



FLUVANNA COUNTY BOARD OF SUPERVISORS

REGULAR MEETING AGENDA

Carysbrook Performing Arts Center

8880 James Madison Hwy, Fork Union, VA 23055

January 19, 2022

Budget Work Session – Non Profit Presentations 5:00pm

Regular Meeting 7:00 pm

TAB	AGENDA ITEMS
A	CALL TO ORDER
B	PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE
C	NON-PROFIT PRESENTATIONS
	Fluvanna County Chamber of Commerce
	Fluvanna County Arts Council
	Central Virginia Partnership for Economic Development
	Virginia Career Works - Piedmont Region
	Fluvanna Leadership Development Program
	Fluvanna/Louisa Housing Foundation
	Foothills ACA - Foothills Child Advocacy Center
	Hospice of the Piedmont
	JAUNT - Regional Transportation
	LAJC - Legal Aid Justice Center
	TJPCD - Thomas Jefferson Planning District Commission
	Thomas Jefferson Soil & Water Conservation District
	TJEMS
	D – CLOSED MEETING AND DINNER RECESS
	RECESS – DINNER BREAK
	RECONVENE AT 7:00PM
	1 - CALL TO ORDER
	2 - PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE
	3 – ADOPTION OF AGENDA
	4 – COUNTY ADMINISTRATOR’S REPORT
	5 – PUBLIC COMMENTS #1 (5 minutes each)
	6 – PUBLIC HEARING
A	ZMP 21:04 Southern Development – Douglas Miles, Community Development Director
	7 – ACTION MATTERS

Fluvanna County...The heart of Virginia and your gateway to the future!

*For the Hearing-Impaired – Listening device available in the Board of Supervisors Room upon request. TTY access number is 711 to make arrangements.
For Persons with Disabilities – If you have special needs, please contact the County Administrator’s Office at 591-1910.*

B Historic Courthouse – Historic Structures Report – Cyndi Toler, Purchasing Officer

C Three Fire Apparatus Purchases – Cyndi Toler, Purchasing Officer

7A – APPOINTMENTS

8 – PRESENTATIONS (normally not to exceed 10 minutes each)

9 – CONSENT AGENDA

D Minutes of January 12, 2022 – Caitlin Solis, Clerk to the Board

E Accounts Payable Report for December 2021 – Tori Melton, Management Analyst

F ZXR Construction Services Project Agreement #14 – Cyndi Toler, Purchasing Officer

10 – UNFINISHED BUSINESS

G Advertisement of a Public Hearing for the Issuance of Lease Purchase Debt – Eric Dahl, County Administrator

11 – NEW BUSINESS

TBD

12 – PUBLIC COMMENTS #2 (5 minutes each)

14 – ADJOURN



County Administrator Review

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PLEDGE OF ALLEGIANCE

I pledge allegiance, to the flag,
of the United States of America,
and to the Republic for which it stands,
one nation, under God, indivisible,
with liberty and justice for all.

GENERAL RULES OF ORDER

1. It shall be the duty of the Chairman to maintain order and decorum at meetings. The Chairman shall speak to points of order in preference to all other members.
2. In maintaining decorum and propriety of conduct, the Chairman shall not be challenged and no debate shall be allowed until after the Chairman declares that order has been restored. In the event the Board wishes to debate the matter of the disorder or the bringing of order; the regular business may be suspended by vote of the Board to discuss the matter.
3. No member or citizen shall be allowed to use defamatory or abusive language directed at any member of the Board or other person, to create excessive noise, or in any way incite persons to use such tactics. The Chair shall be the judge of such breaches, however, the Board may by majority vote of the Board members present and voting to overrule the judgment of the Chair.
4. When a person engages in such breaches, the Chairman shall order the person's removal from the building, or may order the person to stand silent, or may, if necessary, order the person removed from the County property.

RULES OF PROCEDURE FOR PUBLIC HEARINGS

1. PURPOSE
 - The purpose of a public hearing is to receive testimony from the public on certain resolutions, ordinances or amendments prior to taking action.
 - A hearing is not a dialogue or debate. Its express purpose is to receive additional facts, comments and opinion on subject items.
2. SPEAKERS
 - Speakers should approach the lectern so they may be visible and audible to the Board.
 - Each speaker should clearly state his/her name and address.
 - All comments should be directed to the Board.
 - All questions should be directed to the Chairman. Members of the Board are not expected to respond to questions, and response to questions shall be made at the Chairman's discretion.
 - Speakers are encouraged to contact staff regarding unresolved concerns or to receive additional information.
 - Speakers with questions are encouraged to call County staff prior to the public hearing.
 - Speakers should be brief and avoid repetition of previously presented comments.
3. ACTION
 - At the conclusion of the public hearing on each item, the Chairman will close the public hearing.
 - The Board will proceed with its deliberation and will act on or formally postpone action on such item prior to proceeding to other agenda items.
 - Further public comment after the public hearing has been closed generally will not be permitted.

Fluvanna County...The heart of Virginia and your gateway to the future!

	A	B	C	D	L	M	N	O	P	Q	R	S	X
1	850	NON PROFITS								FUNDING REQUIRED			
2	ORG	OBJECT	PROJECT	ACCOUNT DESCRIPTION	FY17	FY18	FY19	FY20	FY21	FY22	FY23	%	
3	CODE	CODE	CODE		ACTUALS	ACTUALS	ACTUALS	ACTUALS	ACTUALS	BUDGET	BASELINE	Change	EXPENDITURE DETAIL
4	TOTAL				550,923	594,153	615,877	622,906	579,306	580,978	622,270	7%	
5	PUBLIC SAFETY												
6	10085000	405686		LAJC (Legal Aid Justice Center)	4,000	4,000	4,000	4,100	4,100	4,100	7,500	83%	
7	10085000	405685		OAR (Offender Aid & Restoration/Jefferson Area Community	13,261	13,261	13,500	13,750	13,750	13,750	14,163	3%	
8	10085000	405678		TJEMS (Thomas Jefferson EMS Council)	16,095	16,095	16,095	16,095	16,095	16,095	16,095	0%	
9	EDUCATION												
10	10085000	405670		PVCC (Piedmont Va Community College)	7,380	50,429	50,426	50,605	7,038	7,179	7,419	3%	
11	HUMAN SERVICES												
12	10085000	405683		Child Health Partnership (Formally Jefferson Area CHIP)	51,000	51,000	52,020	53,060	53,060	53,060	54,121	2%	
13	10085000	405664		IAC (Fluvanna Interagency Council)	-	-	750	750	750	750	750	0%	
14	10085000	405691		FLHF (Fluvanna/Louisa Housing Foundation)	16,000	16,000	16,000	16,000	16,000	16,000	19,600	23%	
15	10085000	405662		Foothills (Foothills Child Advocacy Center)	-	-	10,000	10,000	10,000	10,000	12,000	20%	
16	10085000	405663		Hospice (Hospice of the Piedmont)	-	-	2,500	2,500	2,500	2,500	3,000	20%	
17	10085000	405674		JABA (Jefferson Area Board for Aging)	83,946	83,946	85,000	85,000	85,000	85,000	85,000	0%	
18	10085000	405677		JAUNT (Jefferson Area United Transportation)	79,404	79,404	85,000	85,000	85,000	85,000	72,494	-15%	
19	10085000	405675		MACAA (Monticello Area Community Action Agency)	49,913	49,913	50,000	51,000	51,000	51,000	55,000	8%	
20	10085000	405680		PHA (Piedmont Housing Alliance)	2,100	2,100	2,100	2,200	2,200	2,200	3,000	36%	
21	10085000	405681		ReadyKids	2,100	2,100	2,100	2,100	2,100	2,100	5,000	138%	
22	10085000	405676		Region Ten (Region Ten Community Services Board)	126,250	126,250	126,250	129,000	129,000	129,000	131,794	2%	
23	10085000	405687		SARA (Sexual Assault Resource Agency)	1,000	1,000	1,000	1,050	1,050	1,050	1,500	43%	
24	10085000	405689		SERCAP (Southeast Rural Community Assistance Project)	-	-	-	1,000	-	1,000	5,000	400%	
25	10085000	405684		SHE (Shelter for Help In Emergency)	9,000	9,000	9,000	9,200	9,200	9,200	10,500	14%	
26	CULTURAL ENRICHMENT												
27	10085000	405692	ARTS	Fluvanna Arts Council	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0%	\$4,500 Arts Grant with \$5,500 County Match
28	COMMUNITY DEVELOPMENT												
29	10085000	405679		CVPED (Central Va Partnership for Economic Development)	12,985	13,081	13,066	13,223	13,346	13,519	13,601	1%	
30	10085000	405671		CVSBDC (Central Va Small Business Development Center)	2,500	2,500	2,500	2,750	2,750	2,750	15,752	473%	
31	10085000	405682		Virginia Career Works - Piedmont Region	3,896	3,896	3,920	3,000	3,000	3,000	5,440	81%	
32	10085000	405694		FLDP (Fluvanna Leadership Development Program)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0%	
33	10085000	407020		Chamber (Fluvanna Chamber of Commerce)	3,500	3,500	3,500	3,500	3,500	3,500	5,000	43%	
34	10085000	405688		RCA (Rivanna Conservation Alliance)	1,750	1,750	1,750	1,750	1,750	1,750	5,000	186%	
35	10085000	405672		TJPDC (Thomas Jefferson Planning District Commission)	33,843	33,928	33,900	34,273	34,487	34,845	40,262	16%	
36	10085000	405673		TJSWCD (Thomas Jefferson Soil & Water Conservation District)	20,000	20,000	20,500	21,000	21,630	21,630	22,279	3%	

FY23 Non-Profit Agency Funding Request Form -- INSTRUCTIONS

GENERAL INFORMATION

- The purpose of this form is to summarize and standardize the information that is provided by non-profit agencies.
- Before proceeding with your request preparation, please read the following general information and instructions:

Section 1 - AGENCY INFORMATION

- **Submitting agencies need only to enter information in the boxes/cells without color**
- Enter requesting agency name, agency address, contact person, contact email, and contact phone.

Section 2 - FUNDING REQUESTS BY PROGRAM AREA

- Enter the title of each program for which funds are being requested as well as the amount requested.

Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS

- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.
- Additional space is available in Section 6.

Section 4 - OTHER FUNDING SOURCES

- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY

- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.

Section 6 - ADDITIONAL INFORMATION

- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

- **All request forms must be submitted digitally via email in Excel format.**
- We are asking all agencies to submit an updated signed W9 to confirm that all information on file is correct
- Forms must be submitted via e-mail to Tori Melton, Management Analyst (vmelton@fluvannacounty.org) by **5pm, Wednesday, November 23, 2021.**

ADDITIONAL INFORMATION

- Non-Profit Agency Presentations are scheduled for the BOS work session on Wednesday, December 15, 2021 at 4pm and Wednesday, January 19, 2022 at 4pm.
- An email will be sent out in December confirming presentations.
- All appropriations of \$25,000 or less will be paid in one check by the end of the first quarter.
- All appropriations in excess of \$25,000 will be paid in quarterly installments.

FY22 BUDGET CALENDAR (Meeting Dates & Times are Tentative)

<u>Task Description</u>	<u>Due Date</u>
Release of Budget Packets - - - - -	October 22, 2021
Deadline for submission of Budget Requests - - - - -	November 23, 2021 by 5:00 p.m.
Initial Presentation to Board of Supervisors - - - - -	December 15, 2021, 4:00 p.m. / January 19, 2022, 4:00 p.m.
BOS Public Hearing - - - - -	April 13, 2022, 7:00 p.m.
BOS Budget/CIP Adoption - - - - -	April 20, 2022, 7:00 p.m.

FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna County Chamber of Commerce	\$ 5,000	\$ -	\$ -
Address:	P.O. Box 93, Palmyra, VA 22963	Contact E-mail:	ruthann.carr@fluvannachamber.org	
Contact:	Ruthann Carr	Contact Phone:	434-589-3262	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	The Fluvanna Chamber Directory/Guide 2023	\$ 5,000	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>The Fluvanna Chamber Annual Guide serves as an introduction to the county for current and prospective residents and businesses. As well as listing Chamber member businesses, the Guide also provides important information on: public/private schools, history, government services, utilities, media, transportation, health care, community organizations and churches. Since 2017, the Guide included Fluvanna/Senior resource listings, relieving the county of the cost and trouble of printing. In fact, more than half (19 pages out of the 36-page 2021 Guide) is devoted to essential information on Fluvanna County, which provides more than \$7,000 worth of advertising value to the County. The Chamber has one, part-time employee. It takes that employee an average of 100 hours to gather/verify information, solicit ads, layout and editing to produce the Guide. In 2021, the Fluvanna Chamber printed 7,500 Guides, up from our previous 5,000 copies. Each one of those 7,500 2021 Guides were distributed (5,000 of them directly into boxes in homes in and surrounding Lake Monticello). Consider: 1. The Chamber office is the gateway to Fluvanna, frequently being the first stop for people seeking information on government, the community and tourism. 2. The Chamber fills an advocacy role with Board members serving on the county Economic Development and Tourism Advisory Council, James River Water Authority, Economic Development Authority and Finance Board. 3. Throughout the pandemic, the Chamber office remained open, serving not only members but all visitors and residents. 4. Along with Fluvanna's Economic Development Coordinator, the Chamber championed the FROM Fluvanna grant, not only to its members, but any business in Fluvanna. In the next year, the Chamber will continue to support businesses, advocate for a strong, growing, sustainable business climate, provide</p>				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna County Chamber of Commerce	\$ 5,000	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>The Chamber's primary source of funding is membership dues. It receives no other outside funding, apart from what the county provides.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>County residents continue to rate strong economic development as important. The Chamber shares that view and continues to work with the Economic Development Director to grow the business tax base. We encourage the county to redouble its efforts to support existing businesses and embrace new ones that fit into Fluvanna's Strategic Plan. The Chamber appreciates the support of individual county leaders and county departments. County funding provided to the Chamber shows Fluvanna is serious about creating a healthy business environment. Without county funding, the Chamber would not be able to print the Guide.</p>				
Section 6 - ADDITIONAL INFORMATION				

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- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna County Arts Council	\$ 10,000		\$ -
Address:	285 Turkeysag Trail, Ste 102 Box 210 Palmyra, VA 22963	Contact E-mail:	fjjuvannaartsnews@gmail.com	
Contact:	Sharon Harris, FCAC President	Contact Phone:	434-962-8431	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:			\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>Funds are used to provide live musical, theatrical, youth, dance and other arts performances and arts and cultural enrichment opportunities for the Fluvanna community that are affordable and accessible. Our mission is to promote the arts and cultural enrichment for the community, and to achieve our mission, we use funds to market and promote these performances as well as the work of local artists, artisans, musicians, arts educators, and arts businesses in Fluvanna. Funds are also used to maintain the items we provided for the theater including the technical equipment, lights and sound system, stage, curtain, scrim, seats, and awning as well as to provide for the cleaning and upkeep of the center after performances, to provide internet and phone access to enable us to manage the box office and handle ticket sales and handle all aspects of providing programming including paying performers for virtual and in-person performances.</p>				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna County Arts Council	\$ 10,000	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>During normal performance seasons, we rely on income from ticket sales to enable us to provide quality affordable entertainment. With the matching grant from the County and the Virginia Commission for the Arts, we are able to keep ticket prices affordable to be able to provide accessible programming for the greater Fluvanna community. We also seek donations from the community. However, as a result of the pandemic and its impact on our community we have seen a reduction in donations. With the closing of Carysbrook to the public and our inability to use CPAC to even provide virtual performances from the space, our efforts have been severely curtailed which has also impacted our fundraising efforts. To enable us to continue to offer programming we applied for and received grants that would support our programming efforts. However, without access to the space to provide the programming, we are uncertain of how this funding will be impacted. We remain committed to making the performing arts available to our community, most particularly during a time of uncertainty, social isolation, and despair when the arts can provide a source of comfort and connection. We will continue to seek sources of funding and hope to be able to return to CPAC and to providing arts</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>Without county funds, which are also connected to a matching grant, we may be unable to provide arts programming for the community.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>We continue to seek ways to promote the arts and artists and to provide access to diverse arts and cultural experiences for the residents of Fluvanna. The live performances we present at Carysbrook showcase the work of local musicians and performers, regional performers, artists, and youth as we seek to entertain, engage, and forge community connections. We know the power of the arts to build community and we welcome the opportunity to contribute to the strategic initiatives and actions designed to improve the quality of life in Fluvanna County. We hope to return to CPAC and to continue our long tradition of providing quality, accessible arts programming for the community. We have expanded our partnerships to include visual arts and youth arts education for the community, as we work closely with the Fluvanna Art Association and Empowered Players. Working with our community partners, we hope to be able to provide free arts education and enrichment classes for youth and adults, We also hope to be able to offer free community performances at Pleasant Grove and to continue to find ways to draw on the power of the arts to foster community and economic development.</p>				

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	-- Forms
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BOS Budget/CIP Adoption - - - - -	April 20, 2022, 7:00 p.m.

FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Central Virginia Partnership for Economic Development	\$ 13,601	\$ -	
Address:	1001 Research Park Blvd, Suite 301, Charlottesville VA 22911	Contact E-mail:	hcauthen@centralvirginia.org	
Contact:	Helen Cauthen, President	Contact Phone:	434-979-5610 ext 100	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Regional Economic Development	\$ 13,601	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>The Partnership is a public/private partnership that brings together local governments, higher education, and the private sector to advance innovative strategies for regional economic prosperity. Funds are used to support three primary areas of the Program of Work. First, Marketing/Business Attraction: The Partnership promotes the region as a premier location for business and markets directly to site selectors and companies in our target markets to promote Central Virginia. In FY 2021, two new companies were attracted to the region and both landed in Fluvanna County. We were pleased to support the attraction of Stewart Tool Company (22 jobs and \$9.1 M investment) to the former Kloeckner Metals Facility and Silk City Printing (93 jobs and \$5.7 M investment) to the former Thomasville facility. Secondly, Regional Collaboration: The Partnership serves as the lead support organization for GO Virginia Region 9, which includes Fluvanna County. Site readiness is a priority including the Fork Union Business Park and other sites in the County. Finally, Talent & Workforce Development: Our work continues with the workforce development initiatives of the Piedmont Workforce Development Board, building on the work of our Business-Driven Workforce Recovery initiative, and launching a new program to attract UVA and other graduates and former residents back to the region. We also serve as "back office" support for your economic development efforts. For example, funds are used to subscribe to economic databases. The information from these databases is used to help existing businesses make decisions about future growth and to respond to information requests from companies considering a new location. In summary, Fluvanna County and the Central Virginia Partnership work collaboratively to foster economic growth, create and retain jobs</p>				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Central Virginia Partnership for Economic Development	\$ 13,601	\$ -	
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>The Central Virginia Partnership receives funding from a variety of local sources including about 60 private sector companies, the University of Virginia, Piedmont Virginia Community College, Germanna Community College, and Fluvanna County and eight other localities. Fifty cents per capita is requested from each local government. For FY 2023, we are requesting the following amounts based upon Weldon Cooper Center population estimates published in January 2021: Fluvanna County - \$13,601; Albemarle County - \$55,272; Charlottesville - \$24,723; Culpeper County - \$26,247; Louisa County - \$18,505; Orange County - \$18,413; Greene County - \$10,161; Madison County - \$10,000; and Nelson County - \$10,000. (\$10,000 is the minimum.)</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>Regional economic development is a long-term, strategic process; therefore, short-term effects of underfunding are difficult to measure. The Partnership performs functions that benefit from multiple communities acting in unison, such as research and marketing. As a Partnership supporter, Fluvanna County is recognized as an important regional leader. Eric Dahl serves on the Partnership's Executive Committee and Board of Directors and plays a key role in overseeing and setting policy for regional economic development. We already know Jennifer Schmack and are confident that she'll be a very active member of our ED Partners team. Also, the Partnership actively promotes the region and all of its localities when meeting with consultants and businesses. If Fluvanna County did not participate in the Partnership, the County would not be part of this marketing outreach. Without access to research and the professional economic development staff at the Partnership, Fluvanna County would not be have access to important information that has been used to support existing businesses and strategically plan for the County's future.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>We greatly appreciate Fluvanna County's support and active participation. Thank you very much for your consideration of the Partnership's FY 2023 request.</p>				

FY23 Non-Profit Agency Funding Request Form -- INSTRUCTIONS

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<p>-- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.</p> <p>-- Additional space is available in Section 6.</p>	
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SUBMISSION	
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ADDITIONAL INFORMATION	
<p>-- Non-Profit Agency Presentations are scheduled for the BOS work session on Wednesday, December 15, 2021 at 4pm and Wednesday, January 19, 2022 at 4pm.</p> <p>-- An email will be sent out in December confirming presentations.</p> <p>-- All appropriations of \$25,000 or less will be paid in one check by the end of the first quarter.</p> <p>-- All appropriations in excess of \$25,000 will be paid in quarterly installments.</p>	
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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Virginia Career Works-Piedmont Region	\$ 5,440	\$ -	\$ -
Address:	1001 Research Park Blvd, Suite 301, Charlottesville VA 22911	Contact E-mail:	smorton@vcwpiedmont.com	
Contact:	Sarah Morton, Workforce Development Director	Contact Phone:	434-976-5610 ext 102	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Virginia Career Works - Piedmont Region (formerly Piedmont Workforce Network)		\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>Virginia Career Works- Piedmont Region (VCW-Piedmont) is one of 14 Workforce Development Boards in the Commonwealth of Virginia committed to addressing workforce development needs and combating unemployment. We are committed to creating a stable, competent, and prudent workforce by providing services, support, and resources to the underemployed, career-seekers, businesses, individuals with disabilities, veterans, youth, re-entry individuals, career switchers, new graduates, and other diverse populations.</p> <p>VCW Strategy</p> <ul style="list-style-type: none"> • Designed to mitigate workforce gaps and barriers, of local employers while leveraging resources to create a holistic workforce system that connects career-seekers with employers. • Serve as a convener, our role is to engage partners to cultivate this holistic approach; by providing individuals with the resources and supportive services to help them overcome barriers and recognize their merit and worth to ensure self-sufficiency • Aligns with the State Workforce Development goals and focus on industry sectors. • VCW-Piedmont recognizes industry, needs vary among employers, so it is crucial to validate data and information gathered from outside sources with our local businesses. • We use Target Markets Reports, Sector Strategies, Career Pathways, and GO Virginia Growth Plan, to support employers with recruitment and 				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Virginia Career Works-Piedmont Region	\$ 5,440	\$ -	\$ -

Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)

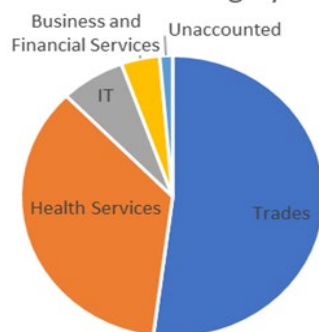
Funding is received annually from the U.S. Department of Labor's Employment and Training Administration to administer the Workforce Innovation and Opportunity Act (WIOA) programs. These programs assist eligible job seekers in participating in education and skills development activities (including occupational skills training and work experiences) to develop skills to obtain self-sufficient employment. The federal funding provided to VCW-Piedmont is limited in scope and does not provide comprehensive workforce development services throughout the region. Locality funds are requested each year from the region's jurisdictions to conduct activities that are not considered allowable expenditures under federal guidelines. 2. At the request of the Council of elected officials, VCW-Piedmont requests 20 cents per capita from each locality. For FY 2023, those amounts are: Fluvanna 5,440, Albemarle County \$22,109, Charlottesville City \$9,889, Culpeper County - \$10,499; Greene County - \$4,064; Louisa County - \$7,402; Madison County - \$2,668; Nelson County - \$2,980; Orange County - \$7,257; Rappahannock County - \$1,464 and Fauquier County - \$14,199

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)

COVID 19 had a significant impact on Workforce System as a whole. In FY 2021, the Virginia Career Works-Charlottesville Center total visits dropped from 13,361 to 2,702, and individual visits specific to Fluvanna were reduced to 129 residents. Significantly, the Pandemic impacted training, transportation, education, and childcare regionally. While the pandemic presented the organization with limitations; the VCW-Piedmont team developed innovative strategies to serve career seekers and businesses virtually. Specifically, we encouraged virtual training platforms such as LinkedIn, and YouTube learning as alternatives, for occupational skills training, financial literacy, career readiness, and job search assistance to active career seekers. Lastly, VCW-Piedmont implemented virtual services immediately to ensure individuals with barriers to employment could continue their journey despite many barriers. Although federal funds were supporting families and households, VCW-Piedmont continued to champion self-sufficiency by empowering career seekers and businesses to attend and navigate virtual hiring events.

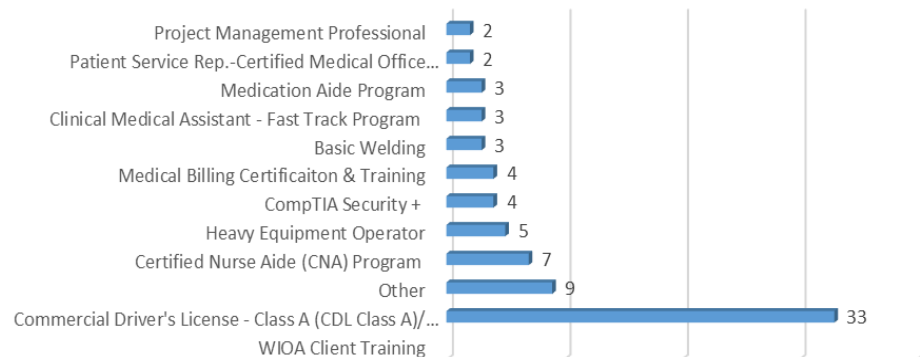
Section 6 - ADDITIONAL INFORMATION

WIOA Client Training by Sector



■ Trades ■ Health Services ■ IT ■ Business and Financial Services ■ Unaccounted

WIOA Client Training



FY23 Non-Profit Agency Funding Request Form -- INSTRUCTIONS

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<p>-- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.</p> <p>-- Additional space is available in Section 6.</p>	
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Section 6 - ADDITIONAL INFORMATION	
<p>-- Use this space for any additional information you believe is relevant to the funding request.</p>	
SUBMISSION	
<p>-- All request forms must be submitted digitally via email in Excel format.</p> <p>-- We are asking all agencies to submit an updated signed W9 to confirm that all information on file is correct must be submitted via e-mail to Tori Melton, Management Analyst (vmelton@fluvannacounty.org) by 5pm, Wednesday, November 23, 2021.</p> <p style="text-align: right;">-- Forms</p>	
ADDITIONAL INFORMATION	
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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna Leadership Development Program	\$ 1,000	\$ -	\$ -
Address:	51 Plum Ct., Palmyra, VA 22963	misprint0949@gmail.com		
Contact:	Jackie Bland	434-589-1444		
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Fluvanna Leadership Development Program	\$ 1,000	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>The Fluvanna Leadership Development Program funds are used for:</p> <ul style="list-style-type: none"> * Promotional materials and ads to recruit students * Snacks at in-person sessions * A familiarization bus tour throughout the county (bus rental, driver, and lunch at a Fluvanna dining facility) * Duplication of materials * Licenses/Subscriptions for Zoom, Dropbox, website and other software to facilitate the program * Catered graduation dinner at class completion, to include speakers and invited guests 				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna Leadership Development Program	\$ 1,000	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>FLDP charges students a \$50 registration fee for the 26-session course of both Zoom an in-person sessions.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>FLDP would be required to raise the tuition or cease the program without support from the County. The program run entirely by volunteers, includes a historical tour of Palmyra as well as a tour of the county which helps students get oriented to the history and nuances of Fluvanna's various regions and depth and breadth of Fluvanna. Without support we would no longer be able to fund the tours. The program facilitates citizens understanding of the needs of the county and the need to get involved in being part of a solution, not only for the county administration, but also for other challenges or opportunities in Fluvanna County.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>FLDP's accounts are audited annually with no issues noted.</p> <p>The FLDP Steering Committee consists of past class participants (alumni) who have volunteered to stay engaged to provide continuity and continuous improvement based on student surveys to assure success of the program. These folks work tirelessly to assure a quality experience for the class members. Without Fluvanna County's support, both financially and in supporting the program by promoting it and providing various speakers, we would have a difficulty fulfilling the promise of this program, now in it's 19th year. Over the course of the 19 years, more than 300 alumni have gone on to positions in the county: county administration and school board, other positions on county boards and commissions, and volunteer positions with organizations like the Chamber of Commerce, the Historical Society, Meals on Wheels, and numerous others.</p>				

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Section 2 - FUNDING REQUESTS BY PROGRAM AREA

- Enter the title of each program for which funds are being requested as well as the amount requested.

Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS

- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.
- Additional space is available in Section 6.

Section 4 - OTHER FUNDING SOURCES

- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY

- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.

Section 6 - ADDITIONAL INFORMATION

- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

- **All request forms must be submitted digitally via email in Excel format.**
- We are asking all agencies to submit an updated signed W9 to confirm that all information on file is correct
- Forms must be submitted via e-mail to Tori Melton, Management Analyst (vmelton@fluvannacounty.org) by **5pm, Wednesday, November 23, 2021.**

ADDITIONAL INFORMATION

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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna-Louisa Housing Foundation	\$ 25,000	\$ -	\$ -
Address:	144-A Resource Lane, Louisa VA 23093	Contact E-mail:	khyland@louisa.org	
Contact:	Kim Hyland, Executive Director	Contact Phone:	540-967-3485	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Essential Home Repair	\$ 10,000	\$ -	\$ -
Program 2:	Ramps	\$ 5,000	\$ -	\$ -
Program 3:	Housing Choice Voucher Program	\$ 5,000	\$ -	\$ -
Program 4:	HOME Building	\$ 5,000	\$ -	\$ -
Program 5:	Rental Homes	\$ -	\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>Essential Home Repair Program: We obtain grants and provide no-interest loans for major home repairs keeping residents warm, safe & dry - particularly our at-risk elderly. Typical repairs are: Roofs, Heat & AC, hot water tanks, well pumps, wells, septic systems, plumbing and electrical problems. We provided \$126,301 in home repairs to Fluvanna resident and procured \$75,770 in grants in the past fiscal year. We loaned the remaining balance of the services they received at zero percent with low monthly payments. This included 10 roof replacements, 8 wells, 5 HVAC units, and 15 additional services including plumbing, electric and other repairs. We obtained a grant from SERCAP for \$25,250 for water line replacement in Bremono Bluff. Housing Choice Vouchers: We administer the HUD program that provides rental assistance to eligible residents. Daily administration of this program is a full-time job for one of our staff and alleviates the need for the County to administer this program. Aluminum Handicap Ramps: We provide handicap ramps at no cost to area residents in need. We have 150 ramps installed in our service area. This program requires constantly picking up ramps that are no longer needed and installing in new locations where they are needed. We also provide materials to build wood ramps with volunteer groups. HOME Program: With HUD funding and Foundation assets, we build new homes for first time homebuyers and provide down payment assistance for residents under 80% AMI. Our staff provides initial credit counseling. We fund new affordable rental properties. We sold 2 homes in Fluvanna to First-Time Homebuyers already this year with several more scheduled for 2022. We are working on a collaborative effort to bring <i>26 additional housing units to Fluvanna</i> this year for the 55+ community. Rental Homes: We own</p>				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Fluvanna-Louisa Housing Foundation	\$ 25,000	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>We receive \$25,650 per year from Louisa County in addition to office space. Office space has been committed to FLHF for the next 5 years next to the Louisa County Resource Council. We currently have no office space in Fluvanna despite the high number of residents we serve. The 2 counties provide 4% of FLHF income. We receive administrative funds from Virginia Housing to manage the Housing Choice Voucher program, however, these funds do not cover the entire cost of managing the program. We use rental income from our rental properties to substantially fund operating costs. We receive local grants which are distributed to residents to subsidize repair costs. We work with TJPDC in the application of HPG funds for residents < 50% AMI. This past year, \$203,910 was received from loan payments and immediately recycled into new loans. The income from Fluvanna County augments admin costs for Payroll, Accounting, Insurance, Office Supplies, Internet, Phone, Postage and Real Estate Taxes.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>We have not received an increase in funding from either county in many years, however, many of our regular expenses have increased. Demand has been particularly high during COVID. Any reduction of funding would make it difficult to provide the services that we have consistently provided to the citizens of Fluvanna for 30 years. We operate on a lean budget, but are faced with increases in contractor's fee, materials, and increasing demand from the community. Reduction in funding would have a direct impact on residents <50% AMI who rely on our services to continue to live in their homes. The elderly are at the highest risk as our Repair Program often allows them to stay in their homes. Many who receive funding would suffer harsh living conditions without repairs, or have their homes condemned. The result of the loss of funding would require the County to obtain housing for those in need. There is no Housing Department in Fluvanna County. Without funding, the County's responsibilities would increase drastically and the financial burden placed on the county would be high.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>This year the FLHF has experienced a dramatic increase in capacity due to a top to bottom reorganization. We have renovated our programs to be more <u>efficient and responsive</u> to the public. We have created <u>new policies and procedures</u>; developed <u>new handouts and brochures</u> with a <u>new logo</u> to enhance visibility in the community; developing a <u>new website</u> to improve capacity and interaction; updating our accounting system; <u>increased our Community Partnerships</u> and awarded several <u>new grants</u>; added volunteers; added staff & changed leadership; <u>increased funding</u> programs offered; and ultimately gone from a shrinking organization to a rapidly <u>expanding</u> nonprofit increasing its services to residents. We utilize local contractors, keeping money in our county. The Housing Choice Vouchers provides landlords with stable, market rate rental income. FLHF rental properties returned \$7,000 in Fluvanna real estate taxes. Providing support for renters to become homeowners further improves our neighborhoods. Additional new housing projects in the next year will increase the well being and stability of approximately 30 families. Several more families will become homeowners, graduating from tenant status. Our aluminum handicap ramps are provided at no cost to our clients, however, these ramps cost an average of \$3500 per homesite. Ramps improve the ability of these residents to get out into the community and attend regular medical appointments. We strive to demonstrate our Integrity, Transparency and Accountability.</p>				

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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Foothills Child Advocacy Center	\$ 12,000	\$ -	\$ -
Address:	1106 East High Street; Charlottesville, VA 22902	Contact E-mail:	churst@foothillscac.org	
Contact:	Cynthia Hurst	Contact Phone:	540-447-6823	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Fluvanna Child Abuse Victim Outreach Expansion Program	\$ 12,000	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>ABOUT FOOTHILLS</p> <ul style="list-style-type: none"> Foothills Child Advocacy Center is a non-profit, 501(c)3 agency designed to provide a culturally sensitive, coordinated community response to child victims in a child-friendly setting. Our goals are to minimize trauma, promote healing, and ensure child safety. Foothills coordinates and/or participates in the Fluvanna child abuse Multidisciplinary Team (MDT). The MDT case review meetings increase communication and mutual accountability, reduce duplication of services, and help to ensure that children are safe and that their needs are met. Foothills also conducts coordinated, legally sound forensic interviews that reduce the number of times a child is interviewed and so reduces the child's trauma, while at the same time gathers accurate information that will help to keep the child safe, and provides non-offending caregivers ongoing support to help them provide safe, healing environments for their children and reduce the risk of the child's re-victimization. In addition to forensic interviews, Foothills provides mental health services and forensic medical exams, as well as connecting families to community resources. <p>ABOUT THIS REQUEST</p> <ul style="list-style-type: none"> Since FY 2012, Foothills has been providing services to assist the Fluvanna County Commonwealth's Attorney, Fluvanna County Law Enforcement, and Fluvanna County Child Protective Services (CPS) in child abuse investigations and family support. The children and families are referred to Foothills by Fluvanna County Law Enforcement or CPS. In 2019, we added mental health services and in 2020, we added onsite medical exams 				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Foothills Child Advocacy Center	\$ 12,000	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
Other funding sources that will cover the difference in expense for serving children in Fluvanna at Foothills include the renewable VOCA grant, foundation grants, and private donations. Total cost is \$22,711.98. We are requesting \$12,000. The difference to be covered by other funding sources is \$10,711.98..				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
Without Fluvanna County's funding, Foothills will not be able to send a forensic interviewer to Fluvanna to provide services in FY 2023, which will significantly reduce the number of child victims and families from Fluvanna who receive the needed services.☐				
Section 6 - ADDITIONAL INFORMATION				
<p>Why This Program is Needed in Fluvanna County</p> <ul style="list-style-type: none"> • Foothills' data shows that most of the children from Fluvanna served in FY 2021 had immediate and continuing needs for physical and psychological safety and security: 75% (12 of 16) were at medium or high-risk of victimization; 81% (13 of 16) received safety planning services; and 62% (10 of 16) needed well-coordinated competent follow-up and intervention throughout the investigation and prosecution. • Children are more likely to experience abuse during a pandemic. "The odds of being psychologically maltreated and physically abused during the pandemic were 112 and 20 times higher, respectively, among children that were maltreated in the year prior to the pandemic." (US National Library of Medicine, National Institutes of Health, September 2020). Foothills has responded swiftly with additional trainings for mandated reporters on how to identify child abuse virtually and increased our media outreach to inform the community. • According to national research, children who are sexually abused are at a significantly greater risk for post-traumatic stress, suicide, substance abuse, pregnancy at a young age, and other negative consequences, and they are more likely to become involved in crime, to perform poorly academically, and to have serious health problems as adults (Darkness to Light, 2017). • The earlier that the abuse is stopped and child victims receive services, the more likely they are to avoid such consequences. 				

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- Enter the title of each program for which funds are being requested as well as the amount requested.

Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS

- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.
- Additional space is available in Section 6.

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- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY

- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.

Section 6 - ADDITIONAL INFORMATION

- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

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ADDITIONAL INFORMATION

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- An email will be sent out in December confirming presentations.
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- All appropriations in excess of \$25,000 will be paid in quarterly installments.

FY22 BUDGET CALENDAR (Meeting Dates & Times are Tentative)

<u>Task Description</u>	<u>Due Date</u>
Release of Budget Packets - - - - -	October 22, 2021
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BOS Public Hearing - - - - -	April 13, 2022, 7:00 p.m.
BOS Budget/CIP Adoption - - - - -	April 20, 2022, 7:00 p.m.

FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Hospice of the Piedmont		\$ -	\$ -
Address:	675 Peter Jefferson Pkwy, Ste 300 Charlottesville, VA 22911	Contact E-mail:	gift@hopva.org	
Contact:	Sarah-grace Parr	Contact Phone:	434-817-6952	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	General Operating Support	\$ 3,000	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>In 2021, Hospice of the Piedmont cared for over 1,700 patients and their families navigating the end of life. As our organization and our community outreach continues to grow, Hospice of the Piedmont will require additional philanthropic support to sustain our ever-increasing patient census and demand for services. These services include, but are not limited to:</p> <ul style="list-style-type: none"> • Quality in-home and residential hospice care for twelve counties, including Fluvanna and surrounding area • Complementary therapies that include art therapy, reiki, massage therapy, pet therapy, and our beloved Music by the Bedside program • No cost grief and healing services to both family and friends of hospice patients, as well as to community members who have lost a loved one, even if that loved one was not in our care <p>Philanthropic dollars provided by the County of Fluvanna will help Hospice of the Piedmont ensure that the residents of Fluvanna will receive expert and compassionate care and therapeutic grief support at no charge.</p>				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Hospice of the Piedmont	\$ -	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
Other funding sources for Hospice of the Piedmont includes county and local government support, individual philanthropic support, corporate sponsorships, and foundation/institutional giving.				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
Without support from Fluvanna County, Hospice of the Piedmont's capacity to offer specialized programs in Fluvanna County would be diminished significantly. Outside funding provides vital resources to our Center for Grief and Healing and our Center for Children. These two programs, and many others, are completely funded by philanthropy. As we continue to increase our footprint and offer more services to a greater number of community members in our service area, these resources become more and more vital.				
Section 6 - ADDITIONAL INFORMATION				

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- Enter the title of each program for which funds are being requested as well as the amount requested.

Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS

- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.
- Additional space is available in Section 6.

Section 4 - OTHER FUNDING SOURCES

- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY

- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.

Section 6 - ADDITIONAL INFORMATION

- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

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FY22 BUDGET CALENDAR (Meeting Dates & Times are Tentative)

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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Jaunt, Inc.	\$ 72,494	\$ -	\$ -
Address:	104 Keystone Place, Charlottesville, VA 22902	Contact E-mail:		
Contact:	Karen Davis, 434-296-3184, karend@ridejaunt.org	Contact Phone:		
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Fluvanna County Public Transportation	\$ 72,494	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>Jaunt is a Virginia Public Service Company established in 1982 by regional localities, including Fluvanna County, to provide regional rural public transportation. Two Fluvanna County residents, Harold Morgan and Pamela Bevins, serve on Jaunt's Board of Directors as representatives for Fluvanna County. For FY 23, Jaunt requests \$72,494 in local funding to match \$145,276 in federal and state grants to perform rural public transportation services.</p> <p>This service is open to all residents of Fluvanna County and does not require a prequalification. Under this service, residents can call a day ahead to request to be picked up at their home to be taken to work, school, and other social activities. Local assistance is required as matching funds to drawdown the federal and state grants. For FY23, Jaunt has reduced its request from FY22's \$85,000 apportionment. This funding will allow Jaunt to maintain the existing level of service.</p>				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Jaunt, Inc.	\$ 72,494	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>With Fluvanna County's local match funding for its public transportation program, Jaunt will be able to match the \$72,494 local funds with \$128,820 in federal/state operating assistance, and \$16,456 in federal/state capital assistance. Total cost for services for FY23 is \$217,770, of which the local match of \$72,494 represents 33%.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>Local Funding is required in order to receive the correlating federal and state funds. If no or less funds are provided, Jaunt will need to eliminate or reduce services to balance the final budget.</p> <p>Jaunt provided safe, reliable service throughout the pandemic providing trips for medical appointments, COVID-19 testing, to vaccination sites, for voting, employment, food, and other important community destinations.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>A major goal for FY23 will be to return ridership back to pre-pandemic levels and to forge a strong working relationship between Jaunt's new CEO, Ted Rieck, and Fluvanna's leadership.</p>				

FY23 Non-Profit Agency Funding Request Form -- INSTRUCTIONS

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<p>-- Enter the title of each program for which funds are being requested as well as the amount requested.</p>	
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS	
<p>-- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.</p> <p>-- Additional space is available in Section 6.</p>	
Section 4 - OTHER FUNDING SOURCES	
<p>-- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.</p>	
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY	
<p>-- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.</p>	
Section 6 - ADDITIONAL INFORMATION	
<p>-- Use this space for any additional information you believe is relevant to the funding request.</p>	
SUBMISSION	
<p>-- All request forms must be submitted digitally via email in Excel format.</p> <p>-- We are asking all agencies to submit an updated signed W9 to confirm that all information on file is correct must be submitted via e-mail to Tori Melton, Management Analyst (vmelton@fluvannacounty.org) by 5pm, Wednesday, November 23, 2021.</p> <p style="text-align: right;">-- Forms</p>	
ADDITIONAL INFORMATION	
<p>-- Non-Profit Agency Presentations are scheduled for the BOS work session on Wednesday, December 15, 2021 at 4pm and Wednesday, January 19, 2022 at 4pm.</p> <p>-- An email will be sent out in December confirming presentations.</p> <p>-- All appropriations of \$25,000 or less will be paid in one check by the end of the first quarter.</p> <p>-- All appropriations in excess of \$25,000 will be paid in quarterly installments.</p>	
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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Legal Aid Justice Center	\$ 7,500	\$ -	\$ -
Address:	1000 Preston Ave, Suite A, Charlottesville, VA 22903	Contact E-mail:	twallace@justice4all.org	
Contact:	Tim Wallace, Director of Development	Contact Phone:	773-426-5948	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Economic Justice Program		\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>The Legal Aid Justice Center (LAJC) will use a grant from the County of Fluvanna to support our Economic Justice Program (EJP). EJP works to make it less expensive to be poor in Virginia by fighting for affordable housing, access to healthcare and public benefits, and consumer and workers' rights.</p> <p>Our lawyers and other advocates in EJP help low-income Fluvanna residents with legal issues that can impede their ability to provide for their families or themselves. We provide legal services in the areas of housing, employment, consumer rights and public benefits, educational access, and health benefits, among other issues. We meet the needs of individual clients by providing advice or representation in court and administrative agency hearings. We also perform outreach services and provide self-help materials to empower low-income families to be their own advocates.</p> <ul style="list-style-type: none"> •Our continuum of housing services includes free legal representation in anti-eviction proceedings, rent relief navigation assistance, tenant education, and affordable housing advocacy. Our eviction defense practice prevents loss of access to safe and affordable housing. An eviction on a tenant's record often jeopardizes future access to public and private housing. •Our employment and consumer services help residents recover stolen wages, fight fraudulent debt collection, and access or recover income 				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Legal Aid Justice Center	\$ 7,500	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>We have recurring funding through a number of public and private sources whom we anticipate will provide renewed support. These sources include the City of Charlottesville, Albemarle County, Jefferson Area Board for Aging (JABA), Adjuvans Relief Fund, Charlottesville Area Community Foundation, and many others. We also allocate a portion of our state funding through the Legal Services Corporation of Virginia and a portion of our unrestricted donations from individuals and law firms.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>LAJC serves low-income residents and families throughout Central Virginia. We are committed to providing services to the residents of Fluvanna County, and they will continue at some level regardless of the outcome of this application. However, County funding for our services is integral to our ability to remain flexible and responsive to changes in the environment in which we provide our services.</p> <p>The COVID-19 pandemic shone a bright light on the need for such funding and the ability to pivot. We mobilized to help residents understand and take advantage of the courts being closed and various eviction moratoria to prioritize their expenses and debts. We leveraged our increased communications capacity and virtual forums for community outreach and education. We helped set up and staff mutual aid networks. We launched an unemployment insurance hotline for residents to get advice on how to navigate the system and help us identify systemic problems. We helped</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>In FY21, we closed 22 cases in Fluvanna County benefiting 51 individuals:</p> <p>Health-Related Benefits (Medicaid appeals mostly): 7 Income-Related Benefits (social security/disability): 16 Housing (eviction): 8 Consumer (predatory lending/debt defense): 6 Education (special education advocacy): 9 Wills & Estates: (wills & power of attorney): 5</p> <p>These cases generated \$120,744 in direct economic benefits for our clients and their families.</p>				

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FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Thomas Jefferson Planning District Commission (TJPDC)	\$ 40,262	\$ -	\$ -
Address:	401 E. Water Street, PO Box 1505, Charlottesville, VA 22902-1505	Contact E-mail:	cjacobs@tjpd.org	
Contact:	Christine Jacobs, Executive Director	Contact Phone:	434-979-1597	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Per Capita Member Assessments - General & Local Projects	\$ 16,865	\$ -	\$ -
Program 2:	Per Capita Member Assessments - Legislative Liaison	\$ 10,881	\$ -	\$ -
Program 3:	RideShare	\$ 3,999	\$ -	\$ -
Program 4:	Solid Waste	\$ 1,370	\$ -	\$ -
Program 5:	Rivanna River Basin Commission (RRBC)	\$ 1,897	\$ -	\$ -
Program 6:	Regional Housing Partnership	\$ 5,250	\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				

- **Per Capita Member Assessments - General & Local Projects** are based on the most recent population figures from the Weldon Cooper Center (Fluvanna population: 27,202) and the unchanged per capita rate of \$0.62. Member assessments provide the required match for rural transportation and the Chesapeake Bay Watershed Program and fund regional and locality work without the need for outside funding. Using these funds, the TJPDC anticipates carrying out direct local assistance or Fluvanna County of approximately 52 hours. The TJPDC is currently assisting the County with a land use and transportation planning project for the Zion Crossroads area.
- **Per Capita Member Assessments - Legislative Liaison:** This funds the regional staff position housed at and supervised by the TJPDC. The Legislative Liaison works directly for member localities. The Liaison compiles the TJPDC Legislative Program, monitors state legislative activities, advocates for locally-requested legislation, attends meetings of the Board of Supervisors, issues a monthly newsletter, and hosts an annual legislative forum. The Legislative Liaison has added a part-time assistant to provide additional General Assembly reporting and on-site committee coverage.
- **RideShare:** RideShare is the region's Travel Demand Management (TDM) program. RideShare encourages commuters to exercise transportation options. Services include carpool and vanpool matching, a toll-free commuter information line, Park & Ride lot marketing/development/inventory, a neighborhood trip reduction program, a Guaranteed Ride Home Program, and customized planning for employers to improve commuter choices for employees. There are two of the region's 20 Park & Ride lots located in Fluvanna.
- **Solid Waste:** The TJPDC prepares, updates and monitors the Regional Solid Waste Management Plan, and submits the annual recycling report to fulfill state regulations on behalf of localities in the Solid Waste Planning Unit.
- **Rivanna River Basin Commission (RRBC):** The RRBC provides guidance for the stewardship and enhancement of the water and natural resources of the Rivanna River Basin. The RRBC serves as a forum in which local governments and citizens can discuss issues affecting the Basin's water quality and other natural resources. The TJPDC staff recently completed the Urban Rivanna River Corridor Plan and are working on a Rural Rivanna River Work Plan to inventory existing policies/plans/recommendations, analyze rural river stakeholders and identify recommendations/next steps for potential initiatives for the rural portion of the Rivanna River.
- **Regional Housing Partnership:** The TJPDC staffs the Central Virginia Regional Housing Partnership (RHP), a 21-member advisory board made up of members from the six member jurisdictions, rural and urban nonprofit housing service providers, urban and rural for-profit housing service providers, the University of VA, and representatives from Workforce Development, the Regional Transit Partnership, the Blue Ridge Health District, and a Financial Lender, as well as an urban and rural citizen representative. The mission of the RHP is to facilitate regional coordination to ensure

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Thomas Jefferson Planning District Commission (TJPDC)	\$ 40,262	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<ul style="list-style-type: none"> • Per Capita Member Assessments - General & Local Projects: Other funds include federal funding of \$1,515,667 (including pass-through HOME and HPG funds to the Fluvanna/Louisa Housing Foundation), state funding of \$1,391,253, local per capita of \$ 383,171 from the remaining 5 jurisdiction in Region 10, additional project-specific local match funding of \$175,470, and miscellaneous funds of \$14,220 (rent and interest), with an estimated \$83,188 use of operating reserves. • Per Capita Member Assessments - Legislative Liason: This position is funded entirely by the localities at a per capita rate of \$0.40, with \$92,892 from the other five jurisdictions. • RideShare: Other funds for RideShare include \$139,358 from the VA Department of Rail and Public Transportation (DRPT) and contributions from the other 5 localities in the amount of \$33,813. • Solid Waste: Other localities in the Solid Waste Planning Unit (Charlottesville, Albemarle, and Greene) provide \$9,130 in contributions. • RRBC: Other localities in the RRBC (Charlottesville, Albemarle, and Greene) provide \$8,603 in contributions. • Regional Housing Partnership: Other local funds for the RHP will be requested from the other 5 localities in Region 10 in the amount of \$44,750. State and Federal funding for this program are provided on a grant basis and are included in the federal and state budget numbers in bullet #1 above. 				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
Local funds provide required match for federal and state funding for transportation programs (Rural Transportation and RideShare) and fully fund the Solid Waste program, Legislative Liaison, RRBC, and Regional Housing Partnership. A reduction from the requested amount for Fluvanna County would create inequities among the funding provided by the six member localities. The allocation of assessments by population among the six localities is intended to create equitable distribution of costs for TJPDC services. Reduction in any funding of the General Per Capita funding would prevent participation by Fluvanna on the Commission Board per the TJPDC by-laws.				
Section 6 - ADDITIONAL INFORMATION				
FY21, FY22, and FY23 local project funding will include special projects directly beneficial to Fluvanna, to include the Regional Housing Plan: Planning for Affordability, Zion Crossroads Corridor Plan and Rivanna River Corridor. While the TJPDC has budgeted for a use of operational reserves, we do not expect to have to use it. We have several upcoming projects that should provide adequate administrative funding to cover any shortfalls: Regional Cigarette Tax administration, VATI Regional Broadband project, if awarded, development of a Regional Comprehensive Economic Development Strategy (CEDS); a grant to develop a Regional Transit Vision Plan that will include Fluvanna County, and the administration of the HOME-ARPA funds for the region.				

FY23 Non-Profit Agency Funding Request Form -- INSTRUCTIONS

GENERAL INFORMATION

- The purpose of this form is to summarize and standardize the information that is provided by non-profit agencies.
- Before proceeding with your request preparation, please read the following general information and instructions:

Section 1 - AGENCY INFORMATION

- **Submitting agencies need only to enter information in the boxes/cells without color**
- Enter requesting agency name, agency address, contact person, contact email, and contact phone.

Section 2 - FUNDING REQUESTS BY PROGRAM AREA

- Enter the title of each program for which funds are being requested as well as the amount requested.

Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS

- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.
- Additional space is available in Section 6.

Section 4 - OTHER FUNDING SOURCES

- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY

- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.

Section 6 - ADDITIONAL INFORMATION

- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

- **All request forms must be submitted digitally via email in Excel format.**
- We are asking all agencies to submit an updated signed W9 to confirm that all information on file is correct
- Forms must be submitted via e-mail to Tori Melton, Management Analyst (vmelton@fluvannacounty.org) by **5pm, Wednesday, November 23, 2021.**

ADDITIONAL INFORMATION

- Non-Profit Agency Presentations are scheduled for the BOS work session on Wednesday, December 15, 2021 at 4pm and Wednesday, January 19, 2022 at 4pm.
- An email will be sent out in December confirming presentations.
- All appropriations of \$25,000 or less will be paid in one check by the end of the first quarter.
- All appropriations in excess of \$25,000 will be paid in quarterly installments.

FY22 BUDGET CALENDAR (Meeting Dates & Times are Tentative)

<u>Task Description</u>	<u>Due Date</u>
Release of Budget Packets - - - - -	October 22, 2021
Deadline for submission of Budget Requests - - - - -	November 23, 2021 by 5:00 p.m.
Initial Presentation to Board of Supervisors - - - - -	December 15, 2021, 4:00 p.m. / January 19, 2022, 4:00 p.m.
BOS Public Hearing - - - - -	April 13, 2022, 7:00 p.m.
BOS Budget/CIP Adoption - - - - -	April 20, 2022, 7:00 p.m.

FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Thomas Jefferson Soil & Water Conservaton District	\$ 22,279	\$ -	\$ -
Address:	705 Dale Ave, Charlottesville VA 22903	Contact E-mail:	anne.coates@tjswcd.org	
Contact:	Anne Coates and Amy Moyer	Contact Phone:	Cell 805-455-2820 or 434-975-0224 ext100	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY23 Prog Rqst	FY23 COAD	FY23 BOS
Program 1:	Non-Point Source Pollution Control Services	\$ 22,279	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				
<p>100% of the funding from Fluvanna County is used to support staff for the following services within our non-point source pollution control program. (Details provided on "TJSWCD Programs" tab/sheet.) This support is often used as matching contributions for grants awarded to the TJSWCD.</p> <p>Services include:</p> <ul style="list-style-type: none"> - Agricultural technical assistance - Implementation/administration of agricultural cost-share programs - Education & outreach - Support and administrative services for elected Directors - Residential and development-related technical assistance - Implementation/administration of cost-share program for non-agricultural conservation practices - Implementation/administration of TJSWCD Easement Program - General natural resource-related information & technical assistance to citizens, local staff, and public officials 				

AGENCY INFORMATION		FY23 Total Rqst	FY23 COAD	FY23 BOS
Agency:	Thomas Jefferson Soil & Water Conservaton District	\$ 22,279	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>Virginia Department of Conservation & Recreation: FY22 committed \$514,176 for Operations and Technical Assistance and \$3,280,877 in Cost-Share funding for Agricultural BMPs Implementation.</p> <p>Albemarle County: FY22 committed \$123,200 (includes \$76,414 in-kind staff position), plus contracts for MS4 program support and ACAP.</p> <p>Louisa County: FY22 committed \$51,170, plus contract for E&SC plan reviews paid at hourly rate.</p> <p>Nelson County: FY22 committed \$33,075.</p> <p>City of Charlottesville: FY22 committed \$13,049, plus contracts for IDDE and CCAP.</p> <p>Other grants as available.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>Fluvanna County's contribution to the District is returned many times over through our success in acquiring funding from other sources such as agricultural cost-share funds and other grants. This funding cannot be utilized effectively without adequate staff to administer and implement these conservation programs. This funding would not be available without local matching contributions. For FY22, we received state cost-share funding to implement agricultural and residential best management practices throughout our SWCD. It is projected that we will continue to receive a high level of funding through FY23. We need sufficient resources to maintain a trained and professional staff to provide landowners with technical and financial assistance. If unfunded or underfunded, we will continue to prioritize our staff resources to best support the services and localities from which we have adequate funding. It should be noted that every locality in Virginia is responsible for a portion of the required improvements to the Chesapeake Bay. With our ability to leverage funds, and with our long-standing technical capabilities, our services are likely the most cost-effective way to achieve these goals on the local level.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>Agricultural and residential conservation work reduces pollution in runoff flowing to local waterways and, ultimately, to the Chesapeake Bay. Detailed information for all of the services of the TJSWCD and their benefits are described on the "TJSWCD Programs" tab/sheet in this packet. Quantitative summaries of accomplishments from 1998 through FY21 have been included with this budget request. The TJSWCD has been, and will continue to be, a resource for information, technical assistance, and support to citizens, local staff, and public officials regarding the Chesapeake Bay initiatives and other water quality concerns.</p>				

TJSWCD Program Descriptions

The TJSWCD provides **Conservation Leadership**, serving as a focal point for, and providing coordination to, governmental and nongovernmental organizations involved in water quality issues. Members of the District represent our localities on many local and state steering committees, technical advisory committees, and other community natural resource groups, providing technical expertise and guidance. We work in partnership with local, state, and federal natural resource-related organizations, providing coordination, communication, and cost-efficiencies that the individual organizations alone would not achieve. District representatives serve on DCR's BMP Technical Advisory Committee and the Virginia Association of SWCDs Steering Committee for the Virginia Conservation Assistance Program (see <https://vaswcd.org/vcap> for more information on VCAP). Ten Directors of the TJSWCD Board are elected (two from each locality) and two additional Directors are appointed (one at large and one from the Extension office). Directors serve (without pay) as liaisons between local citizens and local, state, and federal officials.

The TJSWCD is the primary source of natural resource-related **Educational Services** in this area. Local officials, schools, community organizations, and the general public rely on the TJSWCD for workshops, "field days," presentations, school events, and technical information. Classroom presentations and teacher workshops support grade-specific Standards of Learning. The District coordinates the National Envirothon Program locally (a nationwide, team-based environmental competition). Each year, the TJSWCD provides funding to send two students to a weeklong Youth Conservation Camp held at VA Tech. However, in this year several students from Fluvanna County attended the Virginia Natural Resource Academy, a virtual alternative to Youth Conservation Camp, which was canceled due to COVID-19. The TJSWCD also provides an annual scholarship for individuals wanting to pursue a degree in a natural resource-related field. Rebecca Long of Fluvanna County High School Class of 2021 received a \$500 TJSWCD scholarship. Throughout her high school years she demonstrated outstanding scholastic accomplishments, leadership development, and a passion for soil & water conservation. It is our privilege to help sponsor the education of such a promising individual. Rebecca plans to attend Longwood University, with Environmental Engineering or Physics as her intended fields of study. Due to the COVID-19 pandemic, many of our traditional educational programs came to a halt. However, TJSWCD has responded to the school shutdown and virtual learning by providing support to teachers, students, and families with a wide variety of educational resources available on our website. In addition to online resources, TJSWCD education staff are available for live, virtual Enviroscope demonstrations. **The Enviroscope model demonstrates to students the daily impact we have on our watershed and encourages ways in which we all we all can do better to protect and conserve our nature resources.** The TJSWCD patch program was well received by 3rd, 4th, and 5th grades and will continue while supplies last. Teachers were invited to share with their students & parents an opportunity to learn and earn a Soil Expert patch and/or a Living In Your Watershed patch, giving the students something tangible in their hands to remind them of their achievement during this virtual learning.

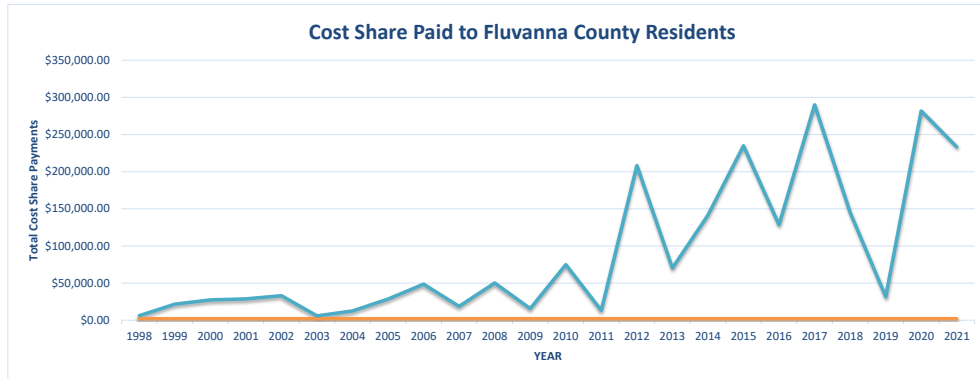
Agricultural Programs of the TJSWCD provide financial and technical assistance to the agricultural community. Services include technical assistance to landowners for farm planning and the design and installation of agricultural best management practices (BMPs); financial assistance to landowners for the installation of BMPs; local implementation of the Virginia Agricultural Stewardship Act; and general conservation planning assistance. Historically, the District's agricultural programs focused on traditional "production farming." However, the program has kept pace with changing times to serve smaller "farmettes" and large "estate farms." Since 1998, the TJSWCD provided cost share dollars and tax credits of **over \$2.1 million directly to Fluvanna County farmers.** In addition, **landowners in Fluvanna contributed an additional match of over \$600,000 of their own funds.** An upward trend for **FY23** in conservation work is expected to continue as the Chesapeake Bay Cleanup Program puts increased emphasis on incentive-based programs to help localities meet necessary pollution reductions. **For FY22, as of November 2021 we already have \$143,000 approved and currently under way** in Fluvanna County. Since many projects are required to be maintained for ten years, TJSWCD staff will be continuing to monitor and spot check those projects to ensure the water quality goals are being met (see <https://www.dcr.virginia.gov/soil-and-water/> for more information). TJSWCD also received an anonymous grant to assist Equine properties with water quality issues. Four projects in Fluvanna were completed **\$32,836.98 and contributed an additional \$11,107.93 of their own funding.**

Residential/Suburban/Urban Services provide support and technical assistance to the non-agricultural community and to local staffs and public officials. Services include: technical support to some localities for implementation of Erosion and Sediment Control and Stormwater Programs (Fluvanna does not currently utilize this TJSWCD service); technical assistance to the community for the design and installation of "low impact development" practices (such as rainwater harvesting, rain gardens, and riparian buffers); and technical assistance to developers to help them meet local, state, and federal environmental requirements. **The TJSWCD led a statewide effort to acquire funding for a cost-share program to support conservation on non-agricultural lands.** This has now become a popular Bay-wide program in Virginia. The TJSWCD also acquired funding to provide homeowners with financial assistance to repair or replace failing septic systems. The District continues to provide each locality with the specific services it requests to address issues related to water quality and quantity in the built environment. These programs will take on added urgency as the Chesapeake Bay Cleanup initiative will put more emphasis on local administration of these programs. The TJSWCD is positioned to provide the support, information, and technical assistance that is needed in each locality.

The TJSWCD **Easement Program** was developed to provide a means for protecting land areas that contribute to the improvement and protection of water quality. Other easement programs protect land for historic, recreational, or aesthetic purposes, and usually are limited to larger acreages. The TJSWCD program focuses on the acquisition of riparian easements, which protect in perpetuity forest buffers along streams. Many of these easements are granted by developers who utilize it as a cost-effective way to mitigate the water-related impacts of development, and help meet stormwater management requirements. Others are donated voluntarily by landowners wishing to protect the integrity of their streamside areas. The costs of any Easement Program are twofold: (1) short-term costs of providing information and negotiating easements, and (2) long-term costs of custodial responsibilities (monitoring, enforcement). Funds requested from member localities are used to offset the short-term costs. In order to ensure that program resources will be available to meet the long-term responsibilities of holding perpetual easements in perpetuity, the TJSWCD formed a subsidiary 501c3 Foundation (Thomas Jefferson Water Resources Protection Foundation) to administer funds for the long-term costs. The Foundation accepts fees and contributions to ensure that funds will be available to cover the long-term responsibilities. Our most recent easement was placed on a Fluvanna County development (Houchens Place - Habitat for Humanity housing) that utilized our easement program to help meet their stormwater management requirements. The District now holds and monitors five easements on 389 acres and includes the protection of 6,010 feet of forested stream buffers in Fluvanna.

Please See Extra Tabs at the Bottom for Additional Information

TJSWCD Contribution to Fluvanna County 1998-FY2021



25 miles of Stream Protected in Fluvanna County since 1998

Total Completed Agriculture Best Management Projects (BMPs) 1998 thru 2021								
Completion FY	Number of BMPs Installed	Total Stream Bank Protected (Feet)	Total Calculated Buffer (Acres)	Total Farm Acres	Total Funding from Partner Agencies	Total Cost Share Payments From TJSWCD	Total Landowner Contribution	Total State Tax Credit Issued
1998	5	10.2	0.02	60.80	\$0.00	\$6,128.60	\$1,017.86	\$382.33
1999	9	22.45	0.04	155.20	\$0.00	\$21,577.35	\$5,473.36	\$989.05
2000	6	3700	5.95	226.27	\$5,540.00	\$27,310.25	\$13,884.81	\$2,477.95
2001	10	4138	6.65	230.30	\$61,122.00	\$28,789.34	\$0.00	\$2,657.41
2002	15	11858.5	31.55	287.40	\$39,767.88	\$32,983.37	\$21,525.50	\$3,006.70
2003	14	771	0.35	349.80	\$34,636.00	\$5,804.65	\$37,523.25	\$8,374.77
2004	16	4832.5	7.77	170.20	\$32,228.20	\$12,413.25	\$35,778.93	\$3,935.42
2005	16	10226.5	16.40	262.40	\$40,174.20	\$28,515.36	\$25,376.87	\$3,935.34
2006	13	9340	19.62	330.90	\$21,155.00	\$48,532.74	\$53,716.37	\$7,468.89
2007	3	107.5	0.17	286.30	\$0.00	\$18,547.31	\$5,588.28	\$1,397.06
2008	17	2577	6.43	453.80	\$8,941.20	\$50,131.80	\$31,346.45	\$4,306.29
2009	6	4199	9.19	324.30	\$28,534.00	\$15,611.21	\$10,531.91	\$1,659.35
2010	18	10906.5	19.73	679.80	\$768.00	\$74,725.22	\$83,544.61	\$6,697.94
2011	3	1296.5	2.08	85.20	\$9,344.00	\$13,237.07	\$8,930.09	\$1,424.72
2012	39	10853	17.56	2,317.40	\$62,473.00	\$208,243.69	\$53,275.95	\$7,353.60
2013	26	490	1.61	1,131.90	\$9,207.00	\$70,166.40	\$12,294.01	\$3,167.92
2014	7	18318.5	85.16	365.40	\$7,739.90	\$141,351.33	\$88,372.14	\$2,921.12
2015	7	13371	27.95	265.20	\$55,955.30	\$234,879.17	\$14,699.39	\$9,036.44
2016	7	4887.5	7.85	423.50	\$7,312.85	\$128,381.19	\$28,315.55	\$0.00
2017	10	13707	22.76	354.10	\$31,935.05	\$289,959.78	\$13,545.55	\$0.00
2018	5	7465	12.59	216.00	\$0.00	\$145,141.68	\$30,076.53	\$5,262.93
2019	8	9545	45.91	510.38	\$41,597.93	\$31,662.32	\$7,757.65	\$1,177.61
2020	13	1200	120.05	415.00	\$29,103.00	\$281,659.50	\$20,060.29	\$226.47
2021	32	12460	126.34	1,541.30	\$12,605.13	\$233,354.31	\$0.00	\$406.17
Total	305	156,282.65	593.73	11,442.85	\$540,139.64	\$2,149,106.89	\$602,635.35	\$78,265.48

FY22	Projects Currently Under Construction				
Current	Number of BMPs Under Construction	Total Stream Bank Protected (Feet)	Total Farm Acres	Total Approved Cost Share Payments From TJSWCD	Total Tax Credit Approved
Total	7	2,638.50	98.1	\$64,088.38	\$2,442.07

FY22	Agronomic Projects Currently Under Construction			
Current	Number of BMPs Under Construction	Total Cropland Acres Benefitted	Total Approved Cost Share Payments From TJSWCD	Total Tax Credit Approved
Total	23	1,440.50	\$79,308.00	\$0.00

Note: Due to continuing updates to state data reporting, figures reported here may differ from prior years. Every effort has been made to reflect the most current and accurate data to date.

Agriculture in Fluvanna County

Source: 2017 USDA Census of Agriculture

There are 273 farms in Fluvanna County and 99% are family farms.

*Family farms are defined as any farm organized as a sole proprietorship, partnership, or family corporation.

Land in Farms by Use and Non-Ag Land



25% or 44,414 acres of land in Fluvanna County is in farmland.

Demographics of Producers

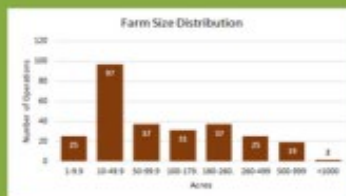


Producer Sex



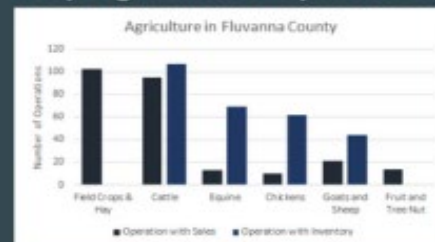
Producer Age

Size of Farms in Fluvanna County



55% of farm operations are greater than 50 acres. The average farm size is 163 acres.

Top Agriculture Operations



THOMAS JEFFERSON SOIL & WATER CONSERVATION DISTRICT

EQUINE CONSERVATION PROGRAM

This year we wrapped up the two-year grant cycle for the privately funded equine conservation program. During its time, the program awarded \$225,000 in cost share to area horse owners to implement 33 conservation practices ranging from manure compost facilities to rain gardens. In addition to the cost share they received, participant landowners also contributed over \$92,000 of their own money in order to install these practices. Properties where these practices are installed will have a lasting impact on nearby surface waters by reducing pollutants and sediment entering waterways within the Bay watershed.

Practice	Number installed
Equine Manure Compost Facility	10
Water Systems	4
Gutters and Outlet Protection	5
Hardened Use Areas	5
Critical Area Planting	2
Stream Exclusion Fencing	2
Animal Laneway	2
Rain garden	1
Division Fencing	1
Hillside Stabilization	1
Total Practices Completed:	33



Each participant landowner received this conservation horse farm sign (top right) to display on their property. Two projects, UVA Polo Facility and Serenity Farm Equine Sanctuary, which have public outreach and education opportunities, each received a 4' x 3' sign to display at their completed manure compost facilities (bottom right). These signs will inform students, volunteers and spectators on the water quality benefits of proper manure management and composting.



An educational video series was filmed at four completed projects in May highlighting installed best management practices, interviews with participants, district services and technical assistance.

Why a manure compost facility?

A 1000 lb horse produces approximately 50 lbs of manure/day that's over 9 tons per year! When you add bedding material, it can quickly grow into a mountain of manure. Proper composting can quickly reduce this volume to a more manageable amount.

How does it work?

The manure in this facility is kept moist, by rainwater and is periodically turned to incorporate air into the pile. This aerobic decomposition allows for higher temperatures, which eliminates odors, kills weed seed and external parasite eggs and drastically cuts down on flies.

Compost Happens

Decomposers like worms, microbes and fungi work to breakdown the materials in the pile into freshest compost.

The Benefits of Composting

- Manure that is stored in a properly managed compost facility (like this one) reduces the chance of concentrated runoff from reaching water sources where it can cause algae, fish kills, and other water quality concerns.
- Valuable compost can be used to enrich pastures by improving soil structure, texture and water retention.
- Composting manure decreases the volume of waste by over 50%.

TJSWCD Equine Conservation Program

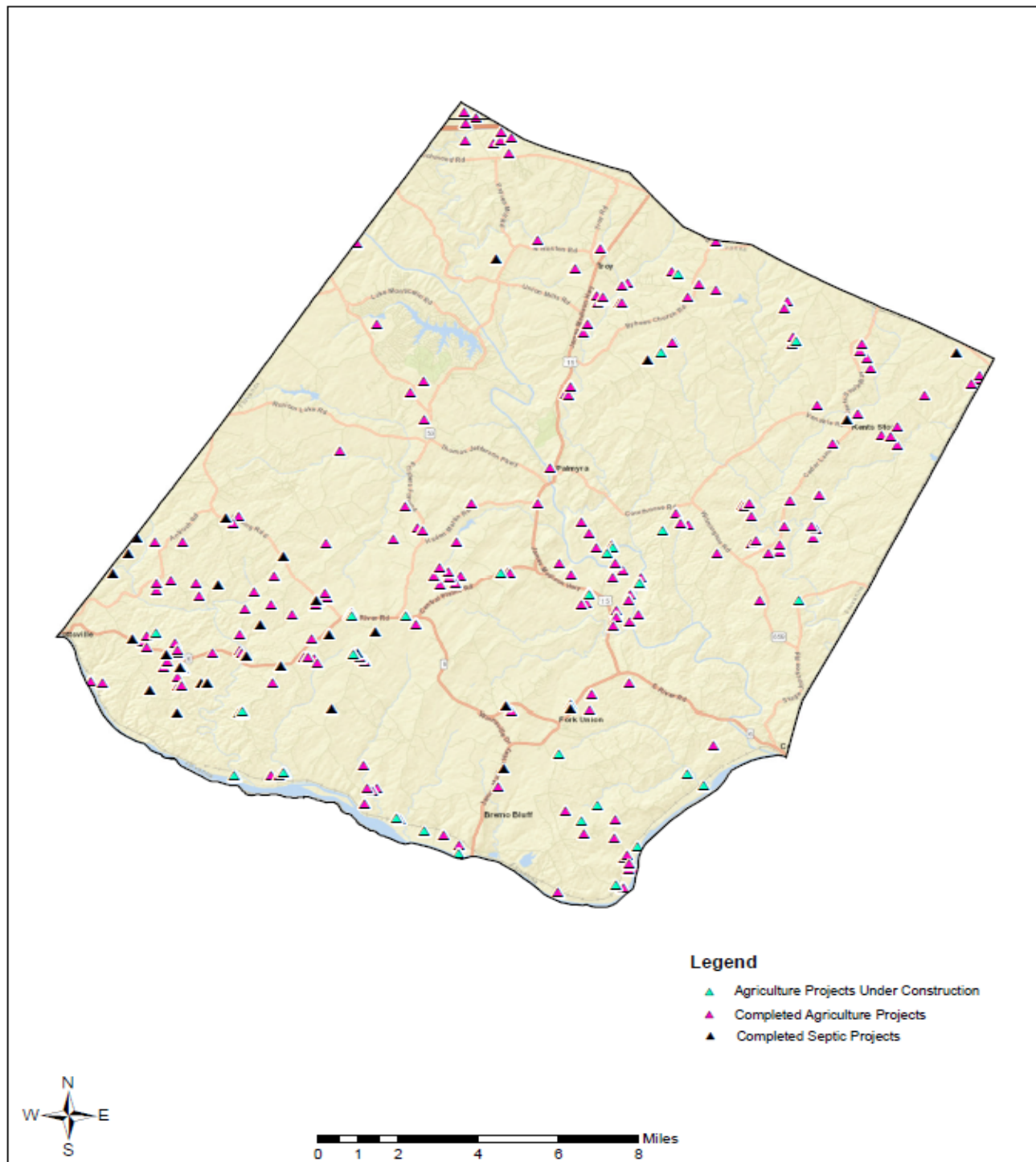
The TJSWCD Equine Conservation Program provided cost share assistance to residents in Fluvanna County to construct best management practices on horse farms. This program was made possible through the generous support of an anonymous donor.

4 Projects Completed

\$32,836.98 Total Cost Share Paid to Landowners

\$11,107.93 Total Landowner Match

TJSWCD Fluvanna County Agriculture & Septic Programs Program Year 1998–Program Year 2022



RIVANNA STORMWATER EDUCATION PARTNERSHIP (RSEP)

Since 2003, RSEP has produced effective and far-reaching education programs that have benefited from the variety of expertise and resources each partner offers. By planning and working together, RSEP will continue to provide watershed-focused projects to the community without the redundancy that might result if each partner were carrying out projects on their own.

To meet the challenges of this past year, RSEP made a shift to include a variety outreach strategy to meet the demand for socially distant and safe watershed education opportunities. This included adapting to online workshops and presentation, timely-topic social media posts, and continued promotion of RSEP's "Love Your Watershed" campaign. RSEP partners were able to host several public involvement activities including socially-distanced stream cleanups and stream investigation kits to local schools.



LEAVE IT OR RAKE IT, BUT **DON'T** BLOW IT!

Leaves, grass, and other yard debris are a significant source of stormwater pollution.

When yard debris ends up in the streets, sidewalks, and storm drains, it will eventually make its way to our creeks and lakes. It can also pose a safety hazard to people using streets and sidewalks and possibly clog the storm drains.

WHAT YOU SHOULD DO!	WHAT YOU SHOULDN'T DO!
<ul style="list-style-type: none"> • Leave leaves and grass on your lawn or rake them into a wooded or landscaped area • Compost or mulch • City residents can utilize the loose leaf collection service 	<ul style="list-style-type: none"> • Put leaves or yard debris down storm drains • Block sidewalks with leaves and yard debris • Throw leaves and yard debris in the trash to be landfilled

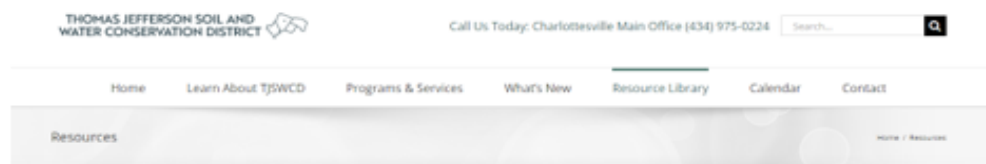
LOVE your watershed
because it matters here

For more information on ways to love your watershed, visit rivanna-stormwater.org

<https://www.tjswcd.org/resources/>

<https://www.tjswcd.org/resources/>




Last year we launched an electronic **Resource Library** on the TJSWCD website. There are over **100** curated agricultural related resources, over **85** educational resources geared towards students, teachers, and parents, and over **30** for residential landowners with more resources continually being added.



[Agriculture Resource Library](#)

[Education Resource Library](#)

[Residential Resource Library](#)

	5 Easy Steps to Compost	Interested in managing your horse's manure through composting? This guide provides information on how to build and use a horse manure composting system. A small download fee applies for this document.	Horses	Manure Management	Horses for Clean Water
	Adding Legumes to Predominantly Grass Pastures	Learn how to incorporate legumes into a predominantly grass pasture; including legume seeding rates.	Cattle	Forage Management	NRCS
	Agronomy Handbook	This handbook is packed full of information on Virginia crops (including forage) and soils, hay recommendations (inc. seeding and storage), information on pasture and nutrient management, and more.	Cattle, Crops, Hay, Horses, Small Ruminants	Forage Management, Grazing Management, Hay Making, Soil Testing	VCE



Thomas Jefferson Soil & Water Conservation District offers FREE Soil & Water Education Programs, Educational Resources and Virtual Lesson Demonstrations

We come to you on your classroom schedule. This means no need for fundraising, bus scheduling or field trip permission slips. Lessons can be tailored to compliment your area of study. **In lieu of in-school learning during the Covid-19 Pandemic we now have available:** live, virtual Enviroscope demonstrations and live, virtual or pre-recorded Watershed Education and Soil presentations. Plus an on-line educational resource library with a variety of lesson & DIY activities. Please visit www.tjswcd.org/education-resources/

Enviroscope Watershed Model

The Enviroscope watershed model addresses watersheds, pollution sources and prevention and connects students to the larger concept of the Chesapeake Bay. It addresses concepts in ecology and AP Environmental Science at the high school level as well as the following SOL standards: 2.4; 2.5; 2.7; 2.8; 3.6; 3.7; 3.8; 3.9; 3.10; 4.4; 4.5; 4.9; 5.6; 5.7; 6.5; 6.7; 6.9; LS.10; ES.8; ES.10; and BIO.8.



Inside & Outside Classroom Activities
customized to your area of current study
supporting all grade levels and adult education.



Soil Boxes

The Soil boxes demonstrate the effect of vegetation and rainfall on the rate of erosion. The topics of soils, erosion, weathering, vegetation and slope are discussed through the following SOLs: 3.6; 3.7; 3.10; 4.9; 5.7; 6.5; 6.9; LS.9; ES.5; ES.8; and BIO.8.



In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught. -Baba Dioum

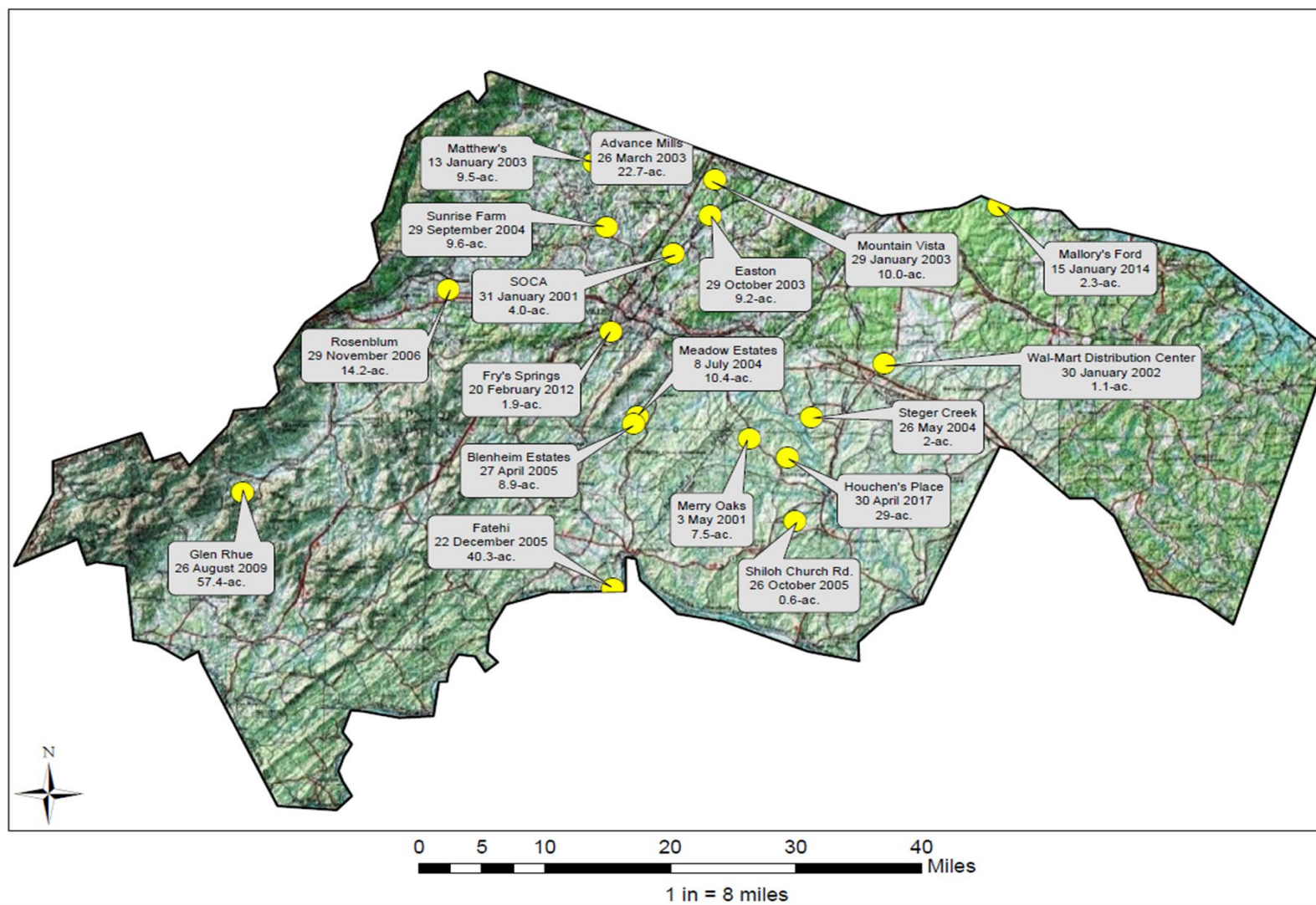
Poster Contest

The annual National Assoc. of Conservation Districts (NACD) Poster Contest is an opportunity for k-12 students to participate as part of a national conservation

outreach initiative. Each year, the winning posters reflect NACD's annual Stewardship theme (Pollinators, Trees, Soils, Watersheds) The contest starts at the district level; winners advance to the state level, and then to the national level, where they receive recognition at NACD's annual meeting.



Thomas Jefferson Soil and Water Conservation District Conservation Easement Map



FY23Non-Profit Agency Funding Request Form -- INSTRUCTIONS**GENERAL INFORMATION**

- The purpose of this form is to summarize and standardize the information that is provided by non-profit agencies.
- Before proceeding with your request preparation, please read the following general information and instructions:

Section 1 - AGENCY INFORMATION

- **Submitting agencies need only to enter information in the boxes/cells without color**
- Enter requesting agency name, agency address, contact person, contact email, and contact phone.

Section 2 - FUNDING REQUESTS BY PROGRAM AREA

- Enter the title of each program for which funds are being requested as well as the amount requested.

Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS

- Describe as briefly as possible the intended use of potential funds allocated by Fluvanna County.
- Additional space is available in Section 6.

Section 4 - OTHER FUNDING SOURCES

- List any other source(s) of funding for the program(s) for which you are seeking Fluvanna County contributions.

Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY

- Briefly explain what problems will arise and the public disadvantage should the program be unfunded or partially funded.

Section 6 - ADDITIONAL INFORMATION

- Use this space for any additional information you believe is relevant to the funding request.

SUBMISSION

- **All request forms must be submitted digitally via email in Excel format.**
- Forms must be submitted via e-mail to Tori Melton, Management Analyst (vmelton@flouvannacounty.org) by **5pm, Wednesday, November 23, 2021.**

ADDITIONAL INFORMATION

- Instructions-- Non-Profit Agency Presentations are scheduled for the BOS work session on Wednesday December 15 at 4pm and Wednesday January 19, 2021 at 4pm.
- An email will be sent out in December confirming presentations.
- All appropriations of \$25,000 or less will be paid in one check by the end of the first quarter.
- All appropriations in excess of \$25,000 will be paid in quarterly installments.

FY21 BUDGET CALENDAR (Meeting Dates & Times are Tentative)

<u>Task Description</u>	<u>Due Date</u>
Release of Budget Packets - - - - -	October 22, 2021
Deadline for submission of Budget Requests - - - - -	November 23, 2021 by 5:00 p.m.
Initial Presentation to Board of Supervisors - - - - -	December 15, 2021, 4:00 p.m./January 19, 2022 4:00 p.m.
BOS Public Hearing - - - - -	April 13, 2022, 7:00 p.m.
BOS Budget/CIP Adoption - - - - -	April 20, 2022, 7:00 p.m.

FY23 NON-PROFIT AGENCY FUNDING REQUEST

Fluvanna County

Section 1 - AGENCY INFORMATION		FY21 Total Rqst	FY21 COAD	FY21 BOS
Agency:	Thomas Jefferson EMS Council	\$ 16,900	\$ -	\$ -
Address:	400 Martha Jefferson Drive, Suite 100, Charlottesville, VA 22911	Contact E-mail:	pwinchel@vaems.org	
Contact:	RD Peppy Winchel	Contact Phone:	434.365.9097	
Section 2 - FUNDING REQUESTS BY PROGRAM AREA		FY21 Prog Rqst	FY21 COAD	FY21 BOS
Program 1:	Local Government funding of Regional EMS Council	\$ 16,900	\$ -	\$ -
Program 2:			\$ -	\$ -
Program 3:			\$ -	\$ -
Program 4:			\$ -	\$ -
Program 5:			\$ -	\$ -
Program 6:			\$ -	\$ -
Program 7:			\$ -	\$ -
Section 3 - DESCRIPTION AND JUSTIFICATION OF FUNDING NEEDS (Briefly describe how the funding would be used. <u>Bullets preferred.</u>)				

The Thomas Jefferson Emergency Medical Services Council, Inc. (TJEMS) is an integral part of the emergency medical services (EMS) system in Central Virginia –functioning to assess, identify, coordinate, plan and implement an effective and efficient regional EMS delivery system in partnership with the Virginia Office of EMS, the Governor’s EMS Advisory Board and the local EMS and governmental agencies within Planning District 10 and Madison County (Planning District 9). We partner with over 1500 EMS personnel from 35 licensed EMS agencies and two hospitals to provide a coordinated emergency care system for the citizens of the region. TJEMS has provided a collaborate environment for regional EMS planning and coordination since 1998, including but not limited to, trauma triage planning, multiple casualty incident/disaster planning, EMS hospital diversion planning and a performance improvement program for the regional EMS and trauma care system. Additionally, we provide critical incident stress management to EMS providers when needed, activated through 911 dispatch, and both initial and continuing EMS education for the region’s EMS personnel.

Recently, TJEMS has undergone a change in leadership at the end of FY2021. Mr. Rodney “Peppy” Winchel, has joined TJEMS to bring his wealth of experience and creative perspective to tackle the challenges EMS agencies and personnel face. We are presenting what TJEMS has contributed in the past, as well as opportunities that Mr. Winchel is pursuing to benefit TJEMS, Fluvanna County, and the EMS agencies in Fluvanna County and throughout the Thomas Jefferson EMS Region to support our request for continued financial support. Mr. Winchel has met with the, Fluvanna County EMS agencies’ leadership and medical directors, to ensure TJEMS is a value-added service and provides the following items to Fluvanna County above what is required. Additionally, the future programs which Mr. Winchel is implementing will further benefit Fluvanna County and its EMS agencies. Traditionally, these services include:

- Regional Medical Director (compensated by TJEMS): TJEMS maintains a Regional Medical Director. Should an agency not be able to contact their Operating Medical Director, or he/she decides to resign as an agency’s OMD that agency will be covered by the TJEMS Regional Medical Director until an agency OMD is found. This allows agencies to continue to operate should this occur.
- Protocol smartphone apps: TJEMS is undergoing additional updates to its phone app to a completely new system. Instead of directing to our website to download them, this app is updated more frequently and has been provided at no cost to providers with smartphones. This give providers immediate up-to-date, on-scene access to regional protocols. The cost associated with development and maintenance of this item is funded with locality contributions.

AGENCY INFORMATION		FY21 Total Rqst	FY21 COAD	FY21 BOS
Agency:	Thomas Jefferson EMS Council	\$ 16,900	\$ -	\$ -
Section 4 - OTHER FUNDING SOURCES (Please list any other source(s) of funding for the program(s).)				
<p>All EMS Councils receive partial funding from the OEMS which, combined with local funding, constitutes the TJEMS operating budget. This year the Commonwealth has announced a 5% increase from FY21 funding for the council, due to the impacts of revenue challenges resulting from COVID-19 restrictions. TJEMS is requesting the same 5% increase for all municipalities in the region.</p>				
Section 5 - IMPACT IF NOT FUNDED BY FLUVANNA COUNTY (Briefly explain the impact on each program area if not funded by Fluvanna County.)				
<p>The operation of the TJEMS Council is dependent on support from the localities that it serves. The present fiscal climate continues to be extremely challenging for TJEMS, and the other 10 councils within the Commonwealth. The Council has begun a comprehensive review of all practices in an effort to assure that we continue to be good stewards of public funds. However, without the existing partnership and continued support of the local governments the present level of service will be increasingly difficult to provide.</p>				
Section 6 - ADDITIONAL INFORMATION				
<p>TJEMS has operated with locality-level funding for the past several years; however, the Virginia Office of EMS has mandated several new contract deliverables that impact all EMS personnel and agencies in the region, such as pandemic vaccinations and patient care report transitions. It is imperative that we receive the continued financial support of the County of Fluvanna in order to continue to serve our constituents, the career and volunteer fire and rescue personnel and their agencies, so that they may serve the County's citizens and visitors. To accomplish our vital mission and in light of the current economic conditions, we are requesting a 5% increase of funding from FY21 for FY22 in the amount of \$16,900.</p>				

FLUVANNA COUNTY BOARD OF SUPERVISORS AGENDA ITEM STAFF REPORT

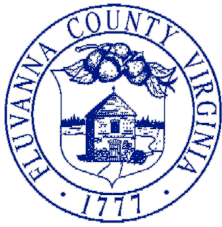
TAB A

MEETING DATE:	January 19, 2022				
AGENDA TITLE:	ZMP 21:04 Southern Development				
MOTION(s):	I move that the Board of Supervisors [approve / deny / defer] ZMP 21:04 a request to amend the Fluvanna County Zoning Map with respect to 122.6 acres of Tax Maps 8, Section A, Parcel 18A, 17 Section A Parcel 10 and 17 Section 9 Parcels 1 & 2 to rezone from A-1, Agricultural, General, and R-3, Residential Planned Community to R-3, Residential, Planned Community and subject to the proffers dated December 29, 2021.				
STRATEGIC INITIATIVE?	Yes	No	If yes, list initiative(s):		N/A
		X			
AGENDA CATEGORY:	Public Hearing	Action Matter	Presentation	Consent Agenda	Other
	X				
STAFF CONTACT(S):	Douglas Miles, Community Development Director				
PRESENTER(S):	Douglas Miles, Community Development Director				
RECOMMENDATION:	At its meeting on December 7, 2021 the Planning Commission recommended Denial of ZMP 21:03 with the proffered conditions dated November 30, 2021 (5-0); Vice Chair Murray-Key moved to recommend Denial and Mr. Johnson seconded. AYES: Bibb, Johnson, Lagomarsino, Murray-Key and Zimmer.				
TIMING:	Normal Planning review process				
REQUESTED ACTION:	ZMP 21:04 Southern Development – A request to rezone from A-1, Agricultural, General and R-3, Residential Planned Community to R-3, Residential Planned Community of 122.6 acres of Tax Maps 8 Section A Parcel 18A, 17 Section A Parcel 10 and 17 Section 9 Parcels 1 and 2. The subject properties are located along State Route 53 and along Garden Lane (SR 636) and they are in the Rivanna Community Planning Area and within the Cunningham Election District.				
FISCAL IMPACT:	Limited Office and Commercial tax base and residential neighborhood taxation				
POLICY IMPACT:	Regarding ZMP 21:03, the Board of Supervisors may: <ul style="list-style-type: none"> Approve this rezoning request with the proffered conditions; Deny this rezoning request; Defer this rezoning request and make a final decision within 90 days. 				
LEGISLATIVE HISTORY:	Review of a proposed Zoning Map Amendment in accordance with Chapter 22, Article 17 of the Fluvanna County Code (Zoning Ordinance: Conditional Rezoning) Application was received on July 1, 2021 with the November 30, 2021 revised proffers and the Planning Commission reviewed the conditional rezoning request on September 14th deferred 60 days, November 9th deferred 30 days and then finally reviewed on December 7, 2021 under a second public hearing case request.				
ENCLOSURES:	Southern Development Staff Report (see report for other application attachments)				
REVIEWS COMPLETED:	X Legal	Finance	Purchasing	HR	Other

FLUVANNA COUNTY BOARD OF SUPERVISORS

AGENDA ITEM STAFF REPORT

MEETING DATE:	January 19, 2022					
AGENDA TITLE:	ZMP 21:04 Southern Development					
MOTION(s):	I move that the Board of Supervisors [approve / deny / defer] ZMP 21:04 a request to amend the Fluvanna County Zoning Map with respect to 122.6 acres of Tax Maps 8, Section A, Parcel 18A, 17 Section A Parcel 10 and 17 Section 9 Parcels 1 & 2 to rezone from A-1, Agricultural, General, and R-3, Residential Planned Community to R-3, Residential, Planned Community and subject to the proffers dated December 29, 2021.					
STRATEGIC INITIATIVE?	Yes	No	If yes, list initiative(s):	N/A		
		X				
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STAFF CONTACT(S):	Douglas Miles, Community Development Director					
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FISCAL IMPACT:	Limited Office and Commercial tax base and residential neighborhood taxation					
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ENCLOSURES:	Southern Development Staff Report (see report for other application attachments)					
REVIEWS COMPLETED:	X Legal	Finance	Purchasing	HR	Other	



COUNTY OF FLUVANNA

"Responsive & Responsible Government"

BOS 2022-01-19 p.75/1306
132 Main Street
P.O. Box 540
Palmyra, VA 22963
(434) 591-1910
Fax (434) 591-1911
www.fluvannacounty.org

BOARD OF SUPERVISORS STAFF REPORT

To: Fluvanna County Board of Supervisors
Case: ZMP 21:04 Southern Development

From: Douglas Miles, AICP, CZA
District: Cunningham Election District

General Information:

This R-3, Residential Planned Community conditional rezoning request has been advertised for a Public Hearing on **Wednesday, January 19, 2022** at 7:00 pm in the Carysbrook Performing Arts Center.

Requested Action:

ZMP 21:04 Southern Development – A request to rezone from A-1, Agricultural, General and R-3, Residential Planned Community to R-3, Residential Planned Community of 122.6 acres of Tax Maps 8 Section A Parcel 18A, 17 Section A Parcel 10 and 17 Section 9 Parcels 1 and 2. The subject properties are located along State Route 53 and along Garden Lane (SR 636) and they are in the Rivanna Community Planning Area and within the Cunningham Election District.

Existing Zoning:

R-3, Residential Planned Community Zoning, Tax Map 17 Section A Parcel 10 and A-1, General Agricultural Zoning, Tax Map 8 Section A Parcel 18A and Tax Maps 17 Section 9 Parcels 1 and 2.

Proposed Zoning:

R-3, Residential Planned Community and the applicant is seeking Preliminary Master Plan approval from the Planning Commission and conditional rezoning approval from the Board of Supervisors for Village Gardens, as an R-3, Residential Planned Community.

Planning Area:

Rivanna Community Planning Area Residential 2.9 dwelling units per acre / This proposed request is in compliance with the Fluvanna County Comprehensive Plan and generally the R-3, Residential Planned Community zoning district requirements.

Adjacent Land Uses:

The adjacent properties are zoned A-1, B-1, R-3 and R-4 and they either contain single-family dwellings, commercial and office uses or are vacant, open space and agricultural parcels that are in the land use program or they are under active livestock management.

Zoning Case History:

ZMP 04:04 Acres Development LLC a R-3, Residential Planned Community Master Plan and conditional rezoning was approved on April 20, 2005, which included Tax Map 17 Section A Parcel 10, that is currently zoned R-3 and undeveloped and it is a part of this R-3, Residential Planned Community Master Plan and conditional rezoning case request. The existing R-3 zoning contains 5.8 acres that is a part of the original Villages of Nahor Residential Planned Community and will be utilized primarily for VDOT right-of-way.

Acronymns used in this Staff Report to avoid repetitive text and for clarity purposes:

AQUA	Aqua Virginia, a private water and sewer provider in the County
FLUVANNA	Fluvanna County Government or as Fluvanna County Staff members
LMOA	Lake Monticello Owners' Association / Lake Monticello development
NAHOR	The Villages of Nahor, an age 55+ residential retirement community
VDOT	VA Department of Transportation – Louisa Residency (Fluvanna County)

Village Gardens Textual Statement / Pertinent Information dated December 28, 2021:

Southern Development and Stanley Martin Homes create well planned residential communities and other development projects in Central Virginia. The Village Gardens R-3 development will provide a mix of residential housing choices, as well as adding some additional commercial opportunities designed to a neighborhood scale. Village Gardens is designed as a walkable community that also preserves much needed green space areas in the development. It will be an active community for all of its residents. Recreational opportunities such as walking trails and programmed facilities and activities will provide a variety of choices for all ages like pickleball.

Southern Development designs communities to meet the existing needs while addressing future growth patterns. Village Oaks, an R-3 Residential Planned Community is currently being built by Southern Development, located on Lake Monticello Road and outside of the Lake Monticello Main Gate area addresses the strong demand for housing in the region and it has encouraged us to assemble all of these adjacent parcels in the Rivanna Community Planning Area. An existing commercial parcel fronting on Route 53 is 5.8 acres; the Galaska parcel is 49.8 acres; the Haden parcel is 49.8 acres and the Fox parcel is 17.3 acres for a total acreage amount of 122.6 acres.

Southern Development Comprehensive Plan Summary:

Southern Development's hope is to further community welfare through fostering the goals of the County's Comprehensive Plan. Their community design stresses pedestrian orientation with open space for recreation and programmed recreational uses and the preservation of environmentally sensitive ecosystems such as streams and wetlands. This design aligns with many of the current goals described in the adopted Comprehensive Plan to be implemented within this development:

New developments should be integrated in a manner that promotes a sense of community while still retaining the rural aspects that make Fluvanna County attractive without overdevelopment.

Efficient design minimizes sprawl in the rural areas and supports the efficient development of growth areas. Families have access to open space and recreation areas that are a part of their community. Neighborhood residential areas should provide a range of residential housing.

The neighborhood residential element it can incorporate a shared green space mainly at its core. Neighborhood parks vary in scale, but will serve local residents as recreational and as gathering spaces. If possible, greenway trails they should be integrated to link the neighborhood to surrounding neighborhoods and open spaces.

Southern Development Community Meeting – June 24, 2021:

Southern Development conducted their first Zoom community meeting on June 24, 2021 during the pandemic in order to discuss their Village Gardens planned residential development. There were well over one hundred (100) virtual attendees from the surrounding neighborhoods that included: The Villages of Nahor (NAHOR) zoned R-3, Residential Planned Community, a 55+ age restricted community, and located directly across Garden Lane from the subject properties; Lake Monticello Owners Association (LMOA) development zoned R-4, Limited Residential located behind the subject properties and the adjacent agricultural and commercial owners fronting on Route 53 and along Garden Lane who also had an interest in this proposed request.

Southern Development provided a very general overview of Village Gardens, an R-3 Master Plan community of 260 single-family dwellings, 95 Townhouses and 9,000 square feet of previously zoned R-3, neighborhood commercial retail space fronting Route 53. However, the applicant's representatives were not able to answer concerns that adjoining homeowners had about the Aqua Virginia water and sewer availability and capacity and their concerns about the increased traffic onto Route 53 generated by their rezoning request. Southern Development had indicated that they would reach out to AQUA and VDOT to seek further clarifying information in order to be able to answer these important questions. The meeting ended with more questions than answers with the representatives offering up to meet with adjacent neighborhoods and all other interested parties in order to continue working with the surrounding community to gain further information.

The surrounding homeowners they generally felt that these questions should have been addressed or answered by the applicant. However, they have been contacting this Summer the Fluvanna County Administrator and Community Development Director for the answers to their questions via e-mails and telephone calls. Some of their thoughts and concerns they are summarized below:

A potentially dangerous entrance and exit to the planned development on Route 53, located at the bottom of the hill, with restricted left and right views of oncoming traffic at speeds at and above 45 MPH. Many residents at the Villages of Nahor foresee residents of the proposed development cutting through the Villages of Nahor to use our existing entrance onto Route 53, which offers up somewhat safer access with the left and right views of oncoming traffic. The entrance and exit to the Villages of Nahor is already challenging for the aging residents of our community. We have concerns that additional traffic volume on Route 53 will pose significant safety issues at the Village Boulevard entrance onto Route 53 at peak hours of use. We do have concerns that the Rivanna River does not have adequate water supply and will this be addressed

*by Southern Development with Aqua Virginia when working through necessary water and sewer.
- Wayne Nye, Villages of Nahor resident.*

My concerns regarding Village Gardens revolve around how it will affect the existing alignment of Garden Lane. The Draft concept I was provided shows the existing entrance remaining as is with portions of Garden Lane being vacated. This I think is an opportunity for VDOT to request a complete realignment of Garden Lane and the existing entrance moved west of its current location along Route 53. VDOT attempted to do this in 2005 during the Villages of Nahor, R-3 rezoning process. I went before the BOS in 2005 and let my concerns be known that this action would adversely affect my business. The BOS sided with me and then stopped that re-alignment. Mike Vlasis, Mulch Monkeys business owner.

Community Meeting with the LMOA – September 9, 2021:

Southern Development representatives conducted a Zoom neighborhood community meeting on September 9, 2021 with the Lake Monticello Owners' Association (LMOA) General Manager and a hundred residents from over 4,000 homes, a commercial restaurant, golf course and five neighborhood beaches along with 350 acre Lake Monticello with Tufton Pond being closest to the proposed residential development. The majority of the LMOA residents, were first and foremost concerned about the second, emergency access to the proposed R-3 neighborhood with potential residents of Village Gardens or others utilizing the Lake Monticello gated community amenities. As the proposed site access will be open without a LMOA gate controlling the Village Gardens residents and the general public from using their available amenities. Southern Development representatives have indicated that they will be providing their Village Gardens residents with their own clubhouse, courts and trails as required by the R-3, Residential Planned Community master plan requirements. They have not provided any written, proffered conditions to restrict the access onto Jefferson Drive other than stating it will be for emergency access use.

Traffic Report:

Please find the attached EPR Traffic Report dated January 8, 2022 for the comprehensive traffic information for the combined R3 developments along Route 53 and Lake Monticello Road such as Colonial Circle, Village Oaks and proposed Village Gardens development for traffic counts.

Engineering & Planning Resources (EPR) has also submitted VDOT comment responses dated January 11, 2022 relative to how their assumptions were made and then how many trips were generated in the Village Gardens Traffic Study and including their supporting graphs and tables.

Planning Commission Public Hearing Meetings Summary:

On September 14, 2021 The Planning Commission it conducted a Public Hearing that went until 10:30 pm that evening with numerous speakers that included the Lake Monticello Owners' Association President who provided a prepared statement where the LMOA Board of Directors was opposed to this request; a spokesperson for Save Rural Fluvanna provided a prepared statement where they were opposed to this request and numerous other adjacent property owners were opposed to this request relative to available water and sewer; public safety response times,

and most importantly their traffic and transportation concerns. The applicant requested and was granted a sixty (60) day deferral in order to be able to address these concerns specifically by working with FLUVANNA and VDOT on right-of-way acquisition and traffic improvements such as new turn lanes and taper lanes to be dedicated and be constructed out on State Route 53.

On November 9, 2021 Southern Development, applicant they provided a status update to both the Planning Commissioners and the general public with four main project updates: ROUTE 53 TRAFFIC IMPACTS – A Traffic Study was completed and civil engineers are finalizing the road designs with possible off-site improvements; AQUA VA WATER & SEWER – Draft Agreement in place; CONNECTIVITY TO LAKE MONTICELLO / TUFTON POND – civil engineers are finalizing designs based upon both staff and public input; COMMERCIAL WITHIN VILLAGE GARDENS – civil engineers are finalizing a commercial design proposal for additional acreage.

On December 7, 2021 Southern Development, applicant they presented a status update to both the Planning Commissioners and general public with these updates and revised proffer statement:

The residential density it was adjusted by removing the existing 5.8 acre parcel adjacent to Route 53; relocated the clubhouse and recreational facilities to a more central location in the project; relocated the emergency access point from the Fox parcel onto Jefferson Drive over towards the gate between Garden Lane and Jefferson Drive and are no longer accessing into Lake Monticello; provided renderings of typical product types, amenity features, trail types and the stormwater management facilities and they are more clearly shown and in their proffer statement; the new proposed entrance onto Route 53 it shows future right-of-way dedication for improvements; an EPR Traffic Study was provided to Fluvanna County and VDOT on November 4, 2021; the future road connection to The Villages of Nahor restricts left turns from Village Gardens; the off-site improvements to the Tufton Gate (Monish Drive) entrance at Route 53 to create a Left turn Lane and travel through lane since there already is a Right turn lane at this gate, additional on-street parking has been provided within the proposed development with a new street section and dedicated parallel parking areas for commercial and visitor parking; and an additional 3 acres of commercial space was added to the project along with a conceptual layout for commercial buildings and parking areas for the proposed commercial land uses.

R-3 Rezoning Proffered Conditions dated 12/29/21:

1. A minimum of 35% of the housing shall be designed with at least one bedroom on the first floor, such that all typical living functions can be accommodated on the first floor of the home.
2. Village Gardens will be developed in a minimum of 4 Phases, with the new entrance from Route 53 and the Garden Lane modifications constructed as part of the first phase.
3. The construction entrance for the project, including primary ingress and egress for any logging operations, shall be established from Rte 53 in the vicinity of the proposed subdivision entrance. The Developer shall notify VDOT and Fluvanna County prior to commencing any construction or logging activity.

4. Prior to issuance of the first Certificate of Occupancy, Route 53 will be improved with new left and right turn lanes at the new entrance to Village Gardens, approximately as shown on Sheet 4.0 of the Rezoning Application Master Plan. The exact dimensions and specifications of the new turn lanes will be per VDOT regulations and turn lane analysis warrants established during VDOT's review of final road plans for Village Gardens.
5. Vehicles entering and exiting Village Gardens will be physically prohibited from using Village Boulevard as a means of ingress or egress by construction of an intersection design in general accord with Sheet 4.0 of the Rezoning Application Master Plan. The intersection design shall include mountable curbs as needed to allow emergency vehicles full turning movement in emergency situations.
6. Prior to the issuance of the 60th Certificate of Occupancy, the Developer shall construct, or cause to be constructed, safety improvements at the Tufton Gate (Monish Drive) of Lake Monticello including left turn, taper and transition lanes on Thomas Jefferson Parkway (Rte 53) approximately as depicted on Sheet 5.0 of the Rezoning Application Master Plan. The proposed improvement shall be constructed to VDOT specifications. After receiving a written request from the Virginia Department of Transportation, the Developer shall dedicate, or cause to be dedicated, the additional right-of-way (or easements) required for the improvements. All costs associated with the acquisition of the right-of-way shall be borne by the Developer.
7. Adequate water and sewer shall be provided prior to Fluvanna County approval for any Final Plat for each phase, including:
 - a. Approval from the Virginia Department of Health (VDH) for the proposed water and sewer system additions;
 - b. A developer agreement with Aqua Virginia specifying infrastructure contributions (connection fees and/or developer installed on-site infrastructure);
 - c. Water line sizing and looping necessary as determined by the design engineer to provide water pressure and fire flow per the Building Code and Fire Code;
 - d. Water line oversizing and/or looped connection to adjoining external water lines, as mutually determined by the Developer and Aqua Virginia, such that the addition to the water system will not negatively affect (and will likely benefit) fire flows and/or water pressures elsewhere in the Lake Monticello system.
 - e. Sewer line sizing to provide required sewer service per the Virginia Sewer Collection and Treatment Regulations.
8. The Developer shall implement advanced stormwater management techniques throughout the project consistent with the objectives of the Virginia Stormwater Management Program such that the physical, chemical, biological and hydrologic characteristics and the water quality and quantity of the receiving state waters shall be maintained, protected, or improved in accordance with or exceeding Virginia VSMP regulations.

9. The developer will construct a 20' wide paved emergency access road as shown on the Master Plan. The existing gate with Lake Monticello located at the end of Garden Lane will be as per specifications requires at the time of site plan approval.

Fluvanna County Zoning Ordinance:

R-3 Zoning / Sec. 22-7-4. - Required information on preliminary master plan.

The location of the open areas which shall comprise not less than twenty-five percent (25%) of the whole. The open areas shall include parks, recreation facilities, residential clubhouse grounds, lakes, trails, and land or water left in undisturbed natural condition and unoccupied by building lots, structures, streets and roads and parking lots. This open space area may be used for active recreation facilities identified in Section 22-7-12 Recreation requirements.

Southern Development is required to provide three active recreation facilities from Group A and B below, and one facility from Group C below, which would further demonstrate to LMOA that Southern Development will provide proper amenities to their own HOA residents and as follows:

Group A: Bicycling, walking, fitness, and equestrian trails, open play area (minimum ½ acre), sitting area, picnic table units, tot lot equipment, community gardens that may be located within the required open space.

Group B: Picnic shelter: 3-4 picnic table units with grill, tennis court(s), multi-use (pickleball) court and active playground with equipment.

Group C: Community Center / Clubhouse / Fitness Center, Swimming Pool, and Athletic fields for private, unorganized activities such as flag football or soccer on a minimum of two (2) acres.

The Preliminary Master Plan shall contain the following information:

(A) The general location of the various types of land uses, including the general location of any village centers, and the residential density classifications of each residential area; (B) The areas designated for residential development, with maximum proposed number of units, density calculations, and plot plans of typical units provided; (C) The areas designated for commercial and/or institutional development, with maximum proposed square footages and floor area ratios. The location of all buildings and improvements, and their proposed use, other than single-family dwellings, and the location of any public buildings shall be shown; (D) The street layout, with indication of which streets are to be dedicated to public use and which are to be held in private ownership, and a brief description of maintenance arrangements; street functional classification; and proposed street cross-sections; (E) The pedestrian and bicycle facilities, including sidewalks and trails, with proposed cross-sections; (F) The orientation of the Preliminary Master Plan to the surrounding community by extending the overall development and preservation pattern, tree protection and buffers, general building design, covenants and restrictions; (G) The general location of all public and private roads; (H) The adequate provision for general sewer, storm

drainage, and water supply; and (I) The Preliminary Master Plan shall demonstrate its compliance with the County's Comprehensive Plan. (Ord. 12-16-15)

Zoning Ordinance Classifications:

The purpose of the A-1 District is “to conserve water and other natural resources, reduce soil erosion, protect watersheds and reduce hazards from floods; to preserve the rural character of the county; to promote existing and future farming and forestry operations; and to promote the retention of undisturbed open space.” Additionally, “the provisions of this district are intended to significantly limit conventional and roadside strip development, especially on major arteries and commuter routes.” The R-3 District is meant to preserve the rural character of the county and not just to construct all new suburban homes and townhouse units on previous agricultural land. The rezoning case applicant needs to define what type of rural preservation methods will be used to perpetually preserve the County’s rural character while designing for their new R-3 community.

The main purpose of the R-3 District is “intended to permit compact village-style residential development and associated institutional uses, community serving mixed uses, open spaces, and creative site design in accordance with a master plan.” This proposed R-3, Residential Planned Community request does not incorporate institutional uses that serve the ever-increasing senior population in Palmyra and in Fluvanna County. The R-3 office space area, formerly shown as townhouses, is inadequate for creating a Village Center that would contain a full-scale grocery store, pharmacy, dry cleaners, restaurants and other supporting retail stores. In order to support Village Gardens and to offer up a village area to shop and buy local rather than travelling outside of Fluvanna County to obtain the necessary grocery and pharmacy items and/or medical services.

2015 Comprehensive Plan:

Land Use Chapter:

The Comprehensive Plan designates this property as within the Rivanna Community Planning Area which makes up approximately 40 percent of the county’s population. According to this chapter, *“the area is traditionally neighborhood residential, with primarily single-family detached dwellings. Surrounding growth should be a mixture of uses and residential dwelling types that serve a variety of incomes. Neighborhood mixed-use is needed to help offset the volume of single-family residential development in this community. Additional services and infrastructure are needed to accommodate more growth.”* In previous studies for this area, residents identified several priorities which included *“to provide housing choices for a variety of age groups and income levels, appropriate to the area.”* Southern Development has stated that:

“Our goal is to provide multiple components within the Master Plan. First, this design will provide housing choices for a variety of age groups and income levels to the Rivanna Community Planning Area. Pedestrian connections, public water and sewer, and the appropriate buffers and setbacks to the adjacent parcels will be enacted. Lastly, Village Gardens will meet the needs for housing and commercial development within the community service area. Village Gardens will be an active community for all residents. Recreational opportunities such as walking trails, green spaces and programmed facilities will provide a variety of choices for all ages” as taken from the Village Gardens Rezoning Request narrative statement last revised December 28, 2021.

The 2015 Comprehensive Plan under Land Use Patterns states:

“It is not sufficient for an applicant to receive approval for a rezoning simply because a property is within a community planning area. Each application is considered by the county to see if a proposed development is well planned within the context of the surrounding community. Applications that do not address a project’s external costs to the community and provide a clear, fiscal benefit to the county will not be favorably received. This decision is subjective, and completely within the purview of the Board of Supervisors; however, the (2015) Comprehensive Plan will be used as reference in evaluating all such discretionary projects.”

The Rivanna Community Planning Area is the most developed planning area in the county and contains a mixture of residential and commercial uses. However, it is important to note no new neighborhood mixed-use office and commercial shopping center areas have been constructed since the Jefferson Centre Shopping Center in 2003 approaching twenty (20) years around the same time that the applicant has developed in Fluvanna County. Southern Development has not added any new commercial land uses as the Rivanna Community Planning Area specifically calls for *“Neighborhood mixed-use is needed to help offset the volume of single-family residential development in this community. Additional services and infrastructure are needed to accommodate more growth.”* The R-3, Residential Planned Community zoning district states that commercial uses should be appropriate to support an area’s needs at a neighborhood scale.

There has been three (3) commercial acres now added to the revised Preliminary Master Plan that is dated December 13, 2021. Typical commercial land uses in the R-3 District include: bakeries, banks, small restaurants, retail stores and medical / professional office buildings. The intent of the R-3 Zoning Ordinance does not appear to be met but with the understanding that it also does not require a minimum amount of office and/or commercial acreage to properly create a Village Center to serve the new neighborhood, Village Gardens and to also serve the overall community.

FLUVANNA has not been provided with any additional information on the proposed land uses that are being considered by the Applicant but at least more office and commercial space has been provided in order to offer neighborhood commercial uses. Southern Development should seek out office and commercial broker or developer partners to develop this acreage to provide the needed support services much in the way they have partnered with Stanley Martin Homes.

Lake Monticello Fire & Rescue:

The new proposal indicates that the second access to this subdivision from Jefferson Drive it has been eliminated and it has been relocated to Garden Lane outside of Lake Monticello. They have proffered to pave a twenty (20) foot access easement directly into that second access for public safety vehicles such as Fluvanna County Sheriff’s and LMOA police, Fire and EMS vehicles.

Is the establishment of a 3-way traffic circle intersection from Village Boulevard to Village Gardens sufficient to provide access? As it has to be wide enough in diameter to be able to accommodate fire apparatus such as a tower ladder truck which is fifty (50) feet in length. The width of the traffic circle it should be one hundred (100) feet in diameter for our proper use.

If mountable curbs are installed, the fire apparatus will not be able to mount these curbs because the ground clearance is not high enough. Driving over those curbs will rip out the water drains, the four (4) truck stabilizers and damage other essential vehicle parts located underneath the fire apparatus truck. If Route 53 at their new entrance is closed and/or it is impassible east of Village Gardens and The Villages of Nahor then emergency vehicles will have to drive completely around Lake Monticello on Routes 600, 618 and Route 53 West.

Suggested Motion:

I move that the Board of Supervisors (Approve/Deny/Defer) ZMP 21:04, a request to amend the Fluvanna County Zoning Map with respect to 122.6 acres of Tax Maps 8, Section A, Parcel 18A, 17 Section A Parcel 10 and 17 Section 9 Parcels 1 & 2 to rezone from A-1, Agricultural, General, and R-3, Residential Planned Community to R-3, Residential, Planned Community and subject to the proffers dated December 29, 2021.

Attachments:

Application and Proffers – December 29, 2021

Village Gardens Preliminary Master Plan – December 13, 2021

Lake Monticello Owners' Association Letter – December 1, 2021

Engineering & Planning Resources Traffic Report – January 9, 2021

Aqua Water and Sewer System Intent to Serve Letter – December 7, 2021



December 7, 2021

Mr. Douglas Miles, AICP, CZA
Community Development Director
Fluvanna Planning & Community Development
Post Office Box 540 / 132 Main Street
Palmyra, VA 22963

SUBJECT: Village Gardens Proposal

Dear Mr. Miles:

I want to follow-up with you regarding the proposal by Southern Development for Village Gardens and Aqua Virginia's link to this development.

1. Aqua Virginia has sufficient water and wastewater capacity and intends to serve Village Gardens.
2. Southern Development will have the responsibility to construct all required infrastructure to obtain required construction permitting from the Virginia Department of Health and the Virginia Department of Environmental Quality. As part of the process, our Aqua Virginia State Engineer will conduct quality reviews of the design and supporting calculations to ensure that the project meets our design specifications, the design intent, and that no adverse impacts occur to our customers.
3. As I presented during the November 7, 2021 Planning Commission meeting, and as I responded to the Planning Commission's questions, this project will have the added benefit to 72 existing customers within a small segment of our water system. I will add or perhaps clarify that these customers' water pressures currently comply with and exceed the minimum pressures within the Virginia Waterworks Regulations. However, we would be amiss not to participate in this opportunity so that existing customers may simultaneously benefit with no additional cost to them. When this project is completed, it is my intent for Aqua Virginia to coordinate with each of these customers, and with their concurrence and agreement, shift their water service connection to the new water line. This will be accomplished at no cost to the customer.
4. Discussions with Southern Development have continued, and I anticipate our utility development and service agreement will be finalized shortly after Planning Commission approval is granted.

Thank you for the opportunity to provide some additional information and our commitment to serve Village Oaks. Aqua Virginia is proud to be a utility provider in the Lake Monticello area and I greatly appreciate the opportunity to work with County officials to support planned growth and development in Fluvanna County.

Regards,

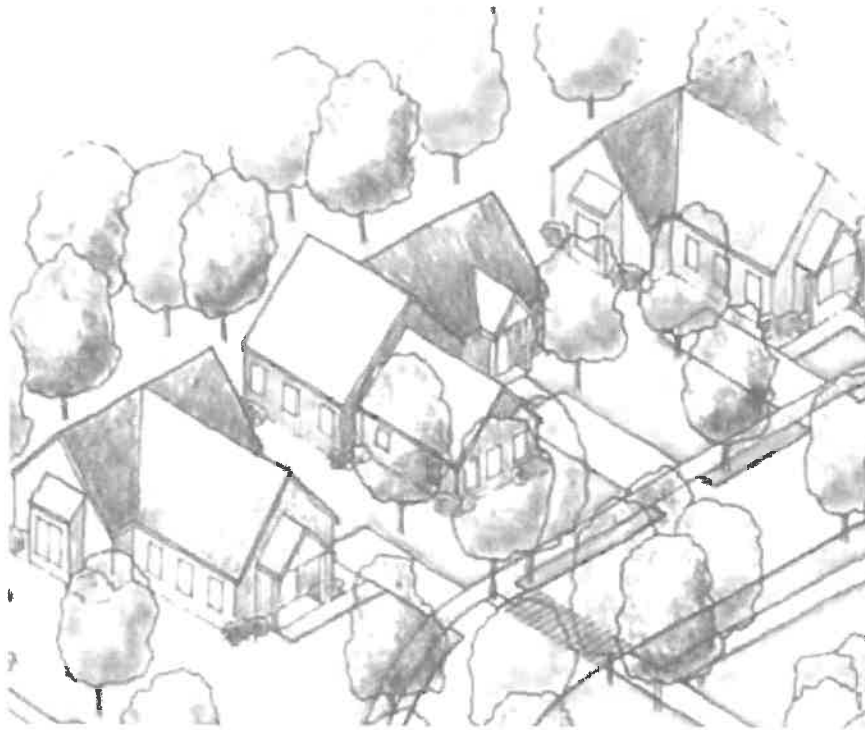
A handwritten signature in blue ink, appearing to read "John J. Aulbach II".

John J. Aulbach II, P.E.
President

**Rezoning Request
for**

Village Gardens

Fluvanna County, Virginia
Revised
December 28, 2021



Submitted by:
Southern Development
and Stanley Martin Homes

Introduction:

Southern Development and Stanley Martin Homes create well planned residential communities, industrial parks, and other development projects in Central Virginia. The rezoning request before is a development plan which meets the needs of both the locality and its residents. The Village Gardens development will provide a mix of residential housing choices for the greater Fluvanna area, as well as, adding additional commercial opportunities designed to a neighborhood scale. Village Gardens is designed as a walkable community preserving much needed green spaces for recreation and for the protection of environmentally sensitive areas.

We design communities to meet existing needs, while addressing future growth. The current success of Village Oaks and the strong demand for housing within the region has encouraged us to assemble adjacent parcels within the Community Planning Area. Given the current housing demand and the vision of the Fluvanna County comprehensive plan, we believe Village Gardens will be beneficial to this community. Thank you in advance for your consideration of Village Gardens.

Property:

The 2015 Comprehensive Plan identifies the following parcels within the Rivanna Community Planning Area. The current zoning of the subject parcels is A-1, Agricultural and R-3. The requested zoning per this application is R-3, Residential. The property includes the following parcels totaling 122.6 acres:

TMP 17-A-10

Area: 5.80 Acres

Owner: NVA Properties LLC

Existing Zoning: R-3

Proposed Use: Commercial

Comp. Plan: Rivanna Community Planning

TMP 17-9-1

Area: 49.78 Acres

Owner: Haden, Lisa Michelle

Existing Zoning: A-1

Proposed Zoning: R-3

Proposed Use: Residential/Community

Comp. Plan: Rivanna Community Planning

TMP 17-9-2

Area: 49.78 Acres

Owner: Galaska, Louise

Existing Zoning: A-1

Proposed Zoning: R-3

Proposed Use: Residential

Comp. Plan: Rivanna Community Planning

TMP 8-A-18A

Area: 17.24 Acres

Owner: Fox, Priscilla Forstbauer

Existing Zoning: A-1

Proposed Zoning: R-3

Proposed Use: Residential

Comp. Plan: Rivanna Community Planning

Desired Use:

Our mission is not simply to build another residential neighborhood. The hope is to further community welfare through fostering goals of the County's Comprehensive Plan. The community design stresses pedestrian orientation, open space for recreation, and preservation of environmentally sensitive ecosystems, such as streams and wetlands. This design aligns with many of the goals described in the Comprehensive Plan. We have outlined a few of these goals below:

- New developments should be integrated in a manner that promotes a sense of community while still retaining the rural aspects that make the area attractive.
- To provide housing choices for a variety of age groups and income levels, appropriate to the area.
- Families have access to open space and recreation areas that are part and parcel of their community.
- Neighborhood residential areas should provide a range of residential housing types and lot sizes.
- While predominantly single-family residential, neighborhood residential areas should incorporate some degree of mixed use, ... Storefront retail and office may be integrated at a residential scale.
- The neighborhood residential element can incorporate a shared green space at its core. Neighborhood parks vary in scale, but serve local residents as recreational and gathering space. If possible, greenway trails should be integrated to link the neighborhood to surrounding neighborhoods and open spaces.
- Encourage housing for seniors and a growing workforce.
- (Efficient design) ... minimizes sprawl in the rural areas and supports the efficient development of growth areas.

(Taken from the Fluvanna County Comprehensive Plan)

We have gone to great lengths to research and meet the needs of both Fluvanna County and its residents. During our research, we found a need for additional first floor housing and the preservation of open spaces within residential neighborhoods. Village Gardens allows for a mix of single-family detached, single-family attached, and single-family patio style homes; thereby offering additional housing choices for a variety of age groups and price points within the community. Moreover, utilizing new growth will help to support existing commercial centers (e.g. Dentistry at Nahor, Ground Effects Garden & Landscape, Jefferson Shopping Center, etc.) along Rt. 53 while promoting a future commercial center at Village Gardens. These centers will benefit from infill development and allow for pedestrian oriented traffic.

By directing growth to the Community Planning Areas, rural preservation can be achieved. Condensing growth reduces sprawl across the County and allows for the preservation of the lands located within the Rural Residential and Rural Preservation Districts. These goals are accomplished by reducing ground water extraction and drain

field installation, while reducing traffic on secondary road systems, and minimizing land disturbance activities.

Community Design:

Our goal was to use the Comprehensive Plan as a guide to develop our Master Plan. First, this design will provide housing choices for a variety of age groups and income levels to the Rivanna Community Planning Area. By reducing lots sizes and increasing common space, we promote pedestrian activity and encourage community engagement. Given the access to public water and sewer, along with providing appropriate buffers to stream and wetlands, will ensure environmentally sensitive features are protected. In addition to the added buffers adjacent to surrounding parcels, storm runoff will be addressed on site by a comprehensive stormwater management design. Multiple stormwater facilities will be placed at strategic locations to treat both water quantity, as well as, water quality. Lastly, Village Gardens will meet the need for additional housing and commercial development within the Community Planning Area.

Village Gardens will be an active community for all its residents. Recreational opportunities such as walking trails, green spaces, and programmed facilities will provide a variety of choices for all ages.

Transportation:

Route 53 is considered a primary gateway and corridor according to the Fluvanna County Comprehensive Plan. This corridor has received extensive improvements with the addition of multiply roundabouts, intersection improvements, and additional turn lanes added in the past few years. The Village Garden entrance to Route 53 will comply with all VDOT specifications with left and right turn and taper lanes. Along with these improvements at the entrance to Route 53, we plan on dedicating additional right-of-way for any future road improvements. This plan will also enhance the safety of two existing intersections by improvements proffered with this proposal. The realignment of Garden Lane will reduce the volume of traffic at the existing Garden Lane, Route 53 intersection. Along with the realignment of Garden Lane, the Villages at Nahor second point of access will be redirected to the new intersection of Village Garden Blvd and Route 53. In this design, traffic is restricted from turning left into the Villages at Nahor, but will still allow for right in and left out for the Nahor residents.

The other major road improvement this proposal will proffer is the much-needed left turn and taper lane on Route 53 at the Monish/Tufton gate. Historical crash data has indicated the need for this type of improvement at the existing entrance. Along with the road improvements, the additional Right-of-way and stormwater facility will be dedicated and built by the developer of Village Gardens.

Water and Sewer:

Aqua America is ready to serve water and sewer for this project. Village Gardens is located within the service area of Aqua America. The newly constructed facilities in Village Gardens will allow us to connect and serve all lots with public water and sewer. In addition to the improvement on site, the design and facilities will also enhance the water pressure off site to adjacent lake residents. Aqua America has already signed a letter of "Intent to Serve" for the community. Further to ensure water and sewer capacity is available, proffers have been included with this proposal that restricts final plat approval for each phase.

Conclusion:

Southern Development and Stanley Martin Homes put a tremendous amount of thought and consideration into the design of Village Gardens. This project has evolved based on public feedback, staff input, and the efforts of many licensed professionals. We feel these improvements in the design will meet the needs of current and future residents of Fluvanna County. The addition of Village Gardens will help implement many goals of the Comprehensive Plan by providing growth within the designated area and allowing for the protection of the rural character of Fluvanna County. Again, thank you for your time and consideration.

December 29, 2021

Mr. Douglas Miles
Director of Community Development
County of Fluvanna
Department of Community Development
P.O. Box 540
Palmyra, VA 22963

RECEIVED

DEC 31 2021
**Fluvanna County
Planning Dept**

RE: Village Gardens (Tax Map Parcels 8-A-18A, 17-9-1, 17-9-2)
Request for Rezoning from A-1 to R-3

Dear Douglas,

Regarding the accompanying Rezoning Request, we propose the following revised Proffers:

1. A minimum of 35% of the housing shall be designed with at least one bedroom on the first floor, such that all typical living functions can be accommodated on the first floor of the home.
2. Village Gardens will be developed in a minimum of 4 Phases, with the new entrance from Route 53 and the Garden Lane modifications constructed as part of the first phase.
3. The construction entrance for the project, including primary ingress and egress for any logging operations, shall be established from Rte 53 in the vicinity of the proposed subdivision entrance. The Developer shall notify VDOT and Fluvanna County prior to commencing any construction or logging activity.
4. Prior to issuance of the first Certificate of Occupancy, Route 53 will be improved with new left and right turn lanes at the new entrance to Village Gardens, approximately as shown on Sheet 4.0 of the Rezoning Application Master Plan. The exact dimensions and specifications of the new turn lanes will be per VDOT regulations and turn lane analysis warrants established during VDOT's review of final road plans for Village Gardens.
5. Vehicles entering and exiting Village Gardens will be physically prohibited from using Village Boulevard as a means of ingress or egress by construction of an intersection design in general accord with Sheet 4.0 of the Rezoning Application Master Plan. The intersection design shall include mountable curbs as needed to allow emergency vehicles full turning movement in emergency situations.

6. Prior to the issuance of the 60th Certificate of Occupancy, the Developer shall construct, or cause to be constructed, safety improvements at the Tufton Gate (Monish Drive) of Lake Monticello including left turn, taper, and transition lanes on Thomas Jefferson Parkway (Rte. 53) approximately as depicted on Sheet 5.0 of the Rezoning Application Master Plan. The proposed improvement shall be constructed per VDOT specifications. After receiving a written request from the Virginia Department of Transportation, the Developer shall dedicate, or cause to be dedicated, the additional right-of-way (or easements) required for the improvements. All costs associated with the acquisition of the right-of-way shall be borne by the Developer.
7. Adequate water and sewer shall be provided prior to Fluvanna County approval of any Final Plat for each phase, including:
 - a. Approval from the Virginia Department of Health (VDH) for the proposed water and sewer system additions;
 - b. A developer agreement with Aqua Virginia specifying infrastructure contributions (connection fees and/or developer installed on-site infrastructure);
 - c. Water line sizing and internal looping necessary as determined by the design engineer to provide water pressure and fire flow per the Building Code and Fire Code;
 - d. Water line oversizing and/or looped connections to adjoining external water lines, as mutually determined by the Developer and Aqua Virginia, such that the addition to the water system will not negatively affect (and will likely benefit) fire flows and/or water pressures elsewhere in the Lake Monticello system.
 - e. Sewer line sizing to provide required sewer service per the Virginia Sewer Collection and Treatment Regulations;
8. The Developer shall implement advanced storm water management techniques throughout the project consistent with the objectives of the Virginia Stormwater Management Program such that the physical, chemical, biological, and hydrologic characteristics and the water quality and quantity of the receiving state waters shall be maintained, protected, or improved in accordance with or exceeding Virginia VSMP regulations.
9. The Developer will construct a 20' wide paved emergency access road as shown on the Master Plan. The existing gate with Lake Monticello located at the end of Garden Lane will be as per specification required at site plan approval.

Sincerely,



Charlie Armstrong
Vice President

REZONING APPLICATION FOR VILLAGE GARDENS

R-3 RESIDENTIAL PRELIMINARY MASTER PLAN

FLUVANNA COUNTY, VIRGINIA

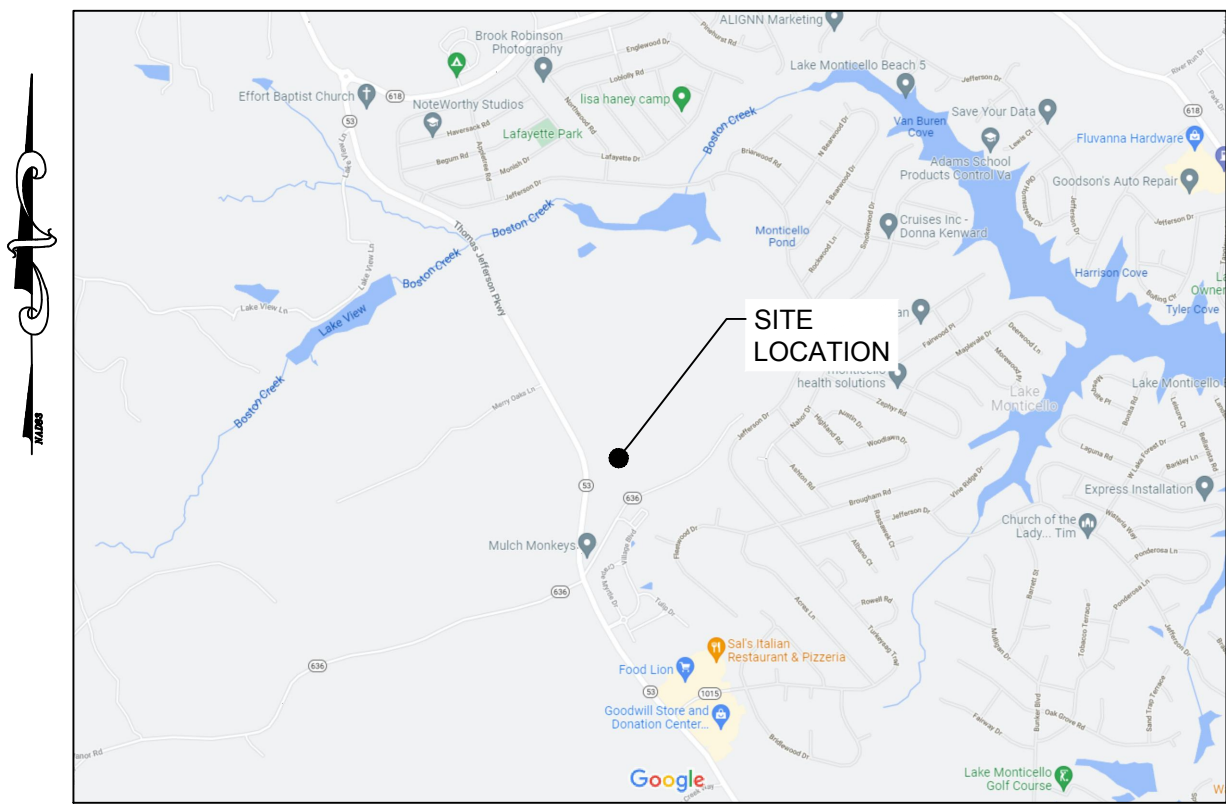
12/13/2021

PROPERTY INFORMATION:

TAX MAP PARCELS:
8-A-18A, 17-9-1, 17-9-2

LEGAL REFERENCES:
DB 115 PG 388, DB 827 PG 800, DB 827 PG 803

TOTAL ACREAGE:
116.806 AC



VICINITY MAP

1"=2000'

APPLICANT:

SOUTHERN DEVELOPMENT HOMES
142 PANTOPS DRIVE
CHARLOTTESVILLE, VA 22911
CONTACT: KEITH LANCASTER
TELEPHONE: (434) 245-0894X106
EMAIL: KLANCASTER@SOUTHERN-DEVELOPMENT.COM

ENGINEER OF RECORD:

TIMMONS GROUP
608 PRESTON AVE. SUITE 200
CHARLOTTESVILLE, VA 22903
CONTACT: CLINT SHIFFLETT, PE
TELEPHONE: (434) 295-5624
EMAIL: CLINT.SHIFFLETT@TIMMONS.COM


Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	PARCEL OVERVIEW
C2.0	MASTER PLAN
C3.0	CONCEPTUAL LAYOUT & SWM
C4.0	TURN LANE EXHIBIT
C5.0	MONISH GATE TURN LANE EXHIBIT
C6.0	APPENDICES
C6.1	EXAMPLES OF SWM SELECTIONS
C6.2	EXAMPLES OF HOUSING SELECTIONS
C6.3	EXAMPLES OF RECREATIONAL SELECTIONS


TOTAL: 10 SHEETS

LEGEND:

JURISDICTIONAL
WETLANDS



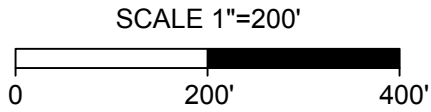
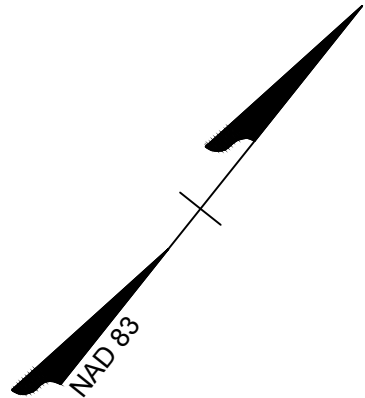
FLUVANNA COUNTY
STREAM BUFFER





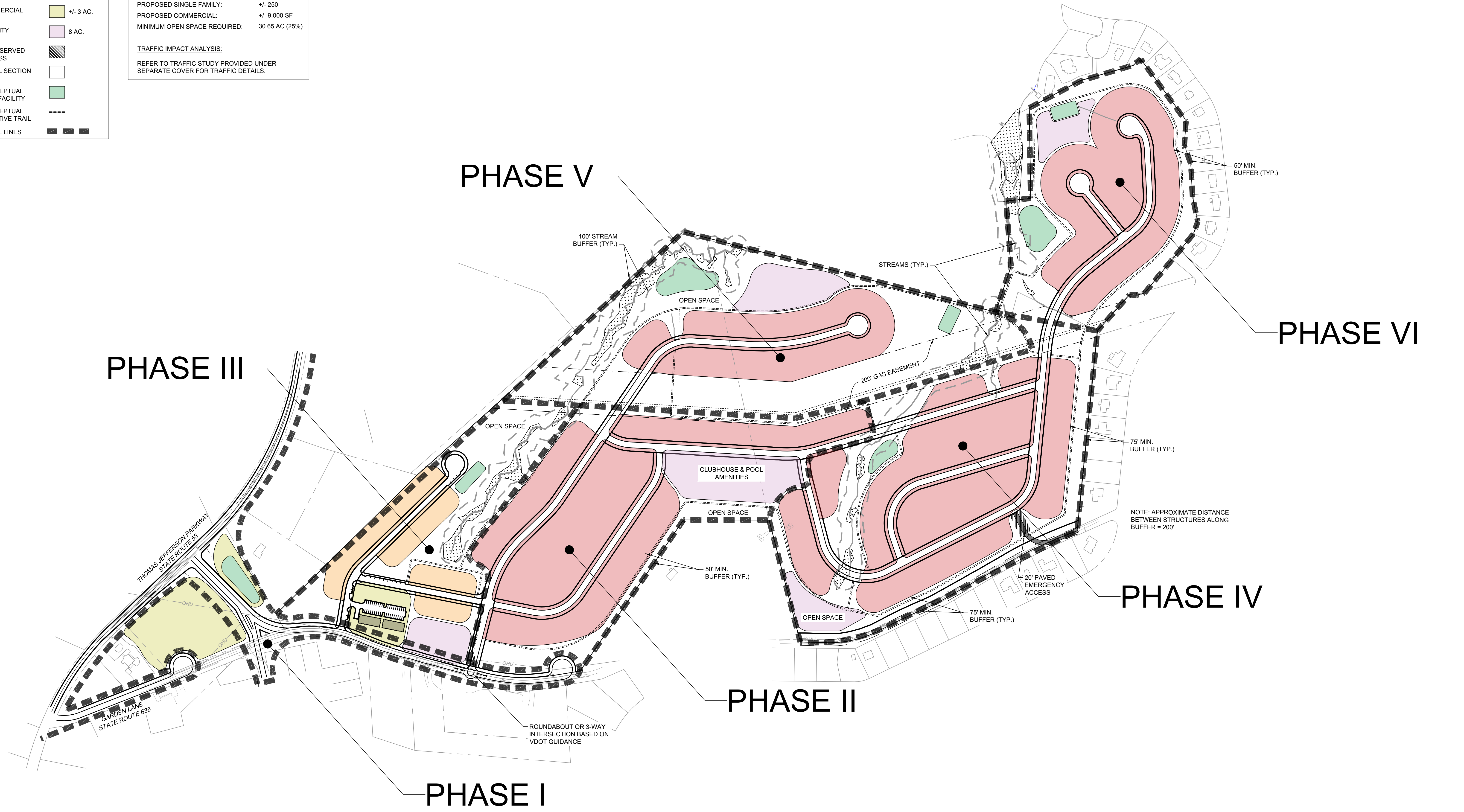
VILLAGE GARDENS - PARCEL OVERVIEW

FLUVANNA COUNTY - DECEMBER 13, 2021



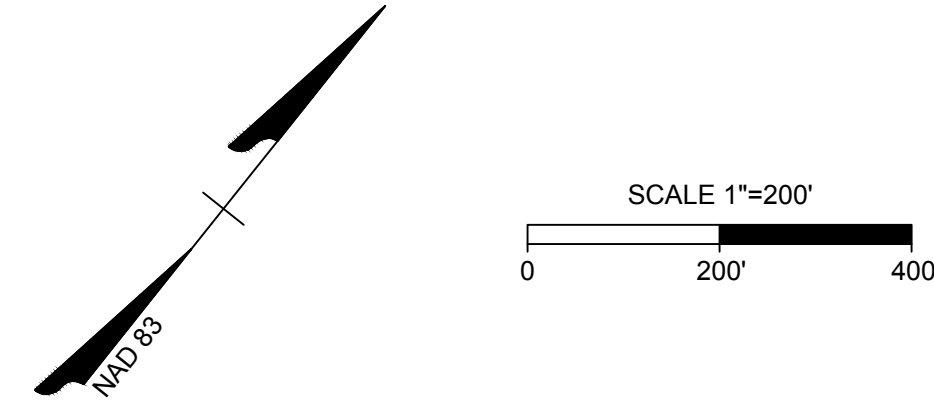
LEGEND:	
SINGLE FAMILY RESIDENTIAL	<div></div> +/- 65 AC.
TOWNHOUSES RESIDENTIAL	<div></div> +/- 10 AC.
COMMERCIAL AREA	<div></div> +/- 3 AC.
AMENITY AREA	<div></div> 8 AC.
50' RESERVED ACCESS	<div></div>
RURAL SECTION ROAD	<div></div>
CONCEPTUAL SWM FACILITY	<div></div>
CONCEPTUAL PRIMITIVE TRAIL	<div></div>
PHASE LINES	<div></div>

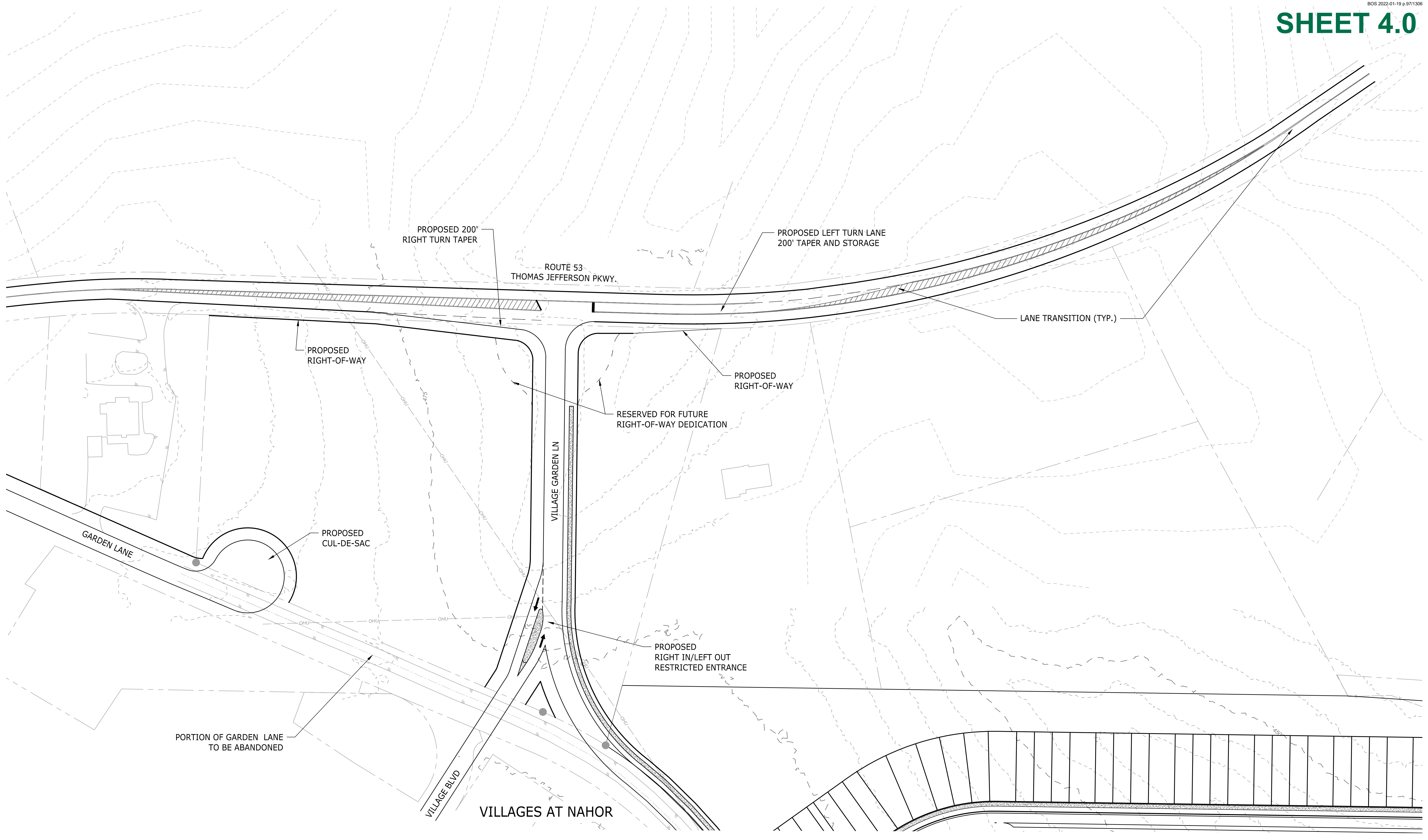
PROJECT ACREAGE:	116.8 AC.
MAXIMUM ALLOWABLE DENSITY (R-3):	2.9 DU/AC.
ALLOWABLE RESIDENTIAL UNITS:	338
PROPOSED TOWNHOUSES:	+/- 80
PROPOSED SINGLE FAMILY:	+/- 250
PROPOSED COMMERCIAL:	+/- 9,000 SF
MINIMUM OPEN SPACE REQUIRED:	30.65 AC (25%)
TRAFFIC IMPACT ANALYSIS:	
REFER TO TRAFFIC STUDY PROVIDED UNDER SEPARATE COVER FOR TRAFFIC DETAILS.	



VILLAGE GARDENS - MASTER PLAN

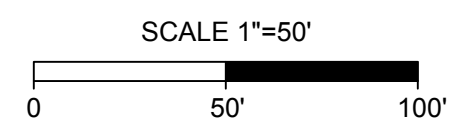
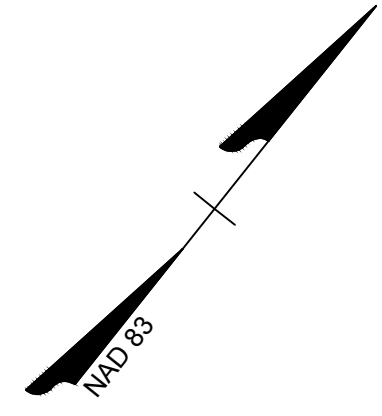
FLUVANNA COUNTY - DECEMBER 13, 2021





VILLAGE GARDENS - PROPOSED TURN LANE EXHIBIT

FLUVANNA COUNTY - DECEMBER 13, 2021



APPENDICES

6.1EXAMPLES OF SWM SELECTIONS

6.2EXAMPLES OF HOUSING SELECTIONS

6.3EXAMPLES OF RECREATIONAL SELECTIONS





TYPICAL SINGLE-FAMILY ATTACHED



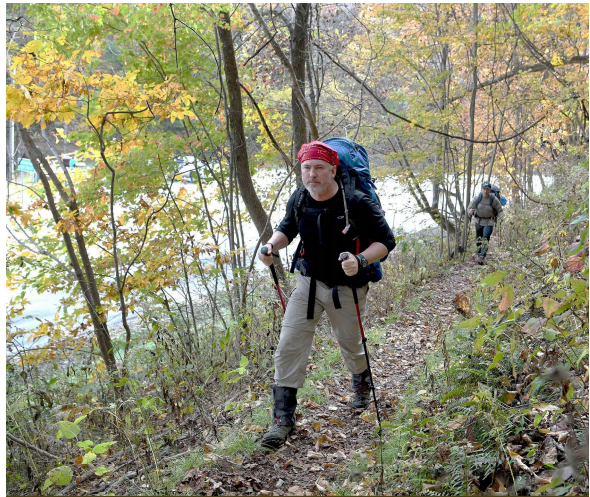
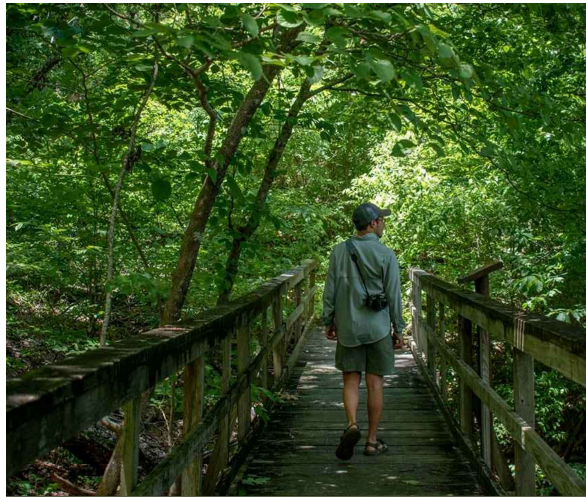
TYPICAL 1-STORY DETACHED



TYPICAL 2-STORY DETACHED



PRIMITIVE TRAILS
EXAMPLES

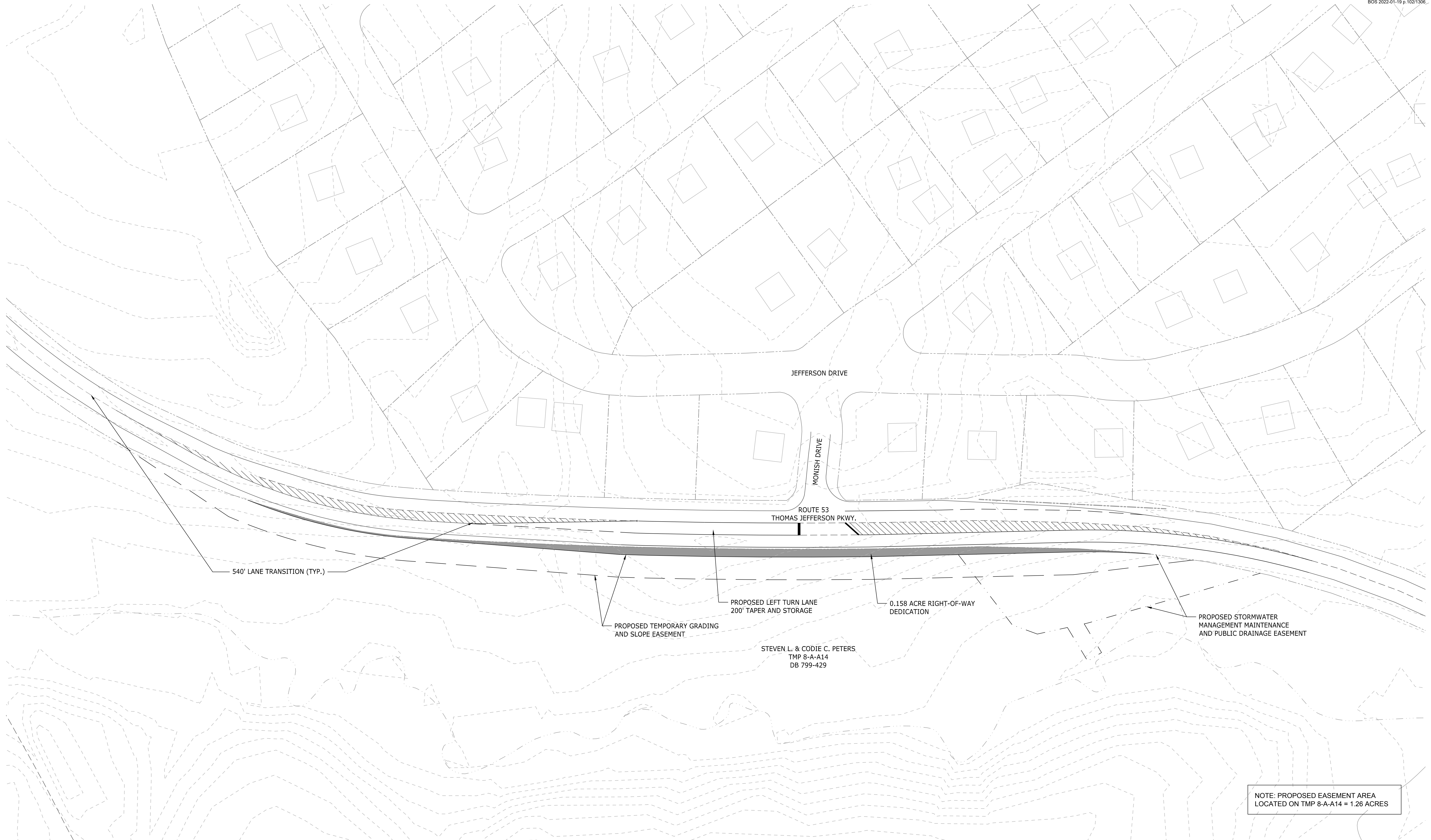


TOT LOT
EXAMPLES



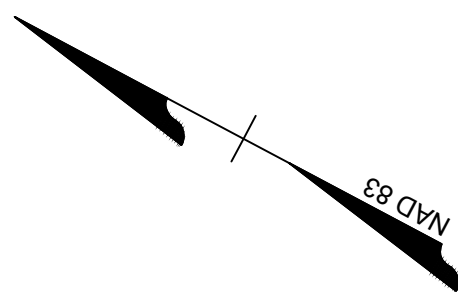
POCKET PARK
EXAMPLES





MONISH GATE TURN LANE EXHIBIT

FLUVANNA COUNTY - NOVEMBER 2, 2021



SCALE 1"=50'

0 50' 100'



Crash Data



This feature layer contains point locations and related data for all reportable motor vehicle crashes.

18 crashes at the intersection: 5 rear end and 13 angle.

 MEMORANDUM

TO: CHARLIE ARMSTRONG

FROM: BILL WUENSCH, P.E., PTOE;
JEANIE ALEXANDER, P.E.
WEI HE

ORGANIZATION: SOUTHERN DEVELOPMENT

DATE: NOVEMBER 2ND, 2021 (AMENDED PER
COMMENTS ON 1/11/22)

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

RE: VILLAGE GARDENS

YOUR REFERENCE NUMBER:

☐ URGENT☒ FOR YOUR USE☐ PLEASE COMMENT☐ PLEASE REPLY☐ PLEASE RECYCLE

Project Overview

This memorandum summarizes the traffic impact for the proposed Village Gardens development to be located off of Route 53 in Fluvanna County, Virginia. Access to the site will be provided via a new roadway north of the existing intersection of SR 636 (Garden Lane) that will connect to Garden Lane. The existing Garden Lane will end in a cul-de-sac south of the existing intersection Village Boulevard. **Figure 1** illustrates the project location, vicinity, and study intersections. **Figure 2** illustrates the conceptual site plan.

As illustrated in Figure 1, the study intersections include: Route 53 and SR 636 (Garden Lane) and Route 53 and the site entrance.

The proposed Village Gardens development will include 247 single family dwelling units, 75 townhomes, and it is assumed that it will be fully occupied by 2026.

Included within this study are the traffic count data, traffic volume projections, traffic operations analyses, turn lane warrant analyses, crash analyses, and a summary of the findings and conclusions.

Traffic Volumes

2021 Existing Traffic Volumes

Traffic counts were conducted at the study intersections on Thursday, October 21st, 2021 from 7-9 AM and 4-6 PM. The traffic count reports are attached in **Appendix A**.

To address possible changes in traffic patterns due to COVID, the traffic counts were compared to peak hour volumes calculated from 2019 VDOT Traffic Data. The result of this comparison indicates that the existing morning and afternoon peak hour traffic volumes along Route 53 are 70% and 95% of the 2019 peak hour volumes based on VDOT AADT and K factor data during the morning and afternoon peak hours, respectively. To address the reduced traffic volumes, the morning and afternoon peak hour traffic volumes were adjusted up by 21% and 5%, for the morning and afternoon peak hours, respectively.

The resulting traffic volumes based on the adjustments previously described are illustrated in **Figure 3**.

2026 No Build Traffic Volumes

The 2021 existing traffic volumes were increased by an annual compounded growth rate of 0.71% based on VDOT traffic data. The resulting 2026 no build traffic volumes are illustrated in **Figure 4**.

2026 Build Traffic Volumes

The 2026 build traffic volumes were developed based on traffic shifts due to the closure of the existing Garden Lane, the 2026 no build traffic volumes, and the site trip generation and distribution.

Garden Lane Closure

Based on the traffic counts, the traffic volumes turning to and from Garden Lane are minimal. As a conservative estimate the traffic volumes at the existing Garden Lane intersection were not reduced to reflect the closure of Garden Lane south of Village Boulevard. However, these volumes were added to the proposed site roadway connection with Route 53 to ensure that the existing traffic generated by the uses north of the proposed closure are appropriately accounted for.

Trip Generation

The proposed Village Gardens development will include 247 single family homes and 75 townhomes and is expected to be fully occupied by 2026. The *ITE Trip Generation Manual 10th Edition* was used to estimate the trips generated by the proposed Village Gardens. **Table 1** summarizes the land use descriptions ITE land use code, size, and anticipated trips.

Table 1 Site Trip Generation

Land Use	LU Code	Number	Unit	Weekday	AM			PM		
					Total	In	Out	Total	In	Out
Single Family	210	247	du	2,389	180	45	135	242	152	90
Townhomes	220	75	du	526	36	8	28	46	29	17
Total		322	du	2,915	216	53	163	288	181	107

As shown in Table 1, the proposed Village Gardens will generate 216 morning and 288 afternoon peak hour trips.

Site Trip Distribution and Assignment

The site trip distribution percentages were based on the existing travel patterns at the Garden Lane intersection with Route 53 and are illustrated in **Figure 5**. Based on these volumes during the morning peak hour:

- 47% of the site trips arrive from the north
- 53% of the site trips arrive from the south
- 50% of the site trips depart to the north, and
- 50% of the site trips depart to the south.

During the afternoon peak hour:

- 67% of the site trips arrive from the north,
- 33% of the site trips arrive from the south,
- 40% of the site trips depart to the north, and
- 60% of the site trips depart to the south.

The estimated site trips shown in Table 1 were assigned to the roadway network per the above distribution percentages and the resulting site trip assignment is illustrated in **Figure 6**.

The site trips shown in Figure 6 were added to the 2026 no build traffic volumes shown in Figure 4 resulting in the 2026 build traffic volumes illustrated in **Figure 7**.

Turn Lane Warrant Analysis

Turn lane warrant analyses were performed for the existing Route 53 and Garden Lane intersection and the Route 53 and site entrance intersection based on the *VDOT Roadway Design Manual*. The turn lane warrant forms are included in **Appendix B** and the results are summarized in **Table 2**.

Table 2 Turn Lane Warrant Analysis Summary

Location	Movement	2026 No Build		2026 Build	
		AM	PM	AM	PM
Route 53 at Garden Lane	Southbound left turn	Not Warranted	Warranted	Not Warranted	Warranted
	Northbound right turn	Not Warranted	Not Warranted	Not Warranted	Not Warranted
Route 53 at Site Driveway	Southbound left turn	NA	NA	Warranted	Warranted
	Northbound right turn	NA	NA	Taper Only	Taper Only

The results in Table 4 indicate that a southbound left turn lane is warranted at the existing Route 53 intersection with Garden Lane. The results also indicate that a 200 foot southbound left turn lane with a 200 foot taper and a 200 foot northbound right turn taper are warranted at the site driveway intersection with Route 53.

Traffic Operations Analysis

Traffic operations analyses were completed using Synchro/SimTraffic 11.0, a computer-based traffic operations model that replicates procedures from the *Highway Capacity Manual (HCM)*. The average vehicle delays (in seconds) for the intersection overall and for each turning movement, as well as the Level of Service (LOS) on a scale of A (best) to F (worst) as defined in the *HCM* are reported in Synchro, and the maximum queue lengths (in feet) for each turning movement are reported in SimTraffic. Both the Synchro and SimTraffic analyses were performed based on the latest *VDOT Traffic Operations and Safety Analysis Manual (TOSAM)*.

2021 Existing Conditions Analysis

The 2021 existing conditions analysis is based on the current intersection configuration, existing traffic control, 2021 existing traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix C** and the SimTraffic queue reports in **Appendix D**. **Table 3** summarizes the 2021 existing delays, levels of service, and maximum queue lengths.

Table 3 2021 Existing Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	Existing AM			Existing PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane								
Unsignalized								
Nahor Manor Road	EBL/T/R	-	B	12.1	59	B	14.2	52
Garden Lane	WBL/T/R	-	B	14.2	45	C	16.4	25
Route 53	NBL/T/R*	-	A	7.7	6	A	8.7	53
Route 53	SBL/T/R*	-	A	8.3	18	A	7.7	23

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

As shown in Table 2, all movements at the study intersections currently operate at LOS C or better and the queuing analysis results indicate that all queues are minimal.

2026 No Build Conditions Analysis

The 2026 no build conditions Synchro models are based on the current intersection configuration, existing traffic control, 2026 no build traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix E** and the SimTraffic queue reports in **Appendix F**. **Table 4** summarizes the 2026 no build delays, levels of service, and maximum queue lengths.

Table 4 2030 No Build Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	2026 No Build AM			2026 No Build PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane								
Unsignalized								
Nahor Manor Road	EBL/T/R	-	B	12.3	58	B	14.6	54
Garden Lane	WBL/T/R	-	B	14.5	49	C	16.9	29
Route 53	NBL/T/R*	-	A	7.7	8	A	8.7	56
Route 53	SBL/T/R*	-	A	8.4	18	A	7.8	19

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

As shown in Table 3, all movements at the study intersections will operate at LOS C or better and the queuing analysis results indicate all queues will be minimal.

2026 Build Conditions Analysis

The 2026 build conditions Synchro models were based on the current intersection configuration (at Garden Lane), previous turn lane warrants (at site entrance), existing traffic control, 2026 build traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix G** and the SimTraffic queue reports in **Appendix H**. **Table 5** summarizes the 2026 build delays, levels of service, and maximum queue lengths. As shown in Table 5, all movements at the study intersections will operate at LOS D or better and the queuing analysis results indicate that all queues will be minimal.

Table 5 2026 Build Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	2026 Build AM			2026 Build PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane								
Unsignalized								
Nahor Manor Road	EBL/T/R	-	B	13.7	65	C	16.3	63
Garden Lane	WBL/T/R	-	C	16.3	46	C	19.9	24
Route 53	NBL/T/R*	-	A	7.9	6	A	9.0	70
Route 53	SBL/T/R*	-	A	8.5	25	A	7.9	19
Route 53/Site Entrance								
Unsignalized								
Site Entrance	WBL/R	-	C	21.1	125	D	30.9	105
Route 53	NBT/R	-	A	0.0	2	A	0.0	11
Route 53	SBL	300	A	8.6	36	A	8.4	68
	SBT	-	A	0.0	0	A	0.0	0

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

Crash Analysis

Crash analysis was performed at the Garden Lane intersection with Route 53 using VDOT Crash Data and is summarized in **Appendix I**. The data includes crashes from January 2014 through September 2021. Based on the data, there was only one crash at the intersection, a sideswipe between vehicles traveling in the same direction. Within 500 feet to the north and south of the intersection there were three crashes, one angle collision south of Garden Lane and two fixed object collisions north of Garden Lane.

While the crash history does not illustrate a safety issue at the intersection of Garden Lane with Route 53, the proposed site entrance is expected to have greater sight distance than exists at Garden Lane.

Findings and Recommendations

Based on the analyses summarized in this memorandum, the principal findings are as follows:

- The proposed Village Gardens development will generate 216 morning and 288 afternoon peak hour trips.
- All movements at the study intersection currently operate at LOS C or better and queues are minimal. These conditions are expected to continue in 2026 without the addition of the Village Gardens development.
- With the addition of the Village Gardens development, all movements at the study intersections are expected to operate at LOS D or better with minimal queues.
- **The impact of the proposed Village Gardens development on the study intersections will be minimal.**
- At the Route 53 and site entrance intersection, a southbound left turn lane (200 feet of storage and a 200 foot taper) and a northbound right turn taper (200 feet) will be warranted.
- Based on the crash history over the most recent eight year period safety issues are not found. However, the new site driveway connection will have improved sight lines compared to the existing intersection of Garden Lane with Route 53.

Based on the above findings, construction of a 200 foot southbound left turn lane with a 200 foot taper is recommended along with a 200 foot northbound right turn taper.

End of Memorandum

Attachments

Figures

Appendix A Traffic Count Reports

Appendix B Turn Lane Warrant Forms

Appendix C Existing HCM Reports

Appendix D Existing SimTraffic Queue Reports

Appendix E 2026 No Build HCM Reports

Appendix F 2026 No Build SimTraffic Queue Reports

Appendix G 2026 Build HCM Reports

Appendix H 2026 Build SimTraffic Queue Reports

Appendix I Crash Analysis

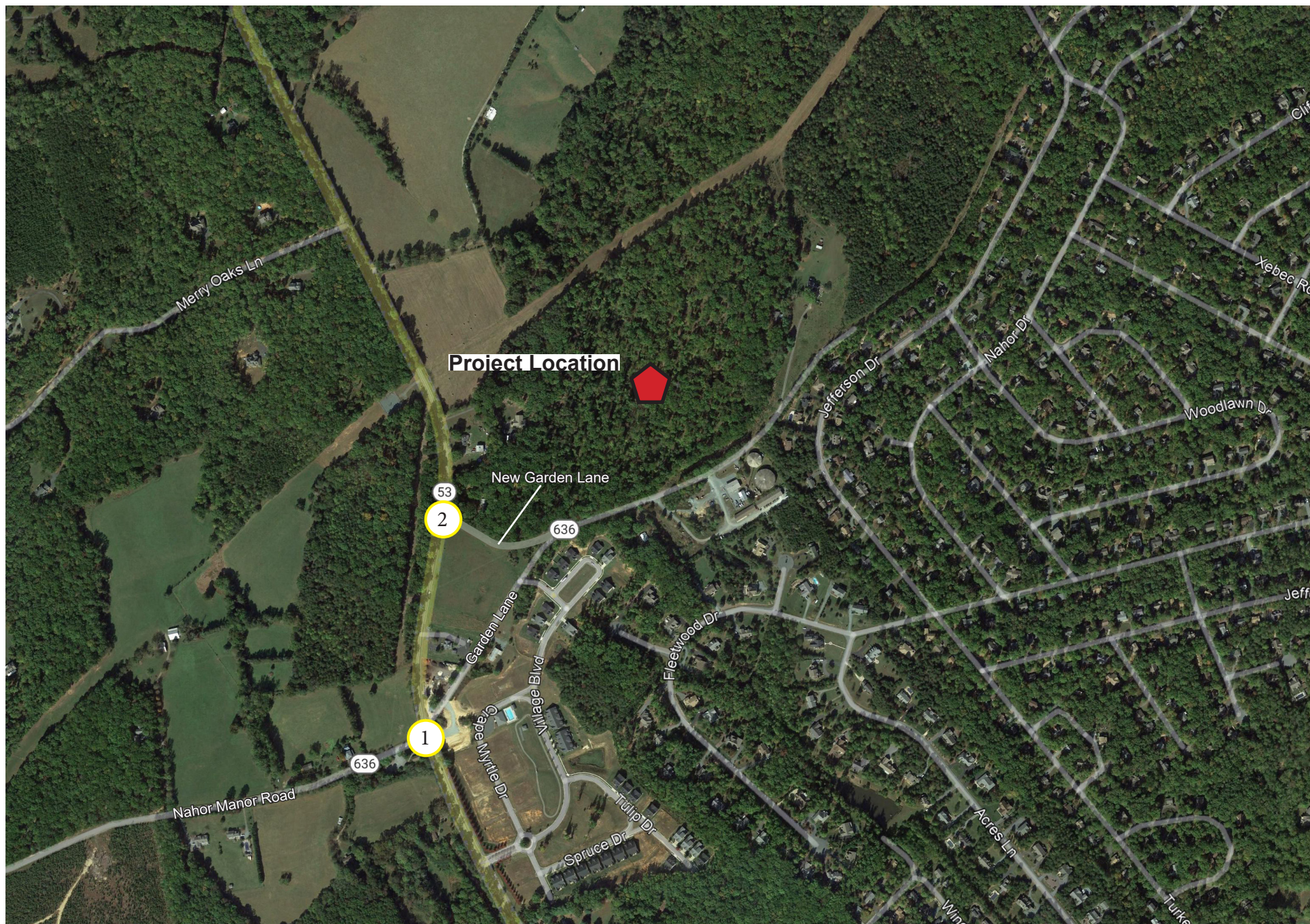
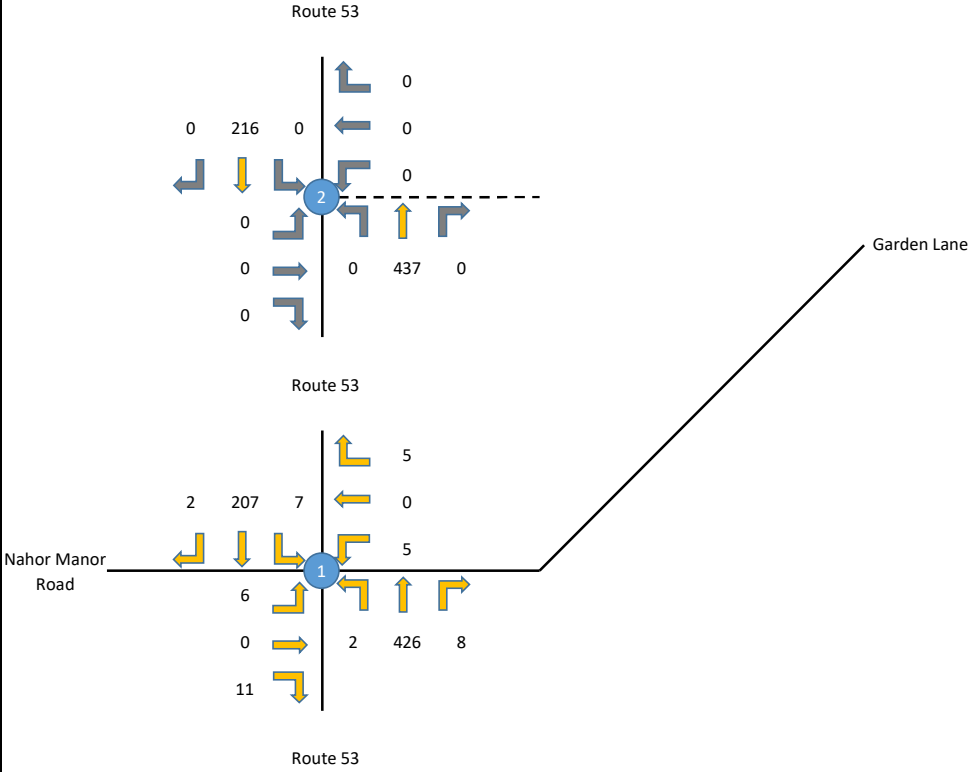


Figure 1 Site Location and Study Intersections

Adjusted Existing 2021 Traffic Volumes AM

Covid Adjustment Rate

1.21



Adjusted Existing 2021 Traffic Volumes PM

Covid Adjustment Rate

1.05

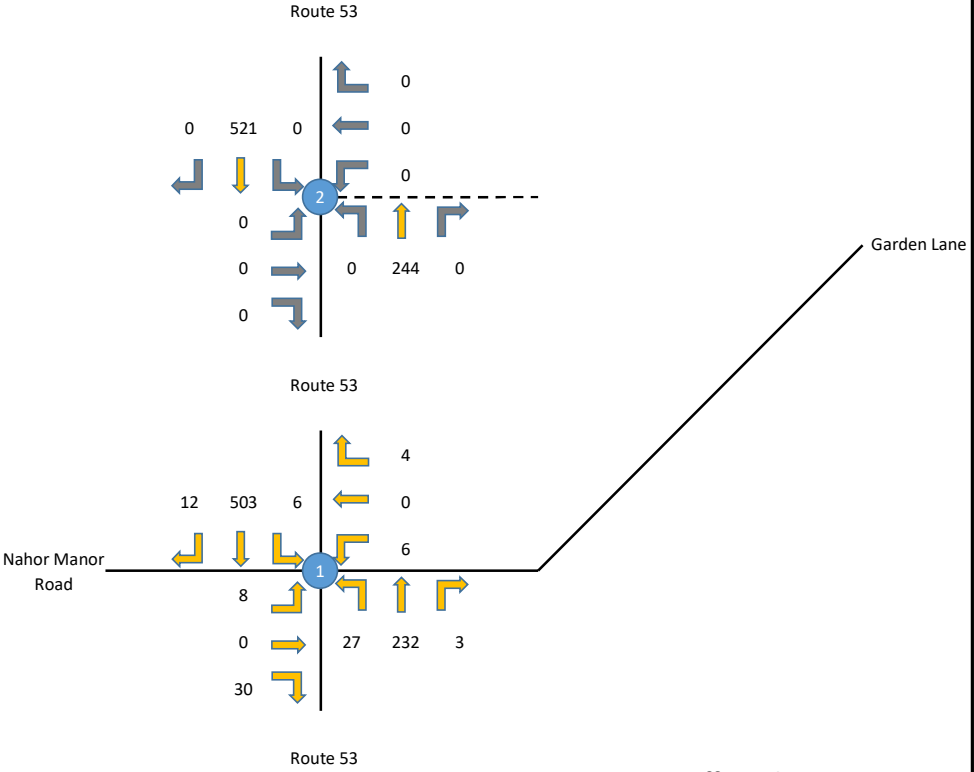
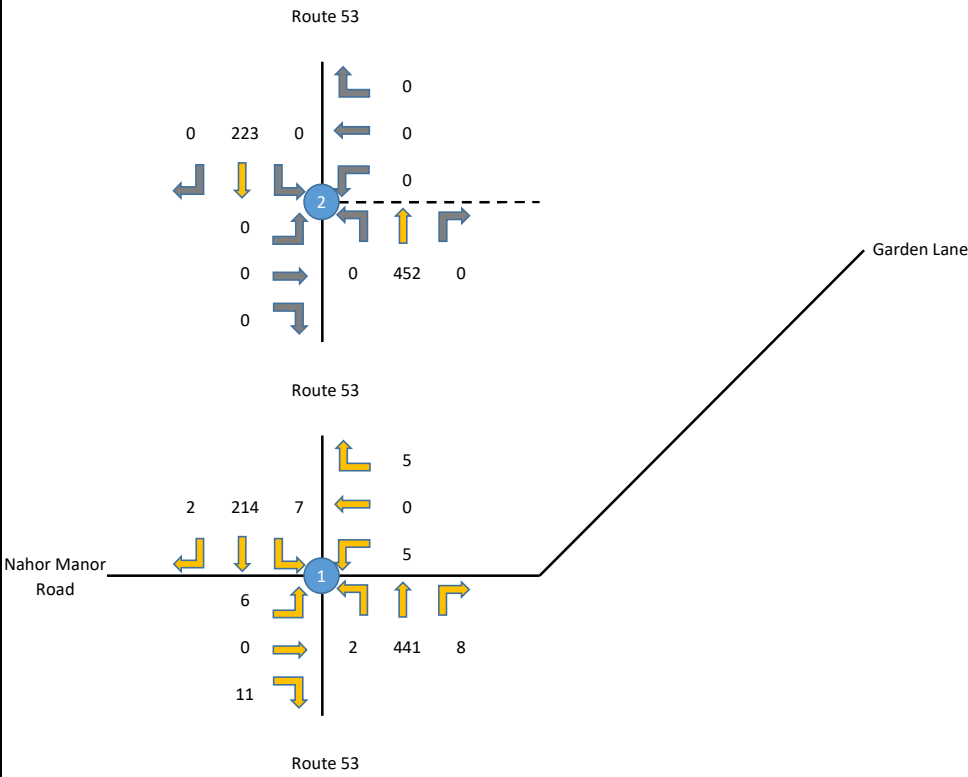


Figure 3 2021 Traffic Volumes

2026 No Build Traffic Volumes AM



2026 No Build Traffic Volumes PM

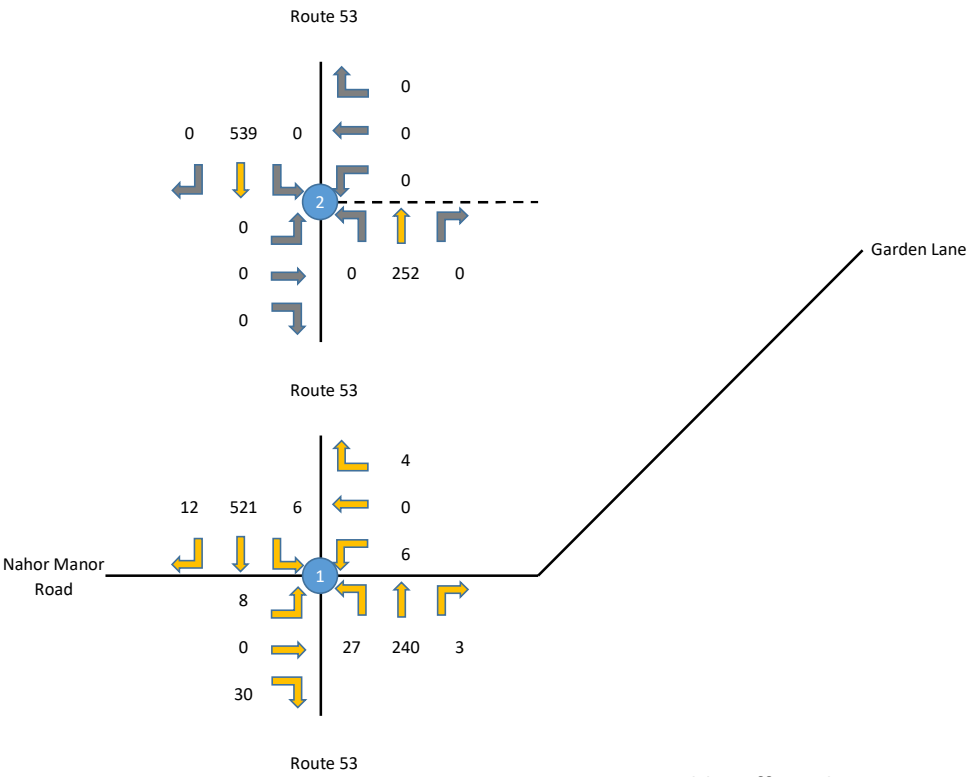
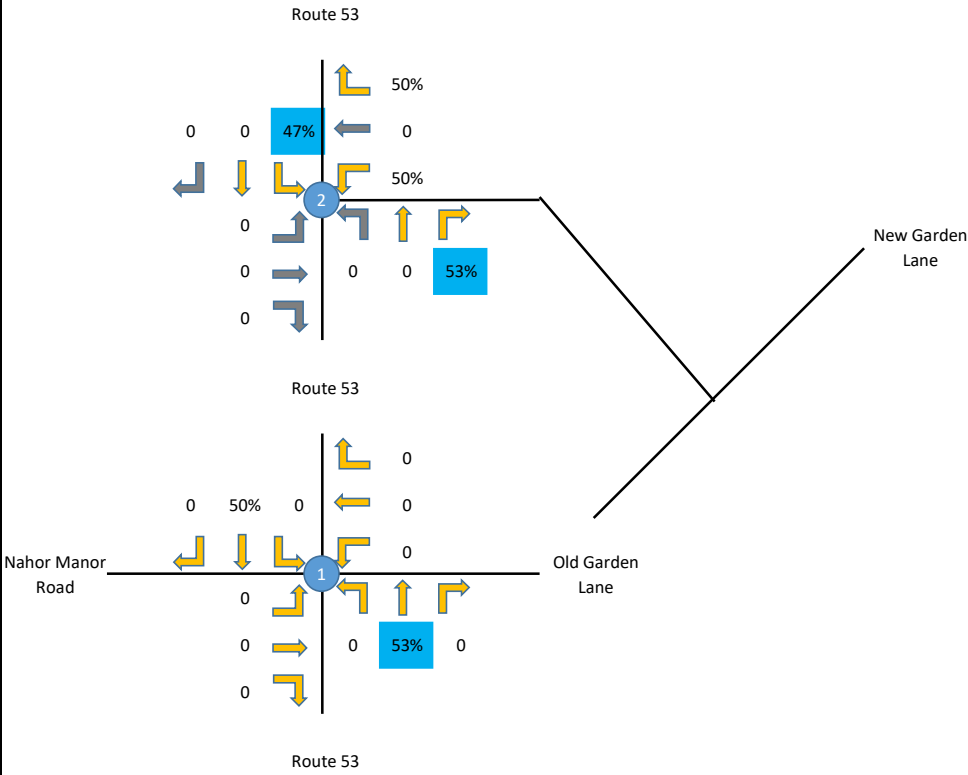


Figure 4 2026 No Build Traffic Volumes

Site Trip Distribution AM



Site Trip Distribution PM

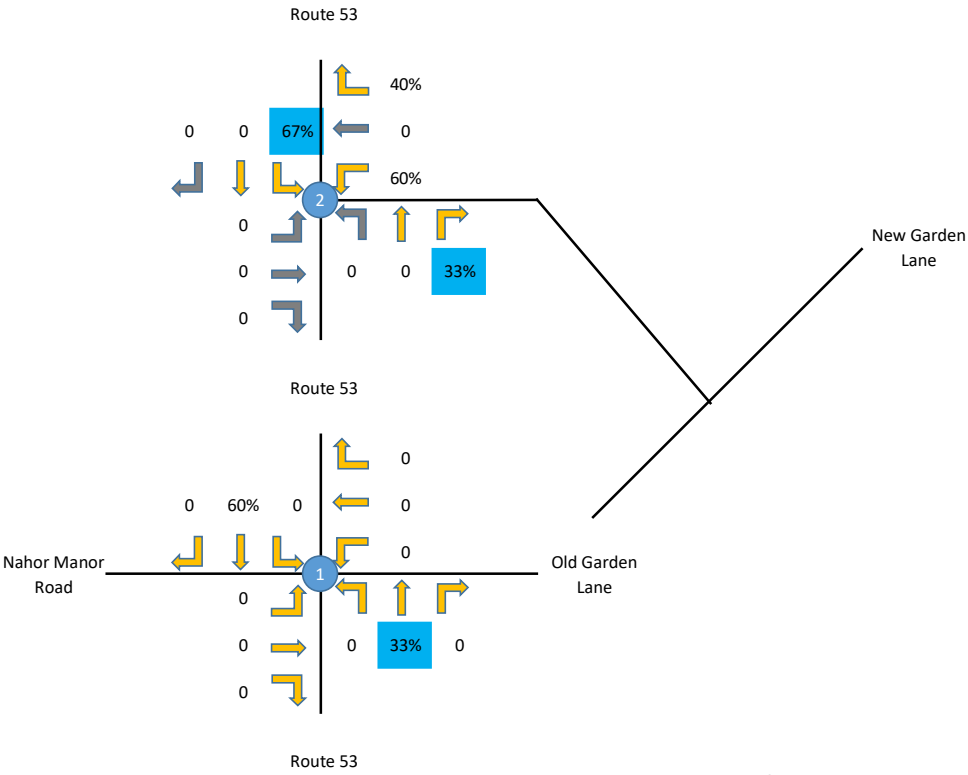
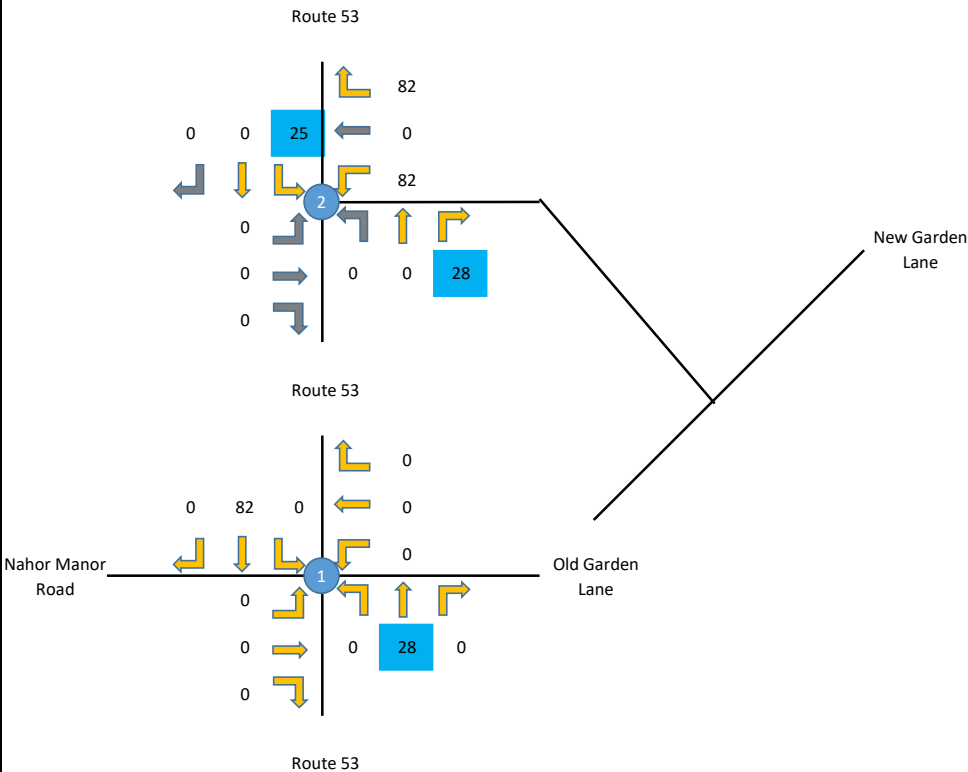


Figure 5 Site Trip Distribution

Site Trip Assignment AM



Site Trip Assignment PM

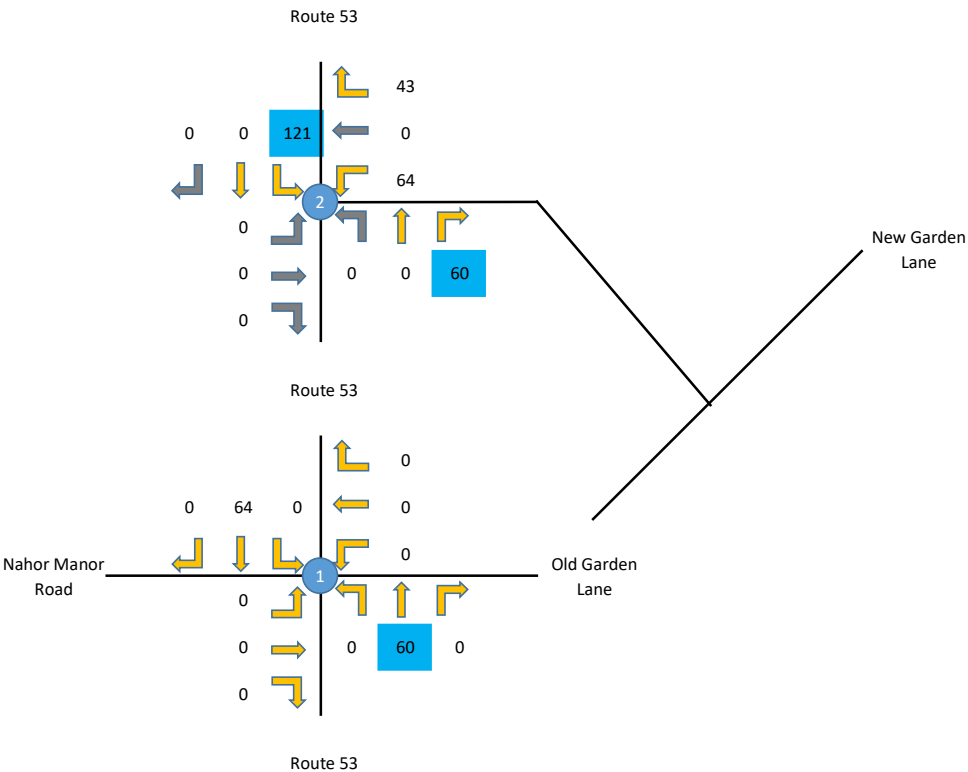
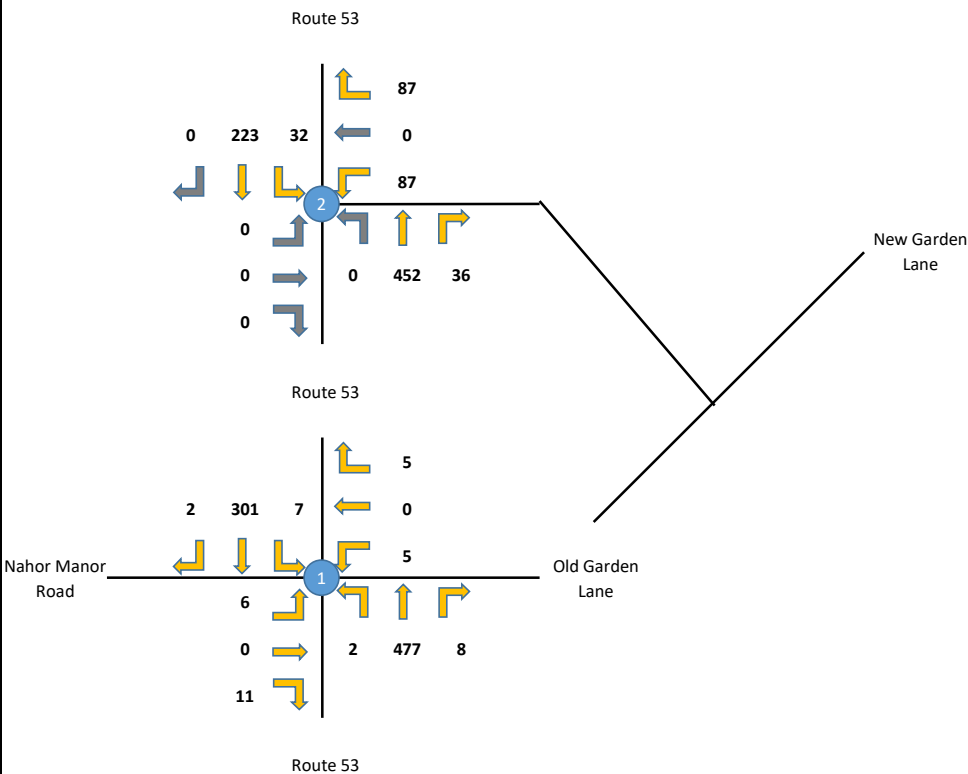


Figure 6 Site Trip Assignment

2026 Build Traffic Volumes AM



2026 Build Traffic Volumes PM

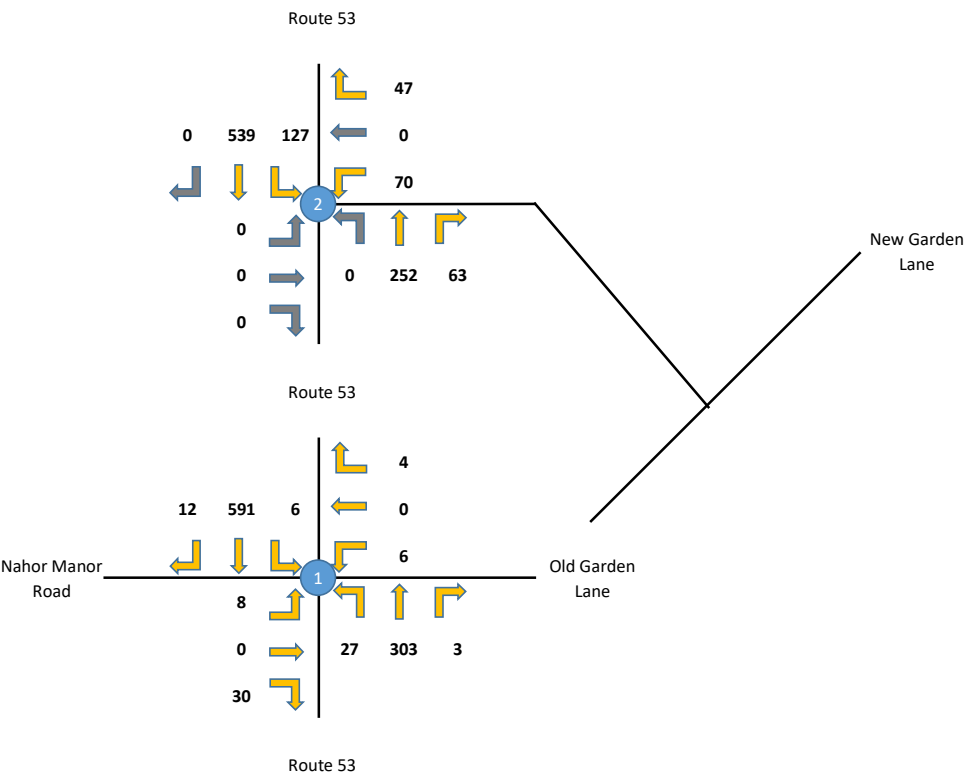


Figure 7 2026 Build Traffic Volumes

Appendices

Appendix A Traffic Count Reports

Peggy Malone & Associates

(888) 247-8602

BOS 2022-01-19 p.122/1306

File Name : Garden Ln & RT 53 AM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Cars

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	44	2	0	46	2	0	0	0	2	2	66	0	0	68	1	0	4	0	5	121
07:15 AM	0	39	1	0	40	3	0	0	0	3	0	79	0	0	79	0	0	0	0	0	122
07:30 AM	0	25	0	0	25	0	0	0	0	0	3	88	0	0	91	0	0	1	0	1	117
07:45 AM	0	42	3	0	45	0	0	0	0	0	3	85	0	0	88	0	0	1	0	1	134
Total	0	150	6	0	156	5	0	0	0	5	8	318	0	0	326	1	0	6	0	7	494
08:00 AM	0	41	1	0	42	1	0	1	0	2	1	103	0	0	104	2	0	2	0	4	152
08:15 AM	0	53	1	0	54	3	0	0	0	3	2	70	1	0	73	5	0	0	0	5	135
08:30 AM	1	28	1	0	30	0	0	2	0	2	0	86	1	0	87	0	0	2	0	2	121
08:45 AM	0	34	3	0	37	0	0	0	0	0	4	81	0	0	85	0	0	1	0	1	123
Total	1	156	6	0	163	4	0	3	0	7	7	340	2	0	349	7	0	5	0	12	531
Grand Total	1	306	12	0	319	9	0	3	0	12	15	658	2	0	675	8	0	11	0	19	1025
Apprch %	0.3	95.9	3.8	0		75	0	25	0		2.2	97.5	0.3	0		42.1	0	57.9	0		
Total %	0.1	29.9	1.2	0	31.1	0.9	0	0.3	0	1.2	1.5	64.2	0.2	0	65.9	0.8	0	1.1	0	1.9	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	42	3	45	0	0	0	0	3	85	0	88	0	0	1	1	134
08:00 AM	0	41	1	42	1	0	1	2	1	103	0	104	2	0	2	4	152
08:15 AM	0	53	1	54	3	0	0	3	2	70	1	73	5	0	0	5	135
08:30 AM	1	28	1	30	0	0	2	2	0	86	1	87	0	0	2	2	121
Total Volume	1	164	6	171	4	0	3	7	6	344	2	352	7	0	5	12	542
% App. Total	0.6	95.9	3.5		57.1	0	42.9		1.7	97.7	0.6		58.3	0	41.7		
PHF	.250	.774	.500	.792	.333	.000	.375	.583	.500	.835	.500	.846	.350	.000	.625	.600	.891

Peggy Malone & Associates
(888) 247-8602

BOS 2022-01-19 p.123/1306

File Name : Garden Ln & RT 53 AM
Site Code :
Start Date : 10/21/2021
Page No : 1

Groups Printed- Trucks

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	5
07:15 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:45 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
Total	1	7	0	0	8	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	14
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
08:15 AM	1	3	0	0	4	0	0	1	0	1	1	2	0	0	3	2	0	0	0	2	10
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Total	1	6	0	0	7	0	0	1	0	1	1	9	0	0	10	2	0	0	0	2	20
Grand Total	2	13	0	0	15	0	0	1	0	1	1	14	0	0	15	3	0	0	0	3	34
Apprch %	13.3	86.7	0	0		0	0	100	0		6.7	93.3	0	0		100	0	0	0		
Total %	5.9	38.2	0	0	44.1	0	0	2.9	0	2.9	2.9	41.2	0	0	44.1	8.8	0	0	0	8.8	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
08:00 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:15 AM	1	3	0	4	0	0	1	1	1	2	0	3	2	0	0	2	10
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	1	7	0	8	0	0	1	1	1	8	0	9	2	0	0	2	20
% App. Total	12.5	87.5	0		0	0	100		11.1	88.9	0		100	0	0		
PHF	.250	.583	.000	.500	.000	.000	.250	.250	.250	.667	.000	.750	.250	.000	.000	.250	.500

Peggy Malone & Associates

(888) 247-8602

BOS 2022-01-19 p.124/1306

File Name : Garden Ln & RT 53 AM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Combined

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	46	2	0	49	2	0	0	0	2	2	67	0	0	69	2	0	4	0	6	126
07:15 AM	0	42	1	0	43	3	0	0	0	3	0	79	0	0	79	0	0	0	0	0	125
07:30 AM	0	25	0	0	25	0	0	0	0	0	3	89	0	0	92	0	0	1	0	1	118
07:45 AM	0	44	3	0	47	0	0	0	0	0	3	88	0	0	91	0	0	1	0	1	139
Total	1	157	6	0	164	5	0	0	0	5	8	323	0	0	331	2	0	6	0	8	508
08:00 AM	0	43	1	0	44	1	0	1	0	2	1	104	0	0	105	2	0	2	0	4	155
08:15 AM	1	56	1	0	58	3	0	1	0	4	3	72	1	0	76	7	0	0	0	7	145
08:30 AM	1	28	1	0	30	0	0	2	0	2	0	88	1	0	89	0	0	2	0	2	123
08:45 AM	0	35	3	0	38	0	0	0	0	0	4	85	0	0	89	0	0	1	0	1	128
Total	2	162	6	0	170	4	0	4	0	8	8	349	2	0	359	9	0	5	0	14	551
Grand Total	3	319	12	0	334	9	0	4	0	13	16	672	2	0	690	11	0	11	0	22	1059
Apprch %	0.9	95.5	3.6	0		69.2	0	30.8	0		2.3	97.4	0.3	0		50	0	50	0		
Total %	0.3	30.1	1.1	0	31.5	0.8	0	0.4	0	1.2	1.5	63.5	0.2	0	65.2	1	0	1	0	2.1	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	44	3	47	0	0	0	0	3	88	0	91	0	0	1	1	139
08:00 AM	0	43	1	44	1	0	1	2	1	104	0	105	2	0	2	4	155
08:15 AM	1	56	1	58	3	0	1	4	3	72	1	76	7	0	0	7	145
08:30 AM	1	28	1	30	0	0	2	2	0	88	1	89	0	0	2	2	123
Total Volume	2	171	6	179	4	0	4	8	7	352	2	361	9	0	5	14	562
% App. Total	1.1	95.5	3.4		50	0	50		1.9	97.5	0.6		64.3	0	35.7		
PHF	.500	.763	.500	.772	.333	.000	.500	.500	.583	.846	.500	.860	.321	.000	.625	.500	.906

Peggy Malone & Associates

(888) 247-8602

BOS 2022-01-19 p.125/1306

File Name : Garden Ln & RT 53 PM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Cars

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	90	1	0	93	0	0	3	0	3	1	77	9	0	87	3	0	1	0	4	187
04:15 PM	7	85	0	0	92	0	0	1	0	1	1	56	6	0	63	3	0	2	0	5	161
04:30 PM	0	90	3	0	93	0	0	1	0	1	0	58	3	0	61	5	0	0	0	5	160
04:45 PM	2	120	2	0	124	2	0	3	0	5	0	56	6	0	62	4	0	0	0	4	195
Total	11	385	6	0	402	2	0	8	0	10	2	247	24	0	273	15	0	3	0	18	703
05:00 PM	2	95	3	0	100	1	0	3	0	4	1	50	3	0	54	2	0	1	0	3	161
05:15 PM	4	118	1	0	123	0	0	0	0	0	0	65	17	0	82	6	0	2	0	8	213
05:30 PM	3	143	0	0	146	1	0	0	0	1	2	48	0	0	50	17	0	5	0	22	219
05:45 PM	4	95	0	0	99	1	0	2	0	3	0	54	2	1	57	4	0	1	0	5	164
Total	13	451	4	0	468	3	0	5	0	8	3	217	22	1	243	29	0	9	0	38	757
Grand Total	24	836	10	0	870	5	0	13	0	18	5	464	46	1	516	44	0	12	0	56	1460
Apprch %	2.8	96.1	1.1	0		27.8	0	72.2	0		1	89.9	8.9	0.2		78.6	0	21.4	0		
Total %	1.6	57.3	0.7	0	59.6	0.3	0	0.9	0	1.2	0.3	31.8	3.2	0.1	35.3	3	0	0.8	0	3.8	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	120	2	124	2	0	3	5	0	56	6	62	4	0	0	4	195
05:00 PM	2	95	3	100	1	0	3	4	1	50	3	54	2	0	1	3	161
05:15 PM	4	118	1	123	0	0	0	0	0	65	17	82	6	0	2	8	213
05:30 PM	3	143	0	146	1	0	0	1	2	48	0	50	17	0	5	22	219
Total Volume	11	476	6	493	4	0	6	10	3	219	26	248	29	0	8	37	788
% App. Total	2.2	96.6	1.2		40	0	60		1.2	88.3	10.5		78.4	0	21.6		
PHF	.688	.832	.500	.844	.500	.000	.500	.500	.375	.842	.382	.756	.426	.000	.400	.420	.900

Peggy Malone & Associates

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BOS 2022-01-19 p.126/1306

File Name : Garden Ln & RT 53 PM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Trucks

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	3
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	9	0	0	9	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	14
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	11	0	0	11	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	16
Apprch %	0	100	0	0		0	0	0	0		0	75	25	0		100	0	0	0		
Total %	0	68.8	0	0	68.8	0	0	0	0	0	0	18.8	6.2	0	25	6.2	0	0	0	6.2	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total Volume	0	9	0	9	0	0	0	0	0	3	1	4	1	0	0	1	14
% App. Total	0	100	0		0	0	0		0	75	25		100	0	0		
PHF	.000	.450	.000	.450	.000	.000	.000	.000	.000	.375	.250	.500	.250	.000	.000	.250	.700

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BOS 2022-01-19 p.127/1306

File Name : Garden Ln & RT 53 PM
Site Code :
Start Date : 10/21/2021
Page No : 1

Groups Printed- Combined

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	95	1	0	98	0	0	3	0	3	1	77	9	0	87	3	0	1	0	4	192
04:15 PM	7	88	0	0	95	0	0	1	0	1	1	56	6	0	63	3	0	2	0	5	164
04:30 PM	0	90	3	0	93	0	0	1	0	1	0	59	4	0	63	6	0	0	0	6	163
04:45 PM	2	121	2	0	125	2	0	3	0	5	0	58	6	0	64	4	0	0	0	4	198
Total	11	394	6	0	411	2	0	8	0	10	2	250	25	0	277	16	0	3	0	19	717
05:00 PM	2	95	3	0	100	1	0	3	0	4	1	50	3	0	54	2	0	1	0	3	161
05:15 PM	4	120	1	0	125	0	0	0	0	0	0	65	17	0	82	6	0	2	0	8	215
05:30 PM	3	143	0	0	146	1	0	0	0	1	2	48	0	0	50	17	0	5	0	22	219
05:45 PM	4	95	0	0	99	1	0	2	0	3	0	54	2	1	57	4	0	1	0	5	164
Total	13	453	4	0	470	3	0	5	0	8	3	217	22	1	243	29	0	9	0	38	759
Grand Total	24	847	10	0	881	5	0	13	0	18	5	467	47	1	520	45	0	12	0	57	1476
Apprch %	2.7	96.1	1.1	0		27.8	0	72.2	0		1	89.8	9	0.2		78.9	0	21.1	0		
Total %	1.6	57.4	0.7	0	59.7	0.3	0	0.9	0	1.2	0.3	31.6	3.2	0.1	35.2	3	0	0.8	0	3.9	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	121	2	125	2	0	3	5	0	58	6	64	4	0	0	4	198
05:00 PM	2	95	3	100	1	0	3	4	1	50	3	54	2	0	1	3	161
05:15 PM	4	120	1	125	0	0	0	0	0	65	17	82	6	0	2	8	215
05:30 PM	3	143	0	146	1	0	0	1	2	48	0	50	17	0	5	22	219
Total Volume	11	479	6	496	4	0	6	10	3	221	26	250	29	0	8	37	793
% App. Total	2.2	96.6	1.2		40	0	60		1.2	88.4	10.4		78.4	0	21.6		
PHF	.688	.837	.500	.849	.500	.000	.500	.500	.375	.850	.382	.762	.426	.000	.400	.420	.905

Appendix B Turn Lane Warrant Forms

Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.130/1306

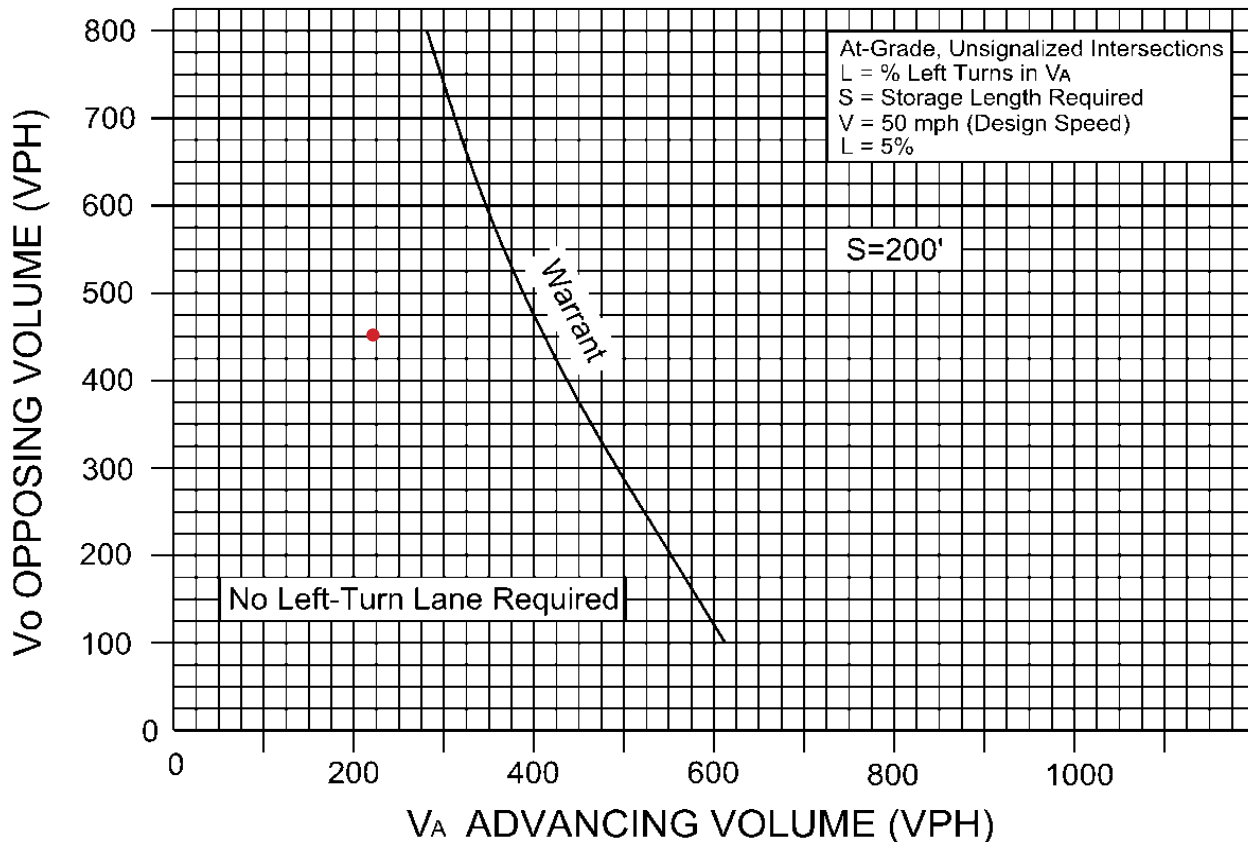
Project: Garden Lane Traffic Analysis (2026 No Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 7 vph
Advancing Volume (V_A): 223 vph
Opposing Volume (V_O): 451 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 3.1%)
% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.131/1306

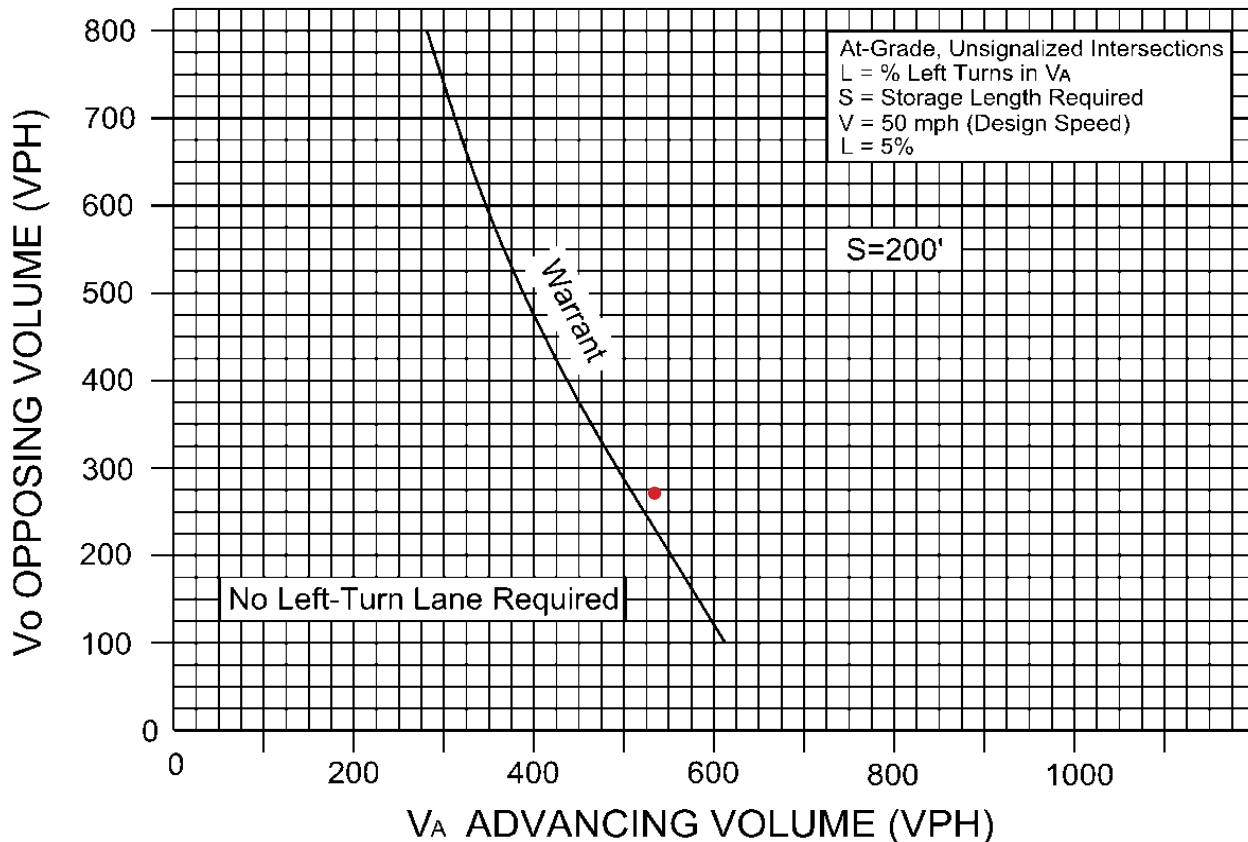
Project: Garden Lane Traffic Analysis (2026 No Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 6 vph
Advancing Volume (V_A): 539 vph
Opposing Volume (V_O): 270 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 1.1%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.132/1306

Project: Garden Lane Traffic Analysis (2026 No Build Condition)

Intersection: Route 53/Old Garden Lane

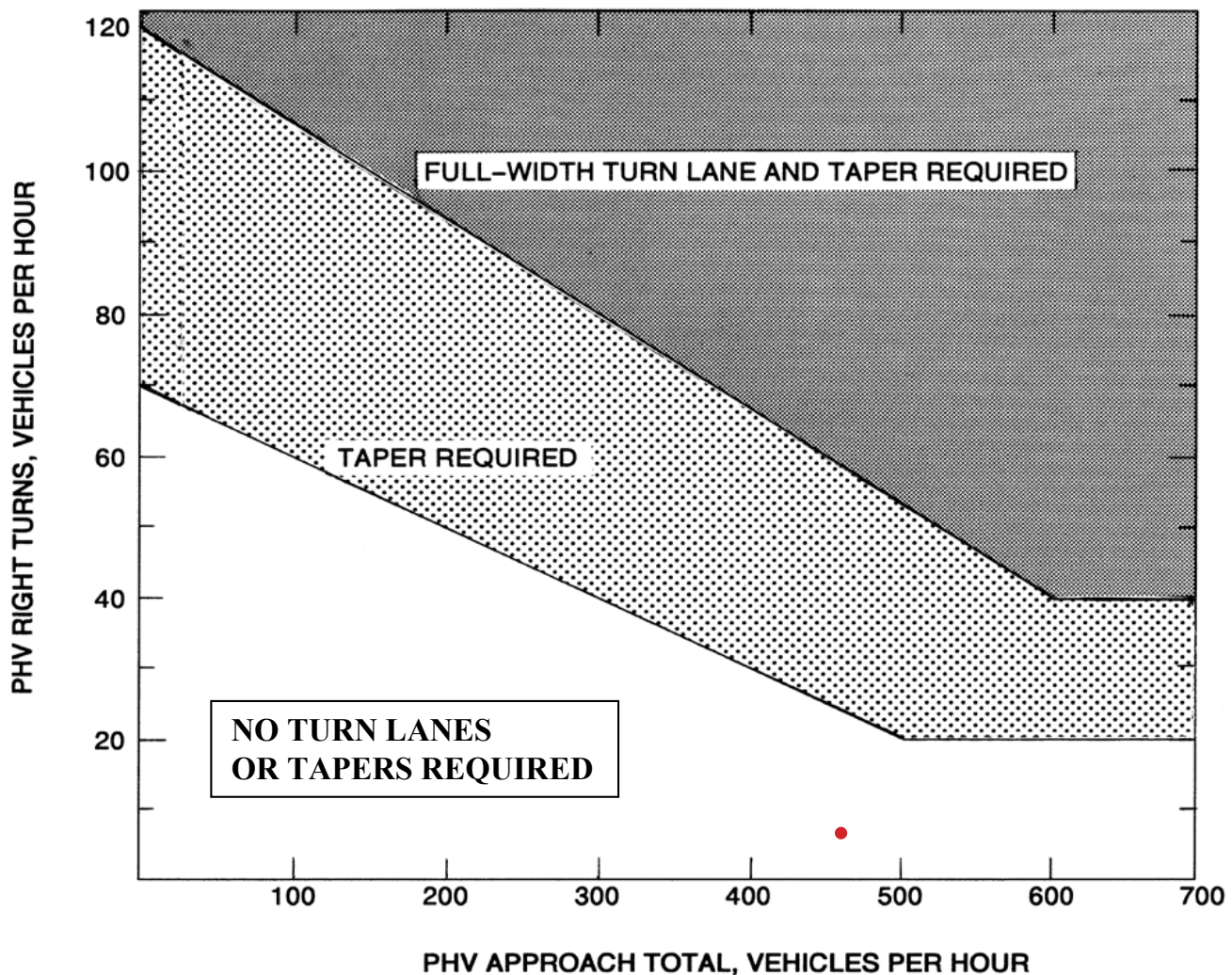
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 8 vph

PHV Approach Total: 451 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.133/1306

Project: Garden Lane Traffic Analysis (2026 No Build Condition)

Intersection: Route 53/Old Garden Lane

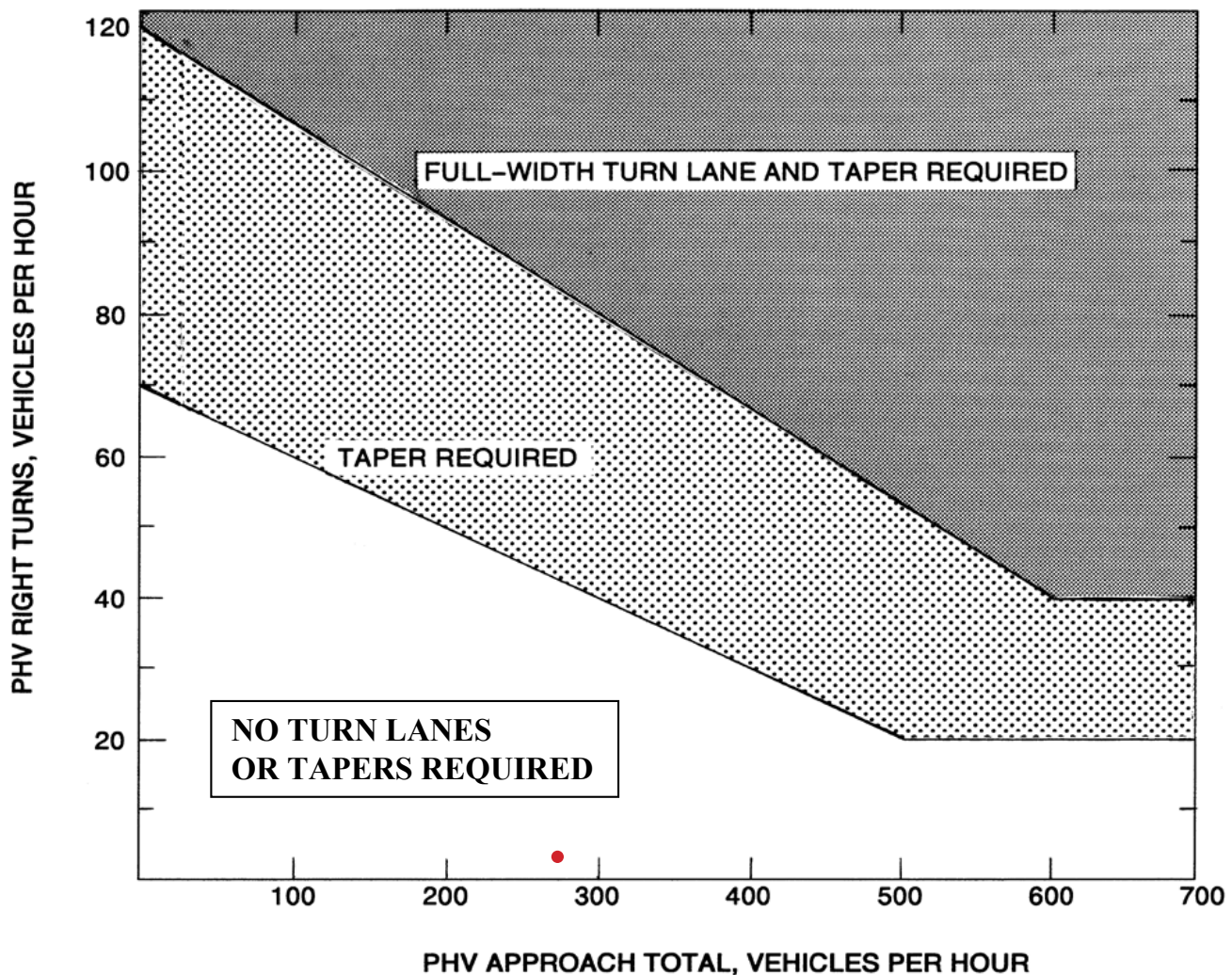
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 3 vph

PHV Approach Total: 270 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.134/1306

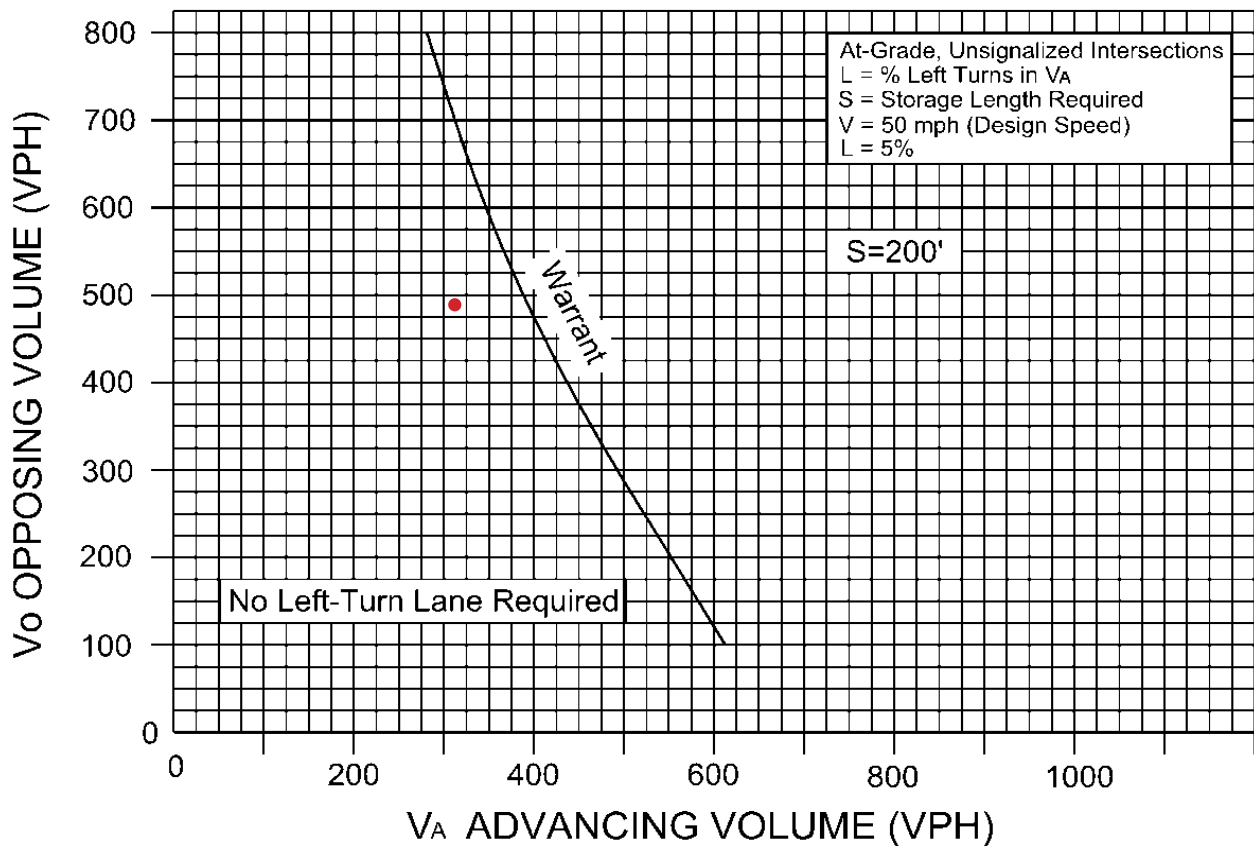
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 7 vph
Advancing Volume (V_A): 310 vph
Opposing Volume (V_O): 487 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 2.3%)
% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.135/1306

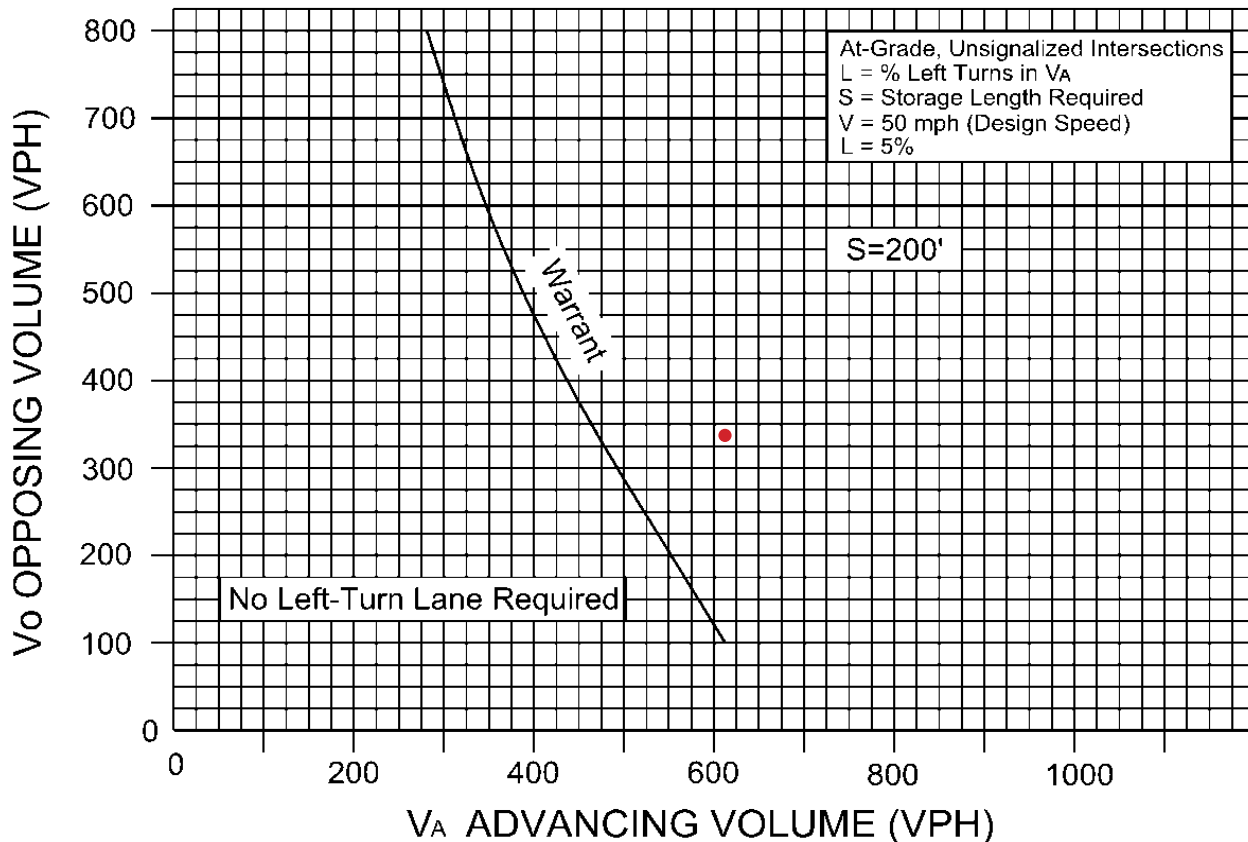
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 6 vph
Advancing Volume (V_A): 609 vph
Opposing Volume (V_O): 333 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 1.0%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.136/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

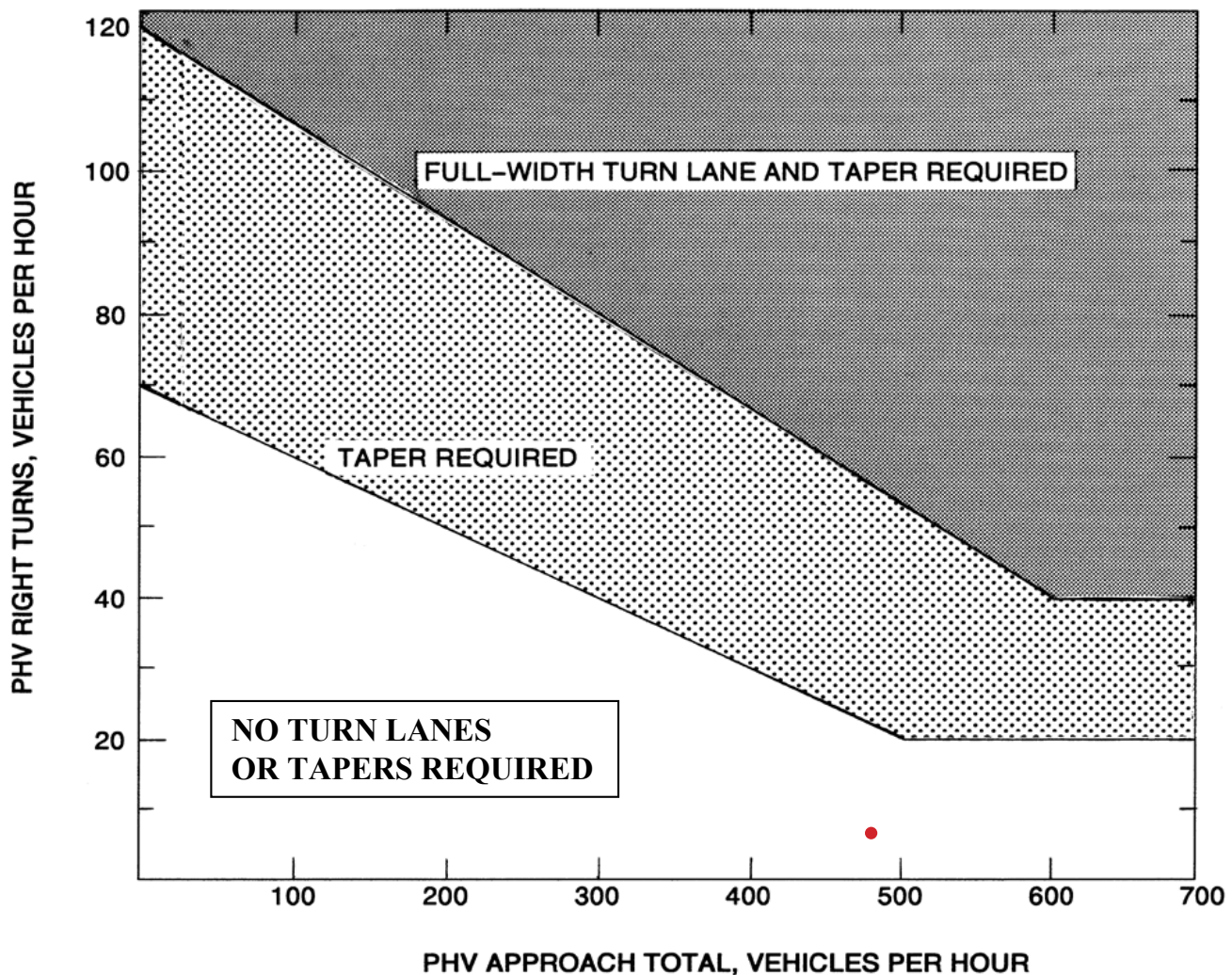
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 8 vph

PHV Approach Total: 487 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.137/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

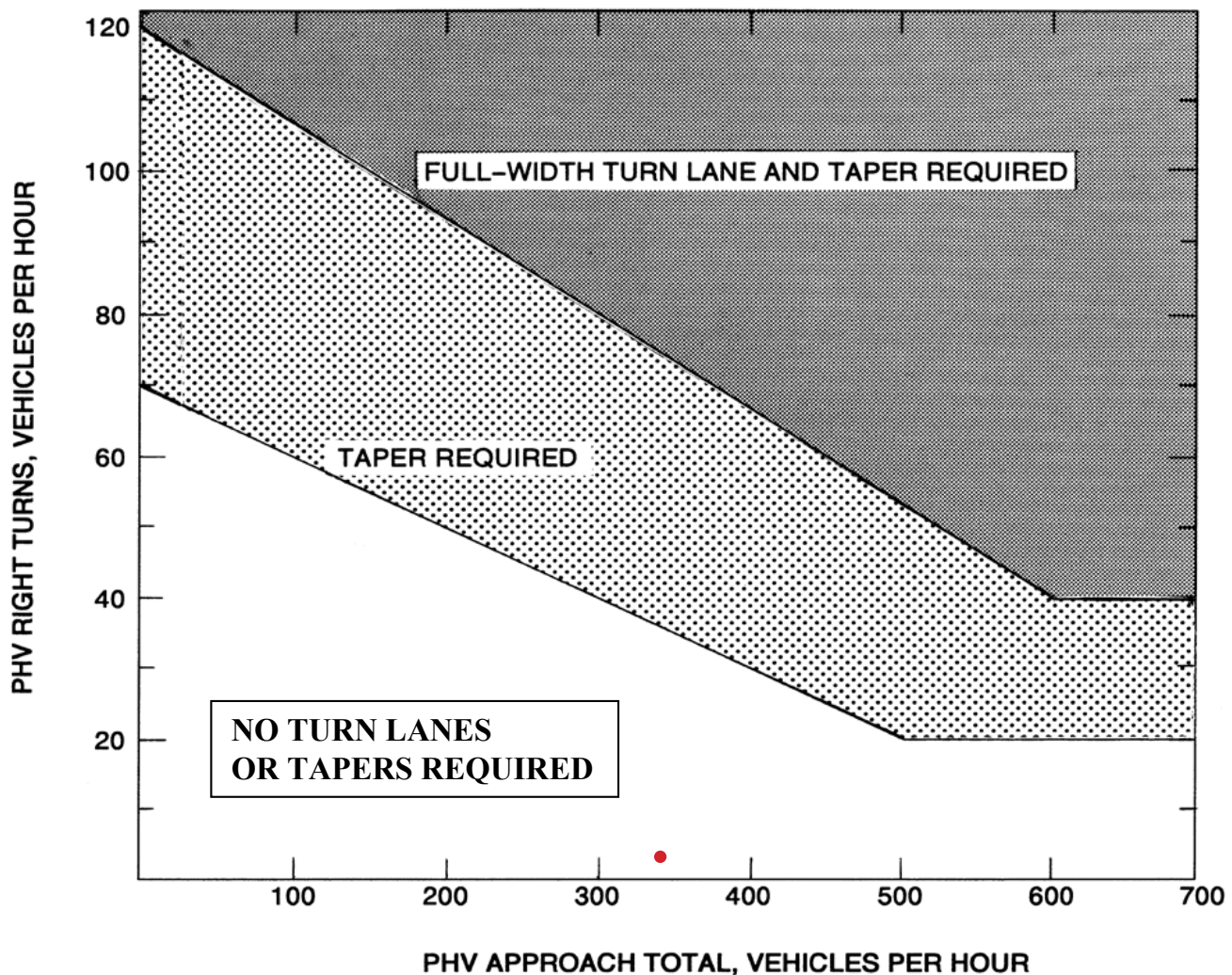
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 3 vph

PHV Approach Total: 333 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.138/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

Approach Direction: Southbound

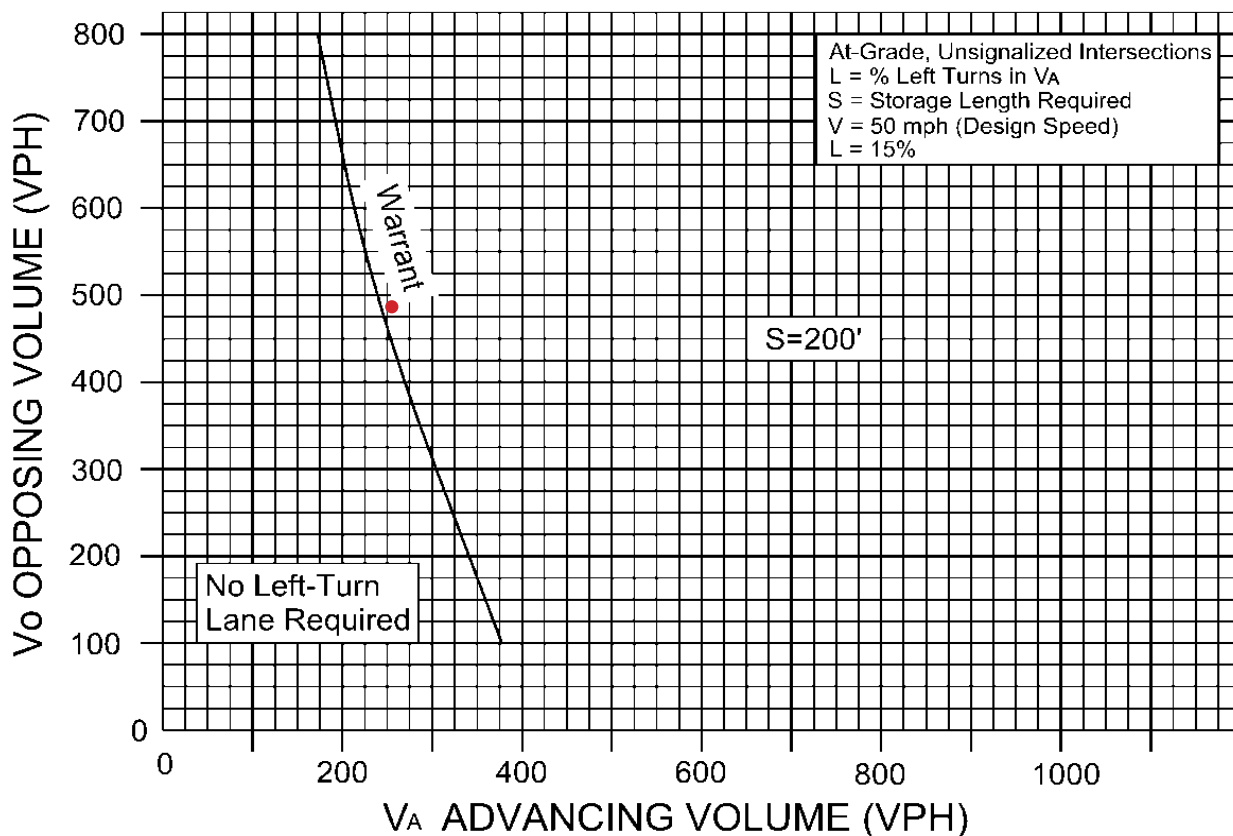
Peak Hour: AM

Peak Hour Left Turns (V_L): 32 vph
Advancing Volume (V_A): 255 vph
Opposing Volume (V_O): 488 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 15% (Calculated Value: 12.5%)

% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.139/1306

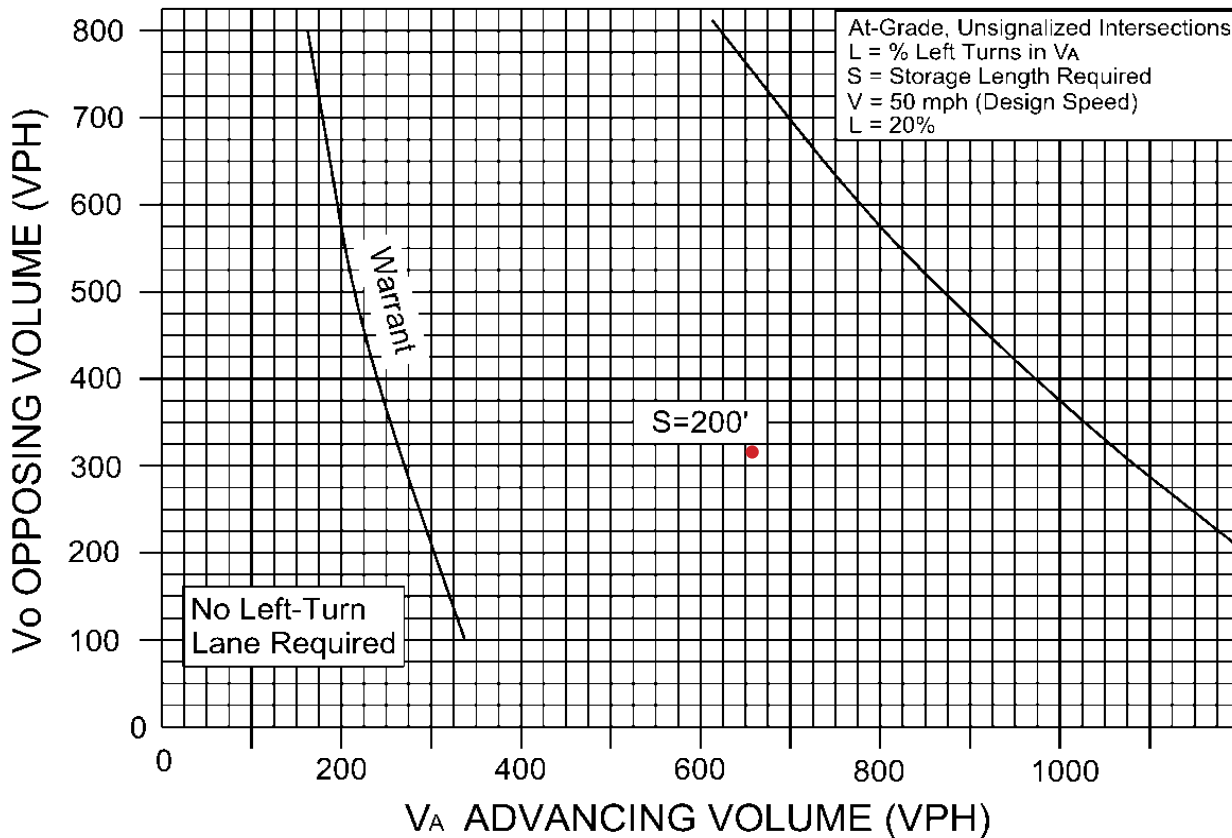
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/New Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 127 vph
Advancing Volume (V_A): 666 vph
Opposing Volume (V_O): 315 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 20% (Calculated Value: 19.1%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.140/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

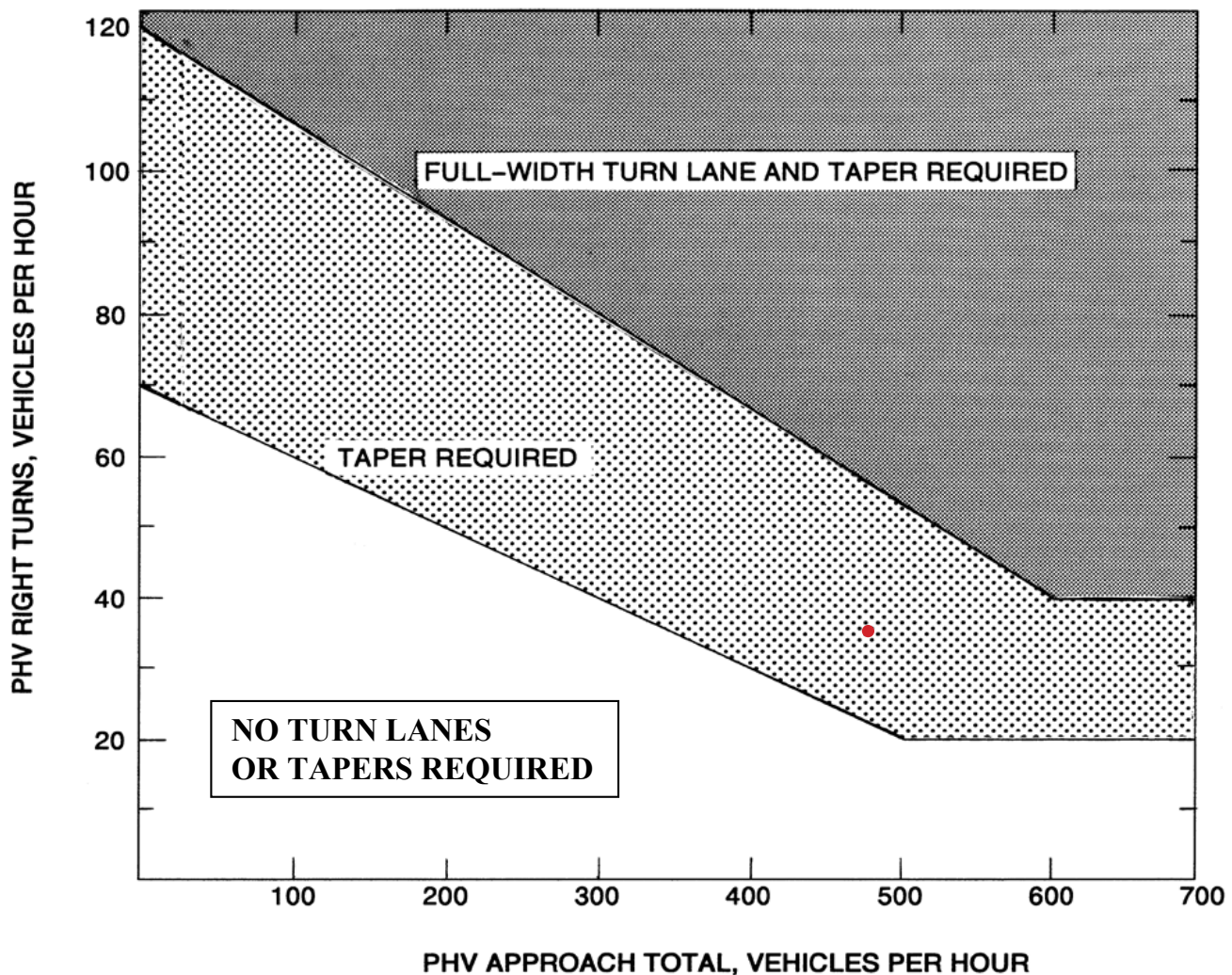
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 36 vph

PHV Approach Total: 488 vph

Conclusion: Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.141/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

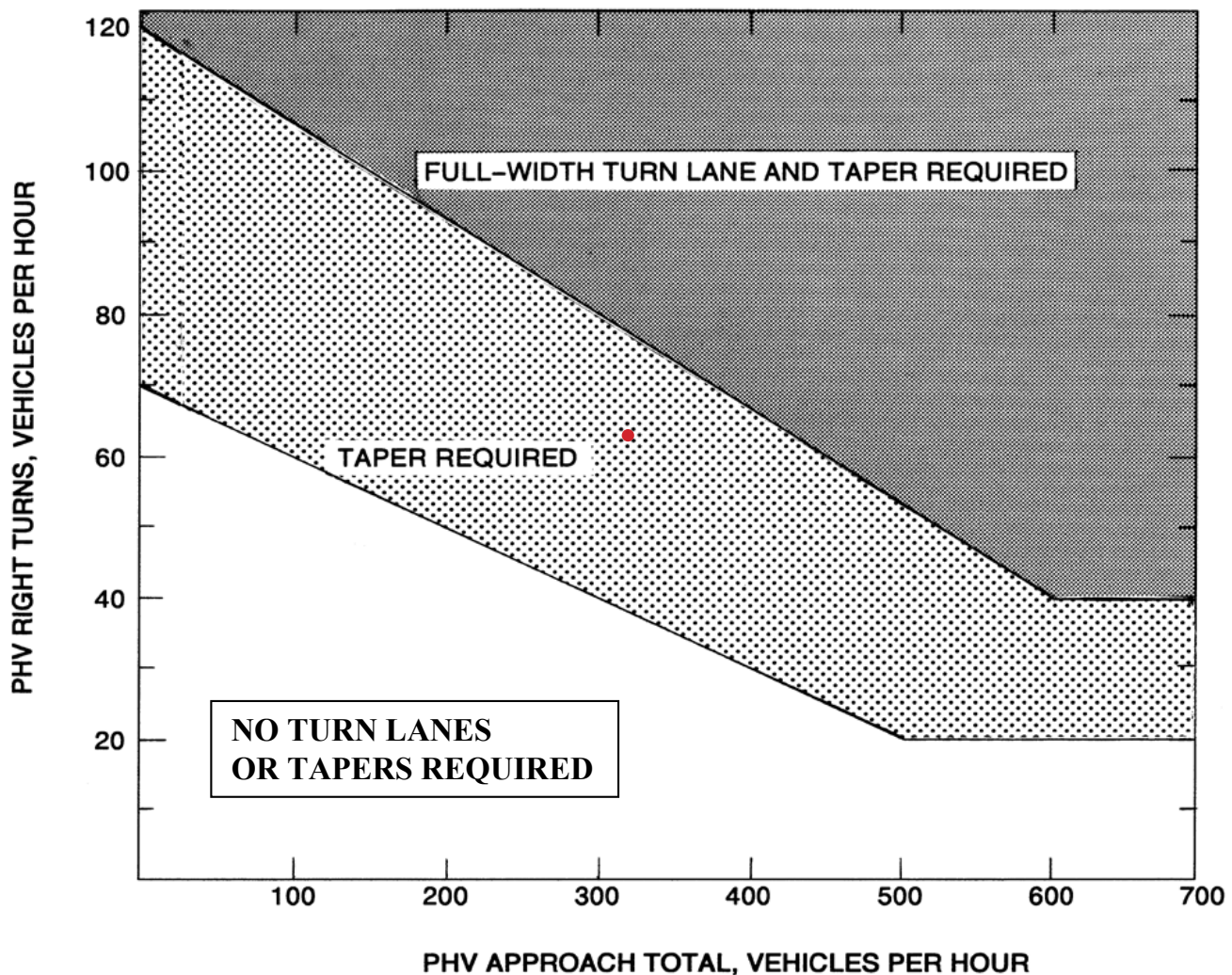
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 63 vph

PHV Approach Total: 315 vph

Conclusion: Taper Required



Appendix C Existing HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	11	5	0	5	2	426	8	7	207	2
Future Vol, veh/h	6	0	11	5	0	5	2	426	8	7	207	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	468	9	8	227	2
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	723	725	228	727	722	473	229	0	0	477	0	0
Stage 1	244	244	-	477	477	-	-	-	-	-	-	-
Stage 2	479	481	-	250	245	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	344	354	764	312	355	595	1351	-	-	1096	-	-
Stage 1	764	708	-	528	559	-	-	-	-	-	-	-
Stage 2	571	557	-	706	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	338	350	764	305	351	595	1351	-	-	1096	-	-
Mov Cap-2 Maneuver	338	350	-	305	351	-	-	-	-	-	-	-
Stage 1	762	702	-	527	558	-	-	-	-	-	-	-
Stage 2	565	556	-	689	701	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	12.1		14.2			0			0.3			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1351	-	-	529	403	1096	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.035	0.027	0.007	-	-				
HCM Control Delay (s)	7.7	0	-	12.1	14.2	8.3	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	30	6	0	4	27	232	3	6	503	12
Future Vol, veh/h	8	0	30	6	0	4	27	232	3	6	503	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	255	3	7	553	13
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	893	892	560	907	897	257	566	0	0	258	0	0
Stage 1	574	574	-	317	317	-	-	-	-	-	-	-
Stage 2	319	318	-	590	580	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	264	283	532	259	281	787	1016	-	-	1318	-	-
Stage 1	507	506	-	698	658	-	-	-	-	-	-	-
Stage 2	697	657	-	497	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	254	271	532	235	269	787	1016	-	-	1318	-	-
Mov Cap-2 Maneuver	254	271	-	235	269	-	-	-	-	-	-	-
Stage 1	490	502	-	674	636	-	-	-	-	-	-	-
Stage 2	670	635	-	462	499	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	14.2		16.4			0.9			0.1			
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1016	-	-	432	327	1318	-	-				
HCM Lane V/C Ratio	0.029	-	-	0.097	0.034	0.005	-	-				
HCM Control Delay (s)	8.7	0	-	14.2	16.4	7.7	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-				

Appendix D Existing SimTraffic Queue Reports

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	59	45	6	18
Average Queue (ft)	14	7	0	1
95th Queue (ft)	43	26	4	7
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	25	53	23
Average Queue (ft)	23	5	7	1
95th Queue (ft)	48	19	30	9
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Appendix E 2026 No Build HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	11	5	0	5	2	441	8	7	214	2
Future Vol, veh/h	6	0	11	5	0	5	2	441	8	7	214	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	485	9	8	235	2
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	748	750	236	752	747	490	237	0	0	494	0	0
Stage 1	252	252	-	494	494	-	-	-	-	-	-	-
Stage 2	496	498	-	258	253	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	331	342	756	300	344	582	1342	-	-	1080	-	-
Stage 1	757	702	-	516	550	-	-	-	-	-	-	-
Stage 2	559	548	-	699	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	325	338	756	293	340	582	1342	-	-	1080	-	-
Mov Cap-2 Maneuver	325	338	-	293	340	-	-	-	-	-	-	-
Stage 1	755	696	-	515	549	-	-	-	-	-	-	-
Stage 2	553	547	-	682	695	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	12.3		14.5		0		0.3					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1342	-	-	515	390	1080	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.036	0.028	0.007	-	-				
HCM Control Delay (s)	7.7	0	-	12.3	14.5	8.4	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	30	6	0	4	27	240	3	6	521	12
Future Vol, veh/h	8	0	30	6	0	4	27	240	3	6	521	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	264	3	7	573	13
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	922	921	580	936	926	266	586	0	0	267	0	0
Stage 1	594	594	-	326	326	-	-	-	-	-	-	-
Stage 2	328	327	-	610	600	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	253	273	518	247	271	778	999	-	-	1308	-	-
Stage 1	495	496	-	691	652	-	-	-	-	-	-	-
Stage 2	689	651	-	485	493	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	243	261	518	224	259	778	999	-	-	1308	-	-
Mov Cap-2 Maneuver	243	261	-	224	259	-	-	-	-	-	-	-
Stage 1	478	492	-	667	629	-	-	-	-	-	-	-
Stage 2	661	628	-	451	489	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	14.6		16.9			0.9			0.1			
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	999	-	-	418	313	1308	-	-				
HCM Lane V/C Ratio	0.03	-	-	0.1	0.035	0.005	-	-				
HCM Control Delay (s)	8.7	0	-	14.6	16.9	7.8	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-				

Appendix F 2026 No Build SimTraffic Queue Reports

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	58	49	8	18
Average Queue (ft)	16	7	0	1
95th Queue (ft)	47	28	4	8
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane





Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	54	29	56	19
Average Queue (ft)	23	5	7	1
95th Queue (ft)	49	21	31	9
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Appendix G 2026 Build HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane





11/01/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	11	5	0	5	2	477	8	7	301	2
Future Vol, veh/h	6	0	11	5	0	5	2	477	8	7	301	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	524	9	8	331	2
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	883	885	332	887	882	529	333	0	0	533	0	0
Stage 1	348	348	-	533	533	-	-	-	-	-	-	-
Stage 2	535	537	-	354	349	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	269	286	666	241	287	554	1238	-	-	1045	-	-
Stage 1	672	638	-	491	528	-	-	-	-	-	-	-
Stage 2	533	526	-	618	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	264	283	666	235	284	554	1238	-	-	1045	-	-
Mov Cap-2 Maneuver	264	283	-	235	284	-	-	-	-	-	-	-
Stage 1	671	632	-	490	527	-	-	-	-	-	-	-
Stage 2	527	525	-	601	631	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	13.7		16.3		0			0.2				
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1238	-	-	433	330	1045	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.043	0.033	0.007	-	-				
HCM Control Delay (s)	7.9	0	-	13.7	16.3	8.5	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

2: Route 53 & New Garden Lane





11/01/2021

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	87	452	36	32	223
Future Vol, veh/h	87	87	452	36	32	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	4
Mvmt Flow	96	96	497	40	35	245
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	832	517	0	0	537	0
Stage 1	517	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	339	558	-	-	1031	-
Stage 1	598	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	327	558	-	-	1031	-
Mov Cap-2 Maneuver	327	-	-	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	21.1	0	1.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	412	1031	-	
HCM Lane V/C Ratio	-	-	0.464	0.034	-	
HCM Control Delay (s)	-	-	21.1	8.6	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	2.4	0.1	-	

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane





11/01/2021

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	30	6	0	4	27	303	3	6	591	12
Future Vol, veh/h	8	0	30	6	0	4	27	303	3	6	591	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	333	3	7	649	13
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1067	1066	656	1081	1071	335	662	0	0	336	0	0
Stage 1	670	670	-	395	395	-	-	-	-	-	-	-
Stage 2	397	396	-	686	676	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	202	224	469	197	223	712	936	-	-	1235	-	-
Stage 1	450	459	-	634	608	-	-	-	-	-	-	-
Stage 2	633	607	-	441	456	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	194	213	469	177	212	712	936	-	-	1235	-	-
Mov Cap-2 Maneuver	194	213	-	177	212	-	-	-	-	-	-	-
Stage 1	432	455	-	609	584	-	-	-	-	-	-	-
Stage 2	605	583	-	406	452	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	16.3		19.9		0.7		0.1					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	936	-	-	361	253	1235	-	-				
HCM Lane V/C Ratio	0.032	-	-	0.116	0.043	0.005	-	-				
HCM Control Delay (s)	9	0	-	16.3	19.9	7.9	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-				

HCM 6th TWSC

2: Route 53 & New Garden Lane

11/01/2021

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	47	252	63	127	539
Future Vol, veh/h	70	47	252	63	127	539
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	1	2	2	1
Mvmt Flow	77	52	277	69	140	592
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1184	312	0	0	346	0
Stage 1	312	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	209	728	-	-	1213	-
Stage 1	742	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	185	728	-	-	1213	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	30.9	0	1.6			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	264	1213	-	
HCM Lane V/C Ratio	-	-	0.487	0.115	-	
HCM Control Delay (s)	-	-	30.9	8.4	-	
HCM Lane LOS	-	-	D	A	-	
HCM 95th %tile Q(veh)	-	-	2.5	0.4	-	

Appendix H 2026 Build SimTraffic Queue Reports

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	65	46	6	25
Average Queue (ft)	16	7	0	1
95th Queue (ft)	48	28	3	9
Link Distance (ft)	905	802	730	1071
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Route 53 & New Garden Lane

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	125	2	36
Average Queue (ft)	46	0	10
95th Queue (ft)	93	2	32
Link Distance (ft)	765	1071	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			300
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	63	24	70	19
Average Queue (ft)	23	6	11	1
95th Queue (ft)	51	21	40	9
Link Distance (ft)	905	802	730	1071
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Route 53 & New Garden Lane

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	105	11	68
Average Queue (ft)	36	0	23
95th Queue (ft)	75	5	53
Link Distance (ft)	765	1071	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			300
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Appendix I Crash Analysis

Crash Data



This feature layer contains point locations and related data for all reportable motor vehicle crashes.

ne crash at the intersection: one sideswipe - same direction.
hree crashes nearby: one angle and two fixed object - off road.

Crash Data



This feature layer contains point locations and related data for all reportable motor vehicle crashes.

200ft

Maxar, Microsoft

5 crashes nearby: one rear end, one fixed object - off road, and three deer.

 MEMORANDUM

TO: CHARLIE ARMSTRONG

FROM: BILL WUENSCH, P.E., PTOE;
JEANIE ALEXANDER, P.E.
WEI HE

ORGANIZATION: SOUTHERN DEVELOPMENT

DATE: NOVEMBER 2ND, 2021 (AMENDED PER
COMMENTS ON 1/11/22)

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

RE: VILLAGE GARDENS

YOUR REFERENCE NUMBER:

☐ URGENT☒ FOR YOUR USE☐ PLEASE COMMENT☐ PLEASE REPLY☐ PLEASE RECYCLE

Project Overview

This memorandum summarizes the traffic impact for the proposed Village Gardens development to be located off of Route 53 in Fluvanna County, Virginia. Access to the site will be provided via a new roadway north of the existing intersection of SR 636 (Garden Lane) that will connect to Garden Lane. The existing Garden Lane will end in a cul-de-sac south of the existing intersection Village Boulevard. **Figure 1** illustrates the project location, vicinity, and study intersections. **Figure 2** illustrates the conceptual site plan.

As illustrated in Figure 1, the study intersections include: Route 53 and SR 636 (Garden Lane) and Route 53 and the site entrance.

The proposed Village Gardens development will include 247 single family dwelling units, 75 townhomes, and it is assumed that it will be fully occupied by 2026.

Included within this study are the traffic count data, traffic volume projections, traffic operations analyses, turn lane warrant analyses, crash analyses, and a summary of the findings and conclusions.

Traffic Volumes

2021 Existing Traffic Volumes

Traffic counts were conducted at the study intersections on Thursday, October 21st, 2021 from 7-9 AM and 4-6 PM. The traffic count reports are attached in **Appendix A**.

To address possible changes in traffic patterns due to COVID, the traffic counts were compared to peak hour volumes calculated from 2019 VDOT Traffic Data. The result of this comparison indicates that the existing morning and afternoon peak hour traffic volumes along Route 53 are 70% and 95% of the 2019 peak hour volumes based on VDOT AADT and K factor data during the morning and afternoon peak hours, respectively. To address the reduced traffic volumes, the morning and afternoon peak hour traffic volumes were adjusted up by 21% and 5%, for the morning and afternoon peak hours, respectively.

The resulting traffic volumes based on the adjustments previously described are illustrated in **Figure 3**.

2026 No Build Traffic Volumes

The 2021 existing traffic volumes were increased by an annual compounded growth rate of 0.71% based on VDOT traffic data. The resulting 2026 no build traffic volumes are illustrated in **Figure 4**.

 MEMORANDUM

TO: CHARLIE ARMSTRONG

FROM: BILL WUENSCH, P.E., PTOE;
WEI HE

ORGANIZATION: SOUTHERN DEVELOPMENT

DATE: JANUARY 08, 2022

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

RE: VILLAGE GARDENS UPDATE

YOUR REFERENCE NUMBER:

☐ URGENT☒ FOR YOUR USE☐ PLEASE COMMENT☐ PLEASE REPLY☐ PLEASE RECYCLE

This memorandum summarizes the update to the previously provided traffic analysis for the proposed Village Gardens development to be located off of Route 53 in Fluvanna County, Virginia. The purpose of this supplemental analysis is to add in new projected traffic from the planned major mixed use development (Colonial Circle) to be constructed on the north side of the Roundabout at Route 53/Rt 618. The traffic study report of the planned major mixed use development (Colonial Circle) is included in **Appendix A**. Consideration was also given to continued buildout of previously approved residential development, such as continued development of Monticello Village along Route 618, though given that those volumes traveling south of Route 618 on Route 53 are considered minor they were deemed to have been already included in the background volume growth projections.

The existing conditions analysis and the development information (i.e. Village Gardens site) are the same as stated in the initial traffic impact study. **Figure 1** illustrates the project location, vicinity, and study intersections. **Figure 2** illustrates the conceptual site plan. **Figure 3** illustrates the existing traffic volumes. **Figure 4** illustrates the 2026 no build traffic volumes.

As requested, the approved Colonial Circle mixed-use development adjacent to the Route 618 and Route 53 intersection was considered as a background development, and the site trips were added to the projected 2026 no build traffic volumes. Note that only the portion of traffic to/from that site that arrives/departs from the south leg of the roundabout has a bearing on this overall analysis. Thus it is this portion of the mixed use development traffic that was utilized in this analysis.

Of the Colonial Circle mixed use development traffic that shows up at the south left of the roundabout, it is assumed that 50% of those site trips will be to/from the residential area via Monish Drive and other 50% of site trips will be traveling through the study intersections. **Figure 5** illustrates the 50% of site trips from the mixed-use development traveling through the study intersections. **Figure 6** illustrates the 2026 no build traffic volumes with the 50% site trips from the mixed-use development added to the general background growth.

Site trip generation, distribution, and assignment are the same as stated in the initial traffic impact study. The site trip distribution percentages and the site trip assignment are illustrated in **Figure 7** and **Figure 8**.

The site trips shown in Figure 8 were added to the 2026 no build traffic volumes with the site trips from the mixed-use development shown in Figure 6 resulting in the 2026 build traffic volumes illustrated in **Figure 9**. *Note that while the existing Garden Lane will be modified, for analysis purpose, the traffic volumes at the existing Garden Lane intersection were not reduced to reflect the closure of Garden Lane*

south of Village Boulevard, however, these volumes (deducting one car from each movement which were assumed to be to/from businesses next to the existing Garden Lane) were added to the proposed site roadway connection with Route 53 to ensure that the existing traffic generated by the uses north of the proposed closure are appropriately accounted for.

Turn Lane Warrant Analysis

Turn lane warrant analyses were performed for the existing Route 53 and Garden Lane intersection and the Route 53 and site entrance intersection based on the *VDOT Roadway Design Manual*. The turn lane warrant forms are included in **Appendix B** and the results are summarized in **Table 1**.

Table 4 Turn Lane Warrant Analysis Summary

Location	Movement	2026 No Build		2026 Build	
		AM	PM	AM	PM
Route 53 at Garden Lane	Southbound left turn	Not Warranted	Warranted	Not Warranted	Warranted
	Northbound right turn	Not Warranted	Not Warranted	Not Warranted	Not Warranted
Route 53 at Site Driveway	Southbound left turn	NA	NA	Warranted	Warranted
	Northbound right turn	NA	NA	Taper Only	Taper Only

The results in Table 1 indicate that a southbound left turn lane is warranted at the existing Route 53 intersection with Garden Lane under both the no-build and build conditions. The results also indicate that a 200 foot southbound left turn lane with a 200 foot taper and a 200 foot northbound right turn taper will be warranted at the site driveway intersection with Route 53.

Traffic Operations Analysis

Traffic operations analyses were performed for 2026 build conditions only. Traffic operations analyses were completed using Synchro/SimTraffic 11.0, a computer-based traffic operations model that replicates procedures from the *Highway Capacity Manual (HCM)*. The average vehicle delays (in seconds) for the intersection overall and for each turning movement, as well as the Level of Service (LOS) on a scale of A (best) to F (worst) as defined in the *HCM* are reported in Synchro, and the maximum queue lengths (in feet) for each turning movement are reported in SimTraffic. Both the Synchro and SimTraffic analyses were performed based on the latest *VDOT Traffic Operations and Safety Analysis Manual (TOSAM)*.

2026 Build Conditions Analysis

The 2026 build conditions Synchro models were based on the current intersection configuration for existing Route 53 intersection with Garden Lane and based on the above warranted turn lane/taper for the proposed site driveway intersection with Route 53, 2026 build traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix C** and the SimTraffic queue reports in **Appendix D**. **Table 2** summarizes the 2026 build delays, levels of service, and maximum queue lengths.

Table 2 2026 Build Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	2026 Build AM			2026 Build PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane (based on the current intersection configuration)						Unsignalized		
Nahor Manor Road	EBL/T/R	-	B	14.4	66	C	20.3	62
Garden Lane	WBL/T/R	-	C	17.3	41	D	27.2	29
Route 53	NBL/T/R*	-	A	8.0	6	A	9.5	77
Route 53	SBL/T/R*	-	A	8.6	22	A	8.2	38
Route 53/Site Entrance (based on the above warranted turn lanes)						Unsignalized		
Site Entrance	WBL/R	-	C	22.1	135	E	49.6	148
Route 53	NBT	-	A	0.0	0	A	0.0	0
	NBR	100	A	0.0	0	A	0.0	11
Route 53	SBL	300	A	8.7	42	A	8.7	70
	SBT	-	A	0.0	0	A	0.0	0

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

As shown in Table 2, all movements at the study intersections will operate at LOS D or better with the exception that Site Entrance WBL/R will operate at LOS E in PM and the queuing analysis results indicate that all queues will be moderate and acceptable.

Findings and Recommendations

Based on the analyses summarized in this memorandum, after including the approved Colonial Circle mixed-use development (adjacent to Route 618 and Route 53 intersection) as a background development, all movements at the study intersections will operate at LOS D or better with the exception that Site Entrance WBL/R will operate at LOS E in PM and all queues will be acceptable in 2026 build conditions. Note that other approved and pending development traffic is considered minimal and is addressed within the general background growth rate as previously applied to the existing traffic counts.

The impact of the proposed Village Gardens development on the study intersections will be minimal. At the Route 53 and site entrance intersection, a southbound left turn lane (200 feet of storage and a 200 foot taper) and a northbound right turn taper (200 feet) will be warranted.

Based on the above findings, the same as in the initial traffic impact study, **construction of a 200 foot southbound left turn lane with a 200 foot taper is recommended along with a 200 foot northbound right turn taper at the site entrance intersection with Route 53.**

An important finding in this analysis is that the Colonial Circle development is expected to result in increased pressure on the Route 53/Monish Drive intersection, with increased turning movements, and through movements occurring. **The need for the turn lane project will be significantly increased as the turn movements into and out of monish increase with trips to/from the commercial uses at Colonial Circle.**

End of Memorandum

[Attachments](#)

Figures

Appendix A Fluvanna, Route 618 at Route 53 Traffic Study

Appendix B Turn Lane Warrant Forms

Appendix C 2026 Build HCM Reports

Appendix D 2026 Build SimTraffic Queue Reports

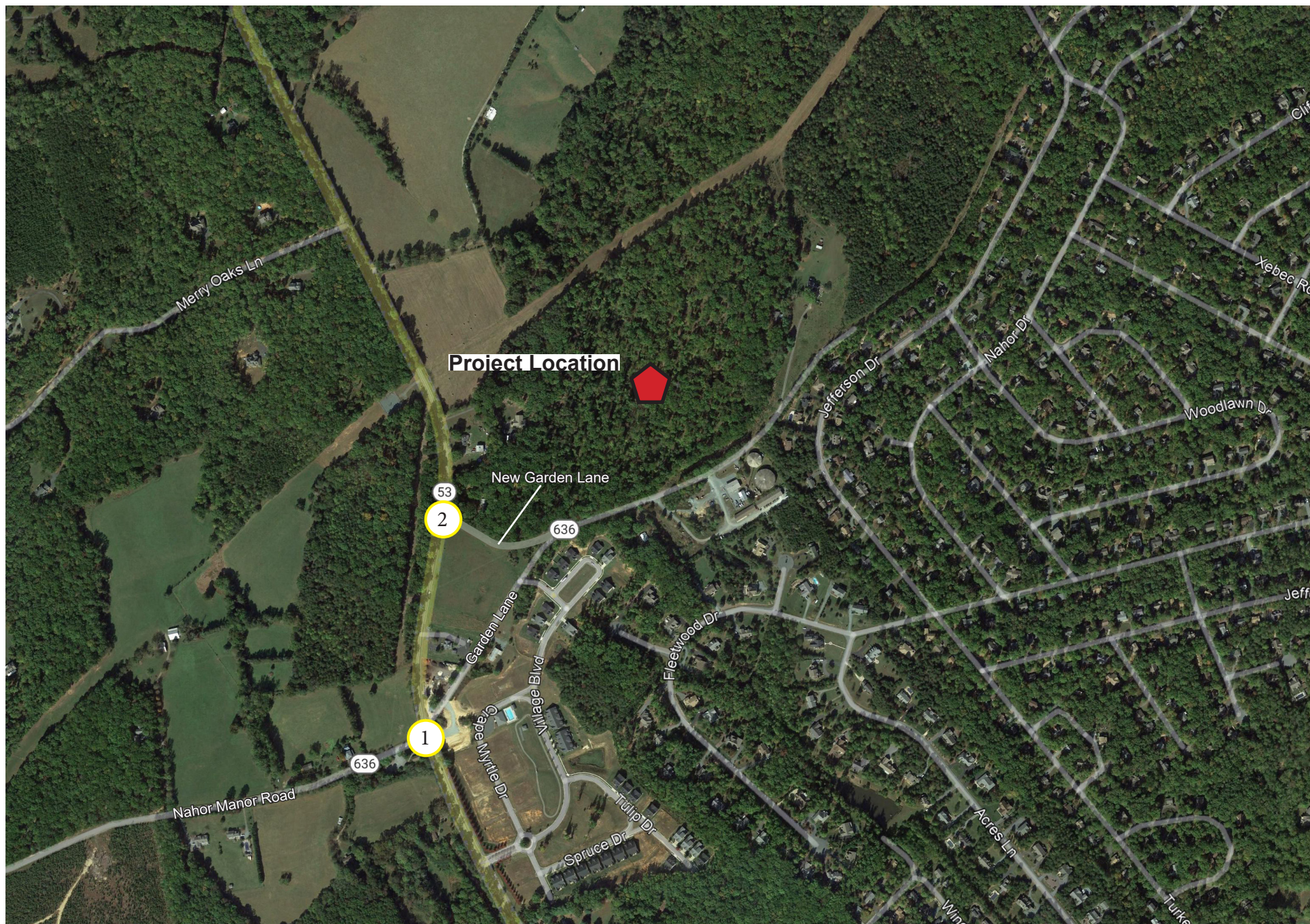
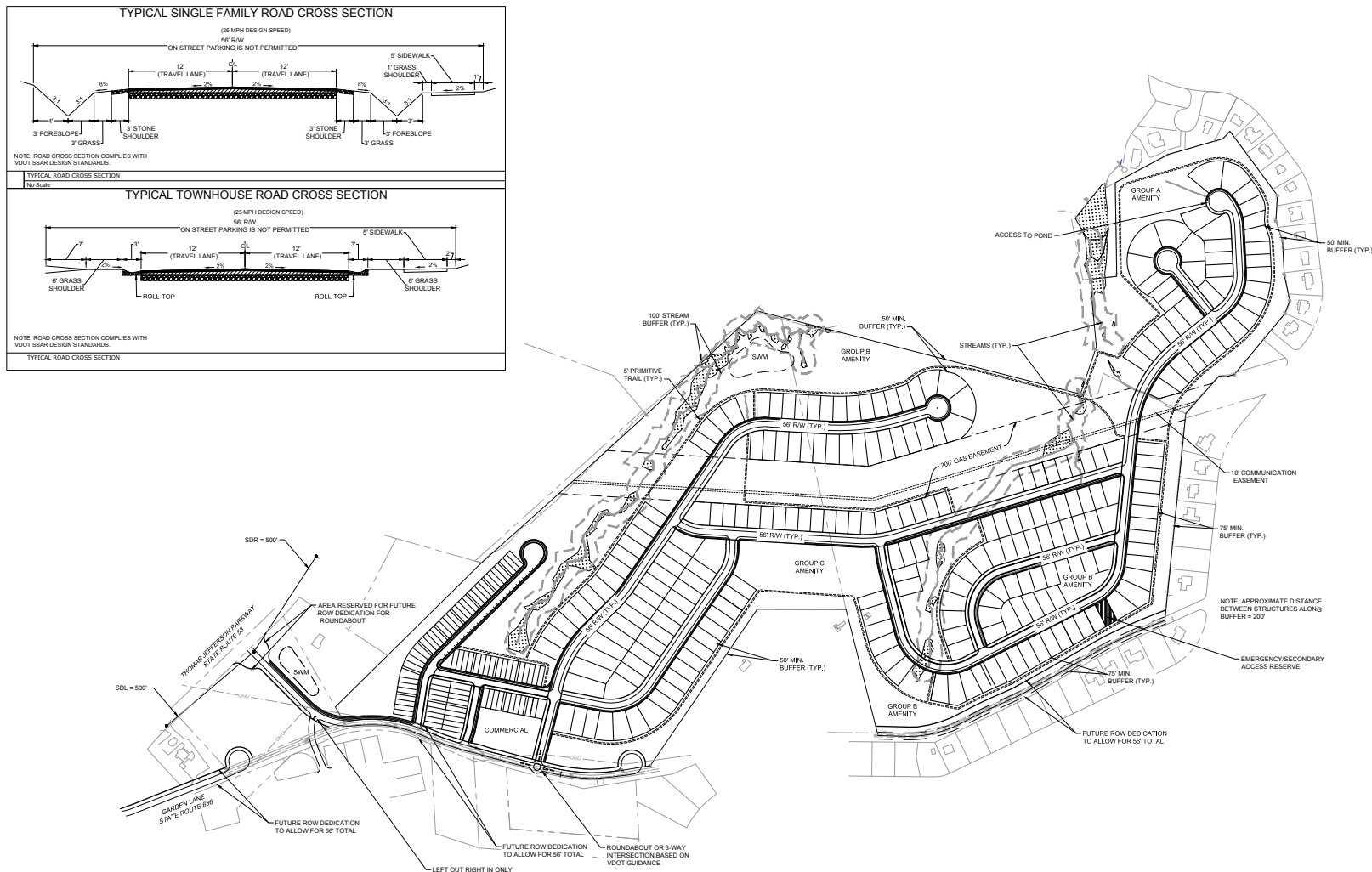


Figure 1 Site Location and Study Intersections



VILLAGE GARDENS - CONCPETUAL LAYOUT

FLUVANNA COUNTY - OCTOBER 13, 2021



SCALE 1"=200'



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

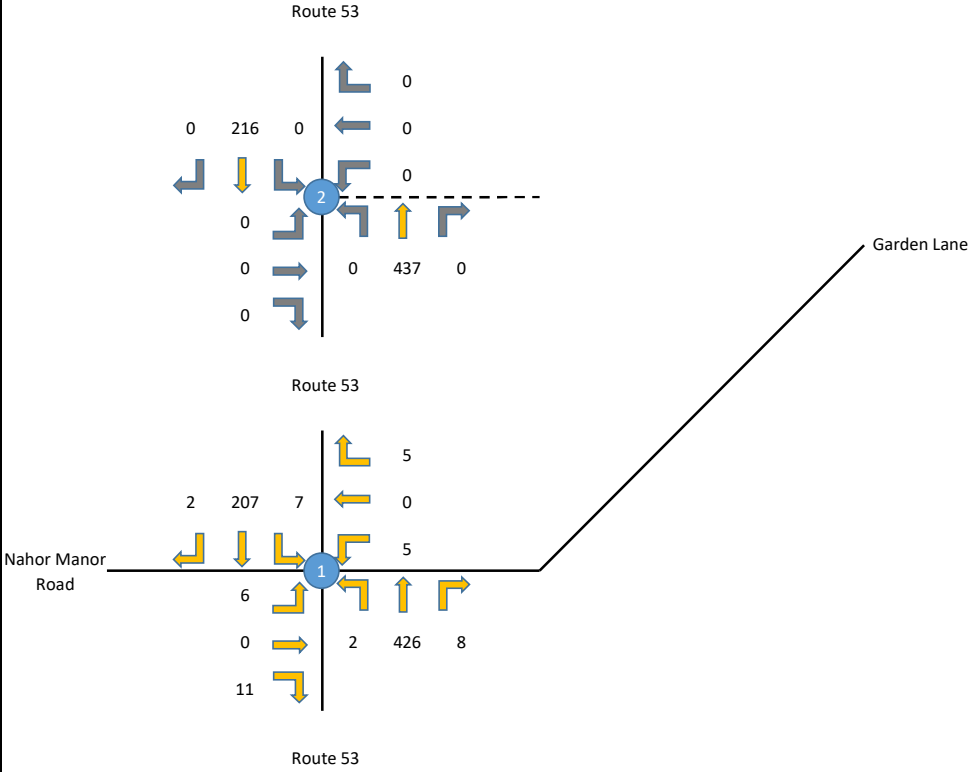
5:102748568-Nahor (Village Gardens) [2010]C-villageGardens-SPL/K103.2wg | Printed on 10/13/2021 2:26 PM | by Jeremy Fox

Figure 2 Conceptual Site Plan

Adjusted Existing 2021 Traffic Volumes AM

Covid Adjustment Rate

1.21



Adjusted Existing 2021 Traffic Volumes PM

Covid Adjustment Rate

1.05

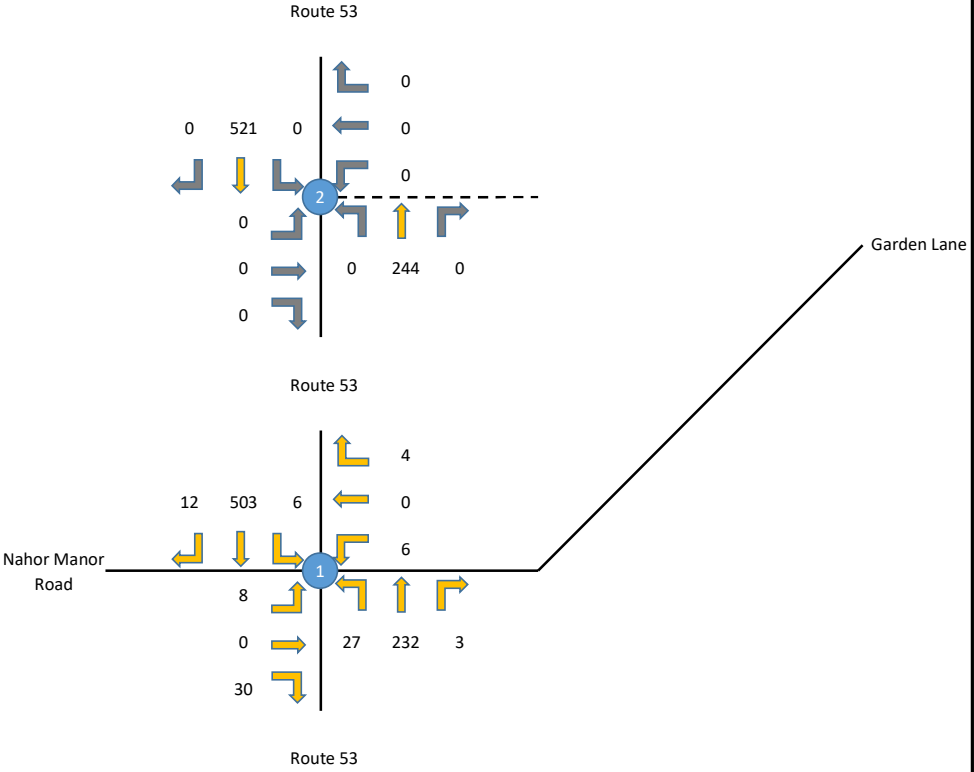
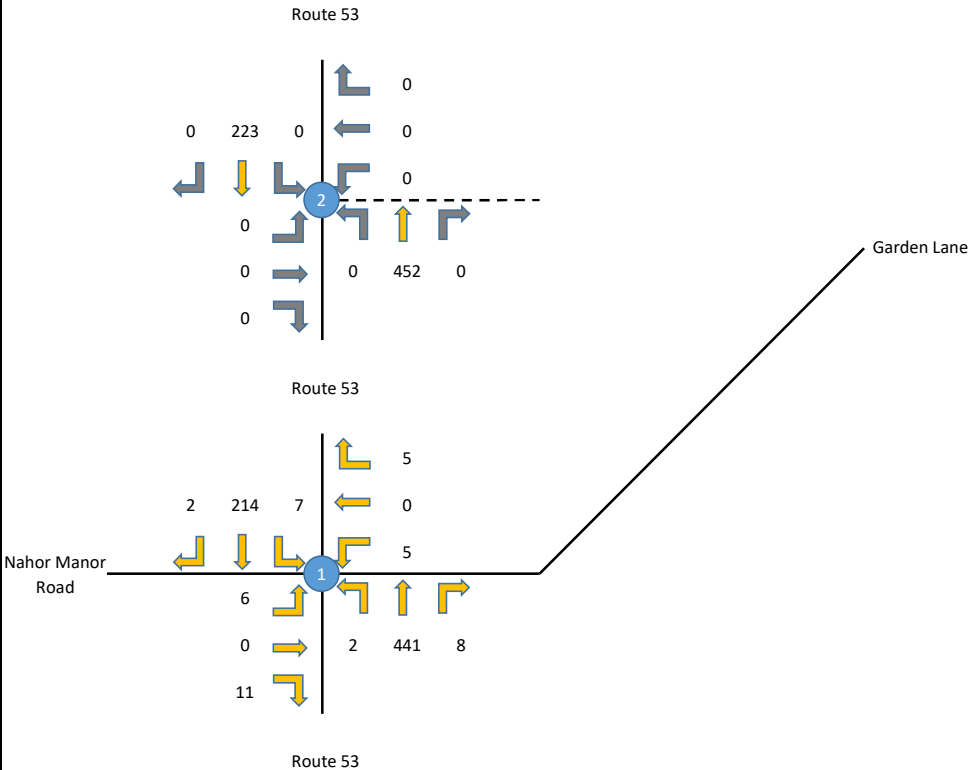


Figure 3 2021 Traffic Volumes

2026 No Build Traffic Volumes AM



2026 No Build Traffic Volumes PM

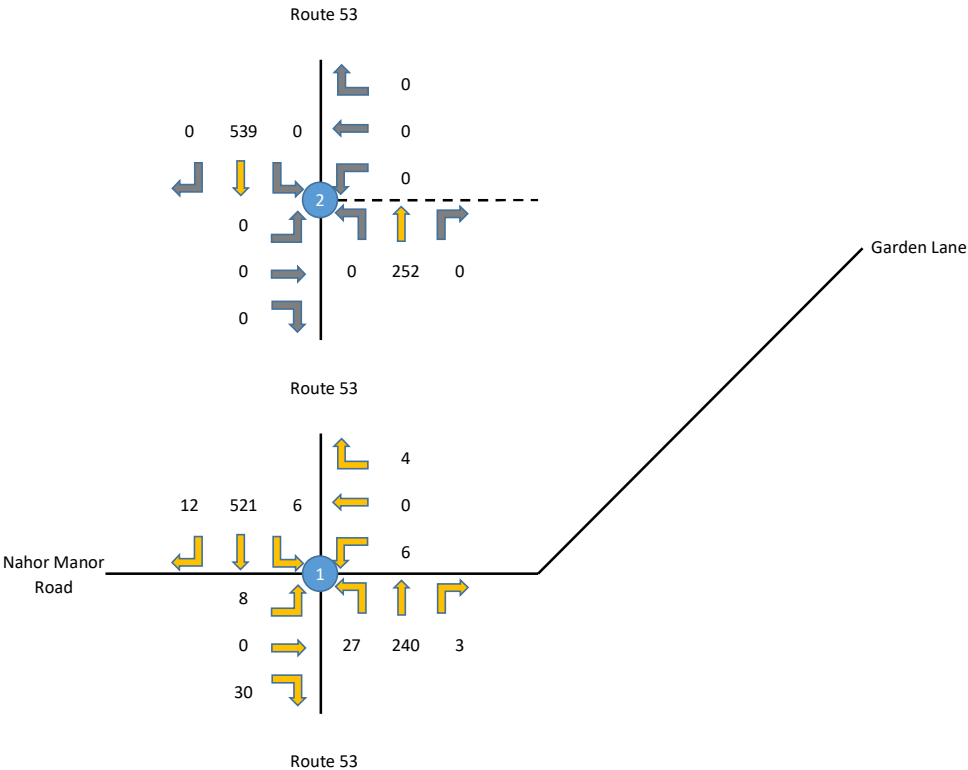
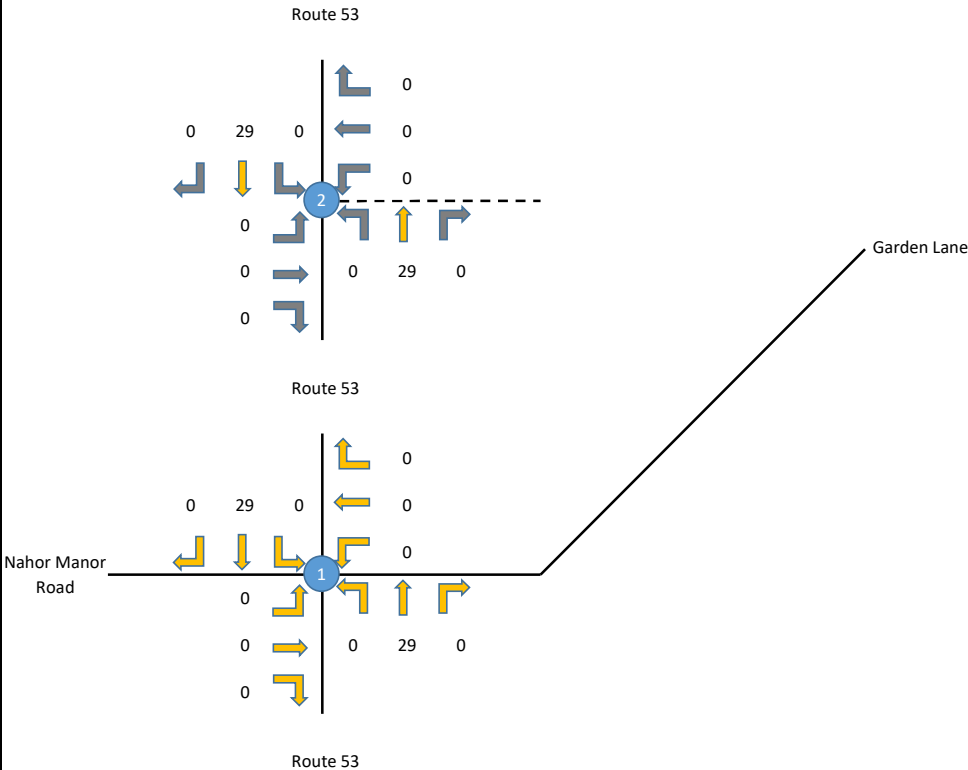


Figure 4 2026 No Build Traffic Volumes

Mixed-use Site Trips from Rt 618/Rt 53 AM



Mixed-use Site Trips from Rt 618/Rt 53 PM

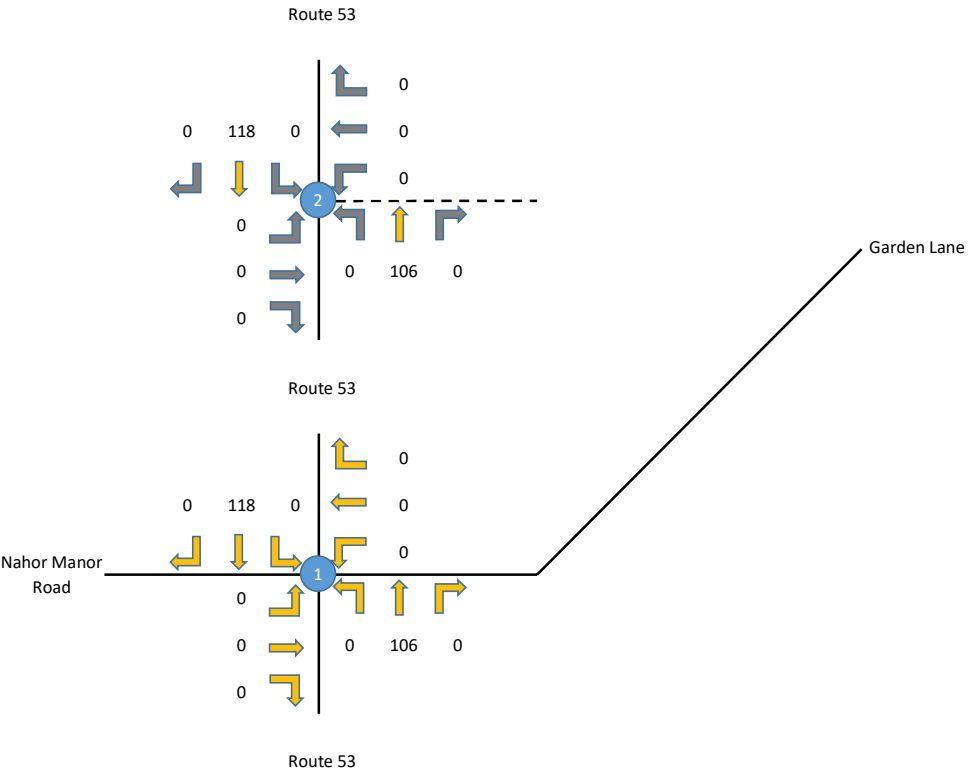
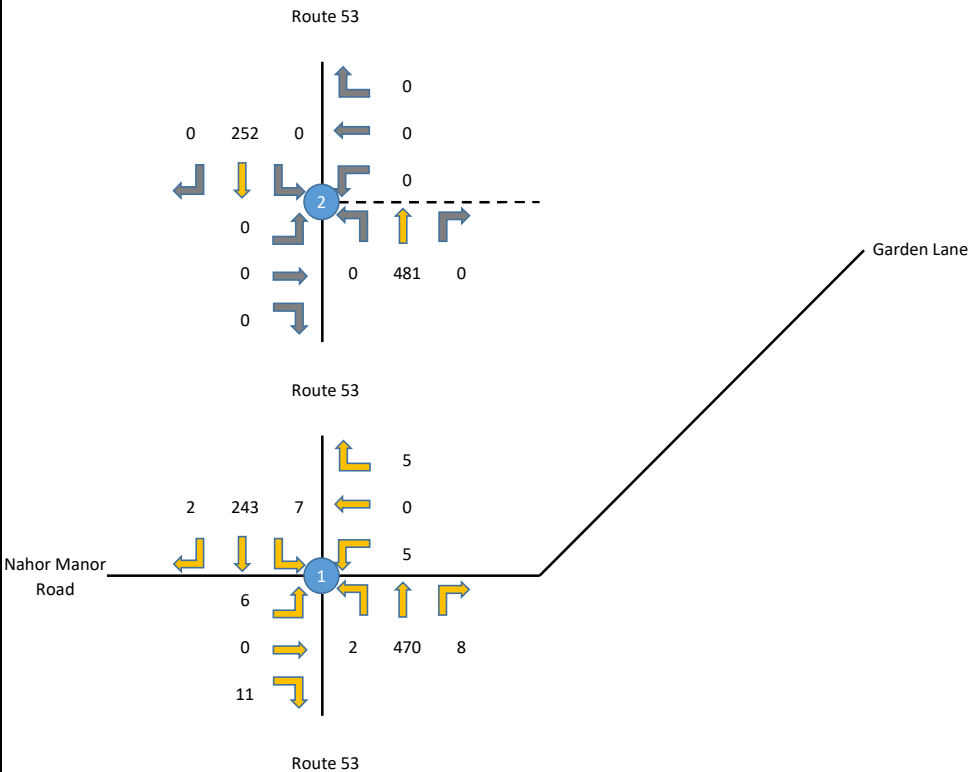


Figure 5 Mixed-use Site Trips from Rt 618/Rt 53

2026 No Build Traffic Volumes (with Mixed-use Site Trips from Rt 618/Rt 53) AM



2026 No Build Traffic Volumes (with Mixed-use Site Trips from Rt 618/Rt 53) PM

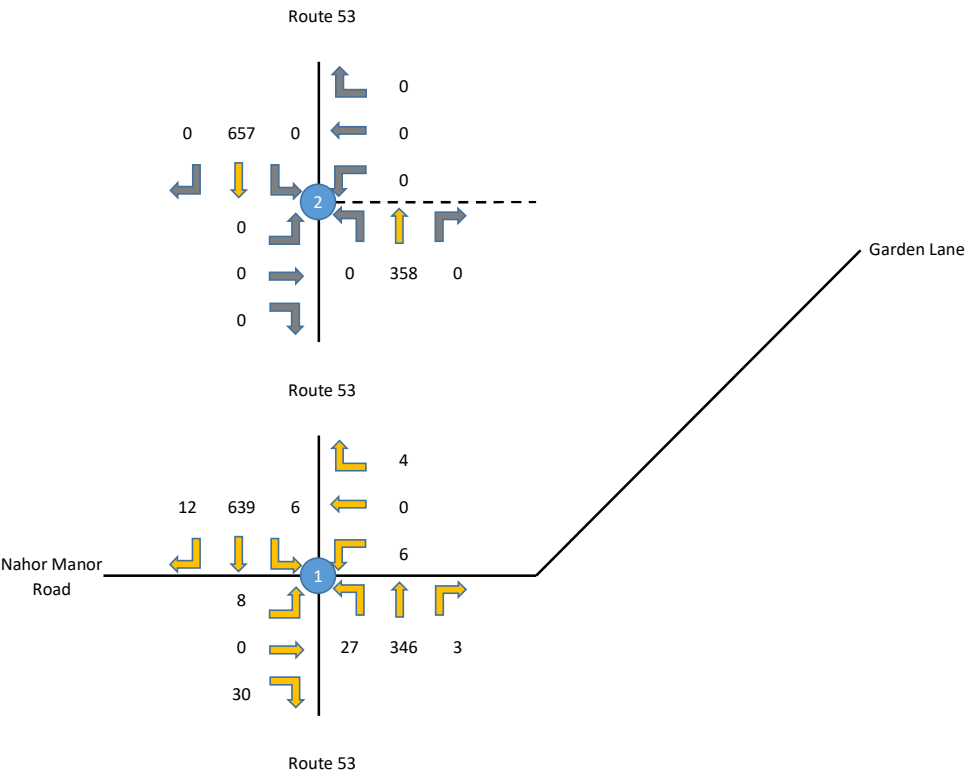
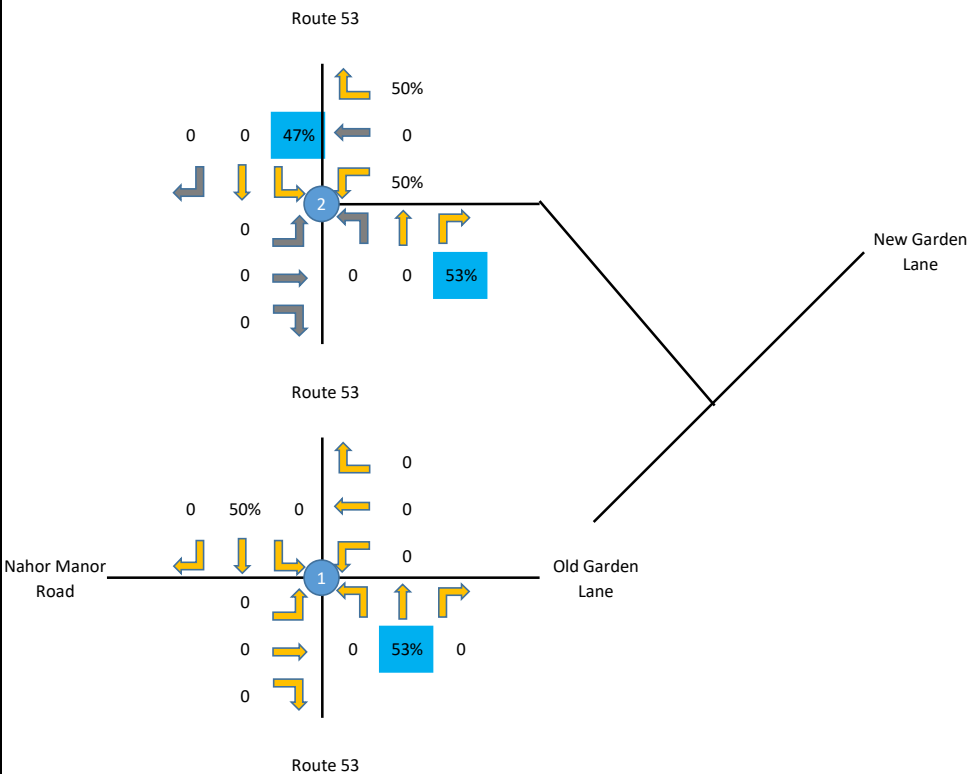


Figure 6 2026 No Build Traffic Volumes (with Mixed-use Site Trips from Rt 618/Rt 53)

Site Trip Distribution AM



Site Trip Distribution PM

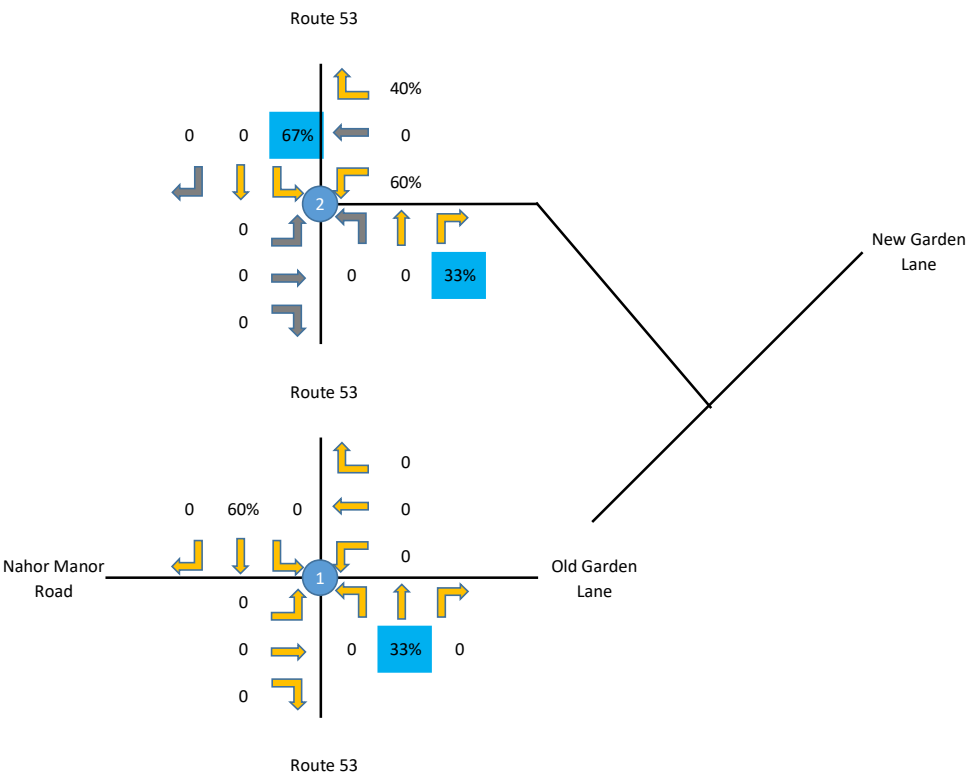
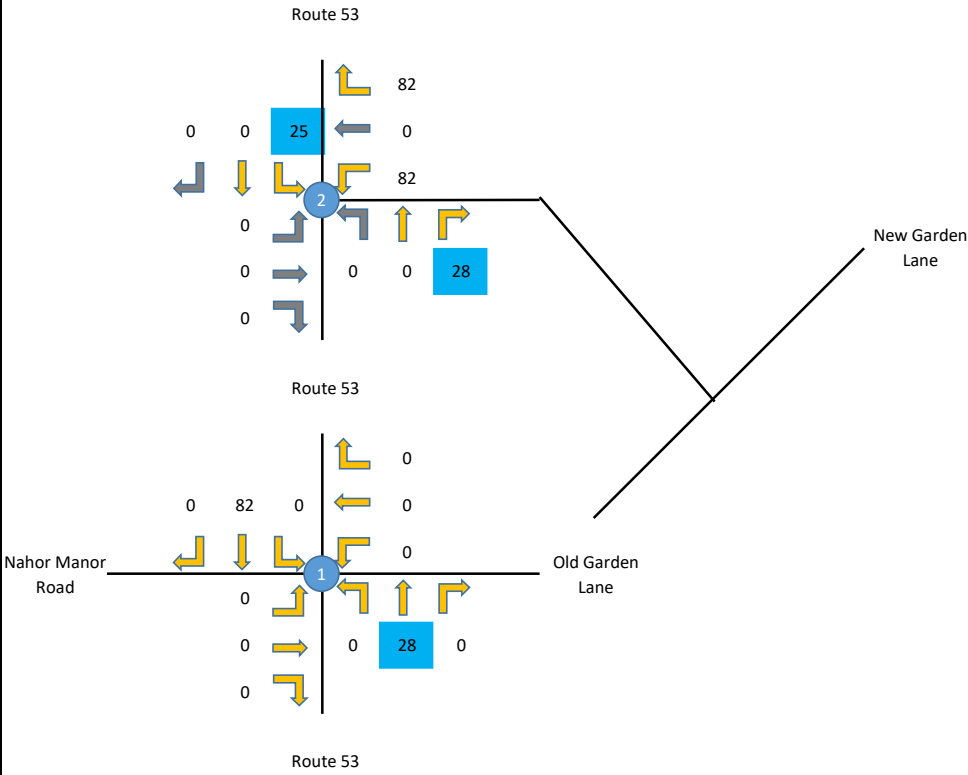


Figure 7 Site Trip Distribution

Site Trip Assignment AM



Site Trip Assignment PM

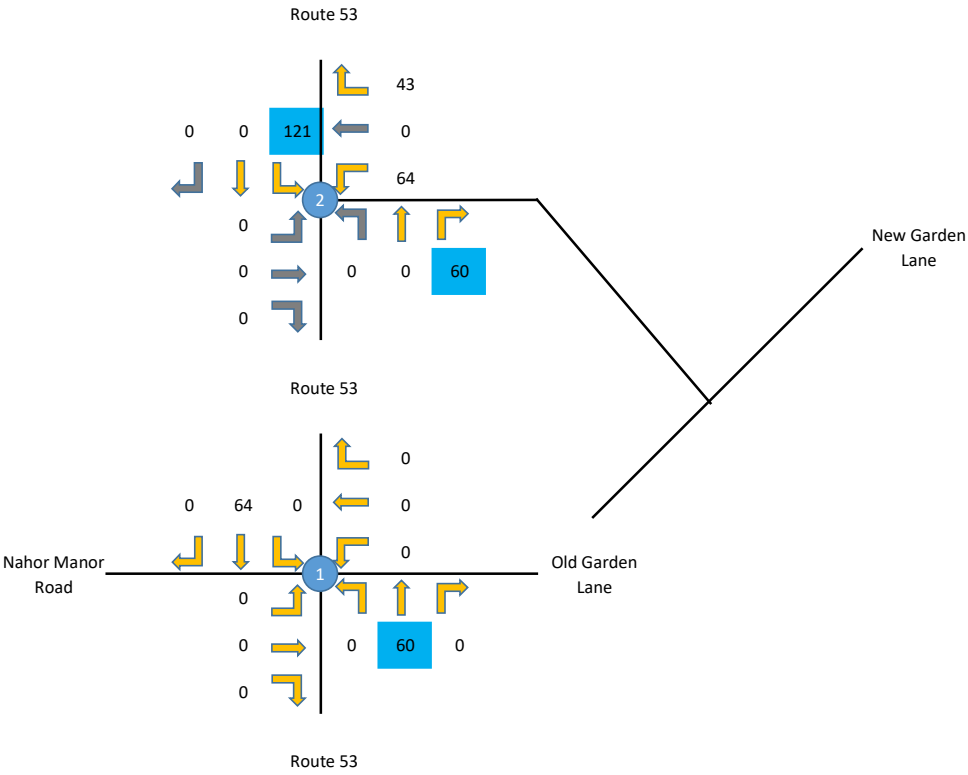
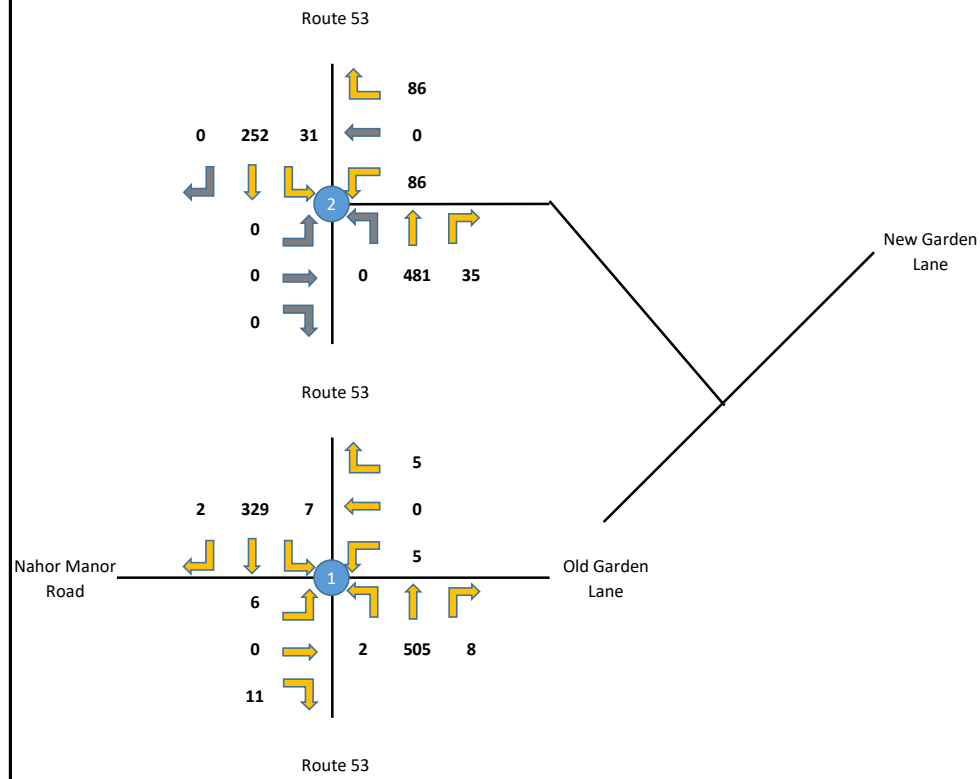


Figure 8 Site Trip Assignment

2026 Build Traffic Volumes AM



2026 Build Traffic Volumes PM

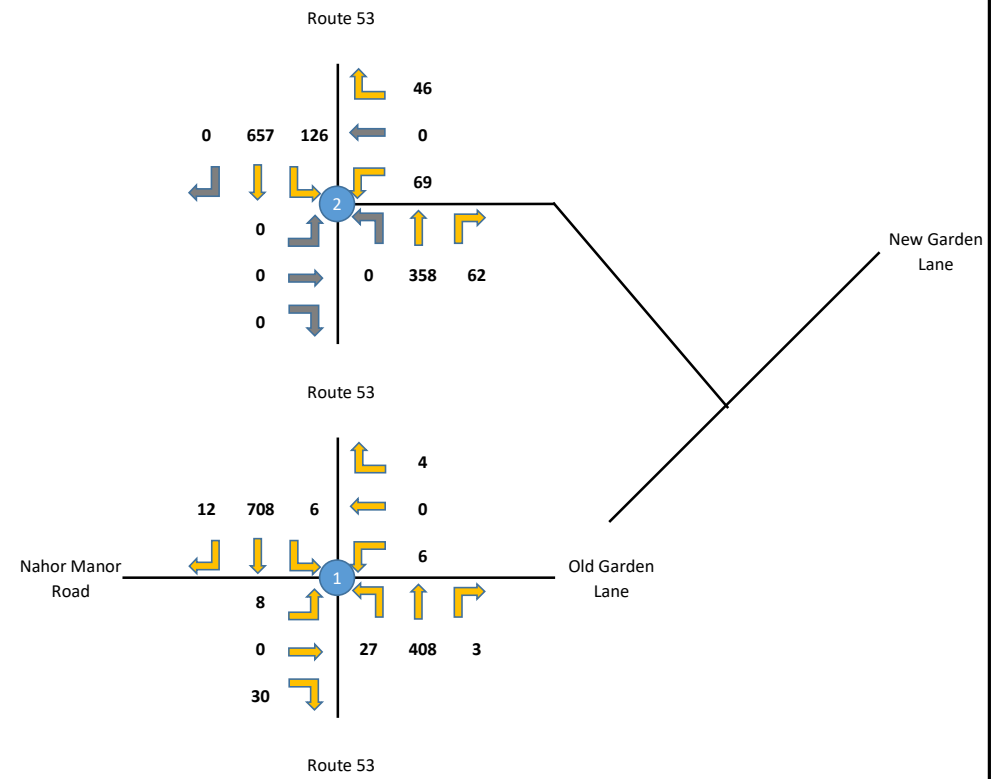


Figure 9 2026 Build Traffic Volumes

Appendices

Appendix A Fluvanna, Route 618 at Route 53 Traffic Study

 MEMORANDUM

TO: JUSTIN SHIMP, P.E.

FROM: BILL WUENSCH, P.E., PTOE;
WEI HE

ORGANIZATION: SHIMP ENGINEERING

DATE: MARCH 22, 2019

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

RE: FLUVANNA, ROUTE 618 AT ROUTE 53 TRAFFIC STUDY

YOUR REFERENCE NUMBER:

☐ URGENT☒ FOR YOUR USE☐ PLEASE COMMENT☐ PLEASE REPLY☐ PLEASE RECYCLE

Fluvanna, Route 618 at Route 53 Traffic Study

The purpose of this memorandum is to summarize a traffic study for the site planning efforts for the commercial and mixed-use site to be located at Route 53 and Route 618 in Fluvanna County, Virginia.

The analysis utilized the traffic counts from the year 2015 study and factored up 1% per year to the year 2025 as the background traffic, and performed trip generation, distribution, and assignment based on the specific land uses and assumed percentages of trips at each entrance as directed by Shimp Engineering staff. The turn lane warrant analysis for the entrances (Entrances 1, 2, 4, 5, 6) and the level of service analysis for the roundabout (Entrance 3) were performed in this memorandum.

The following provides a brief summary of this information.

Traffic Volume Calculation

Existing Traffic Volumes

The existing traffic volumes were collected from the year 2015 study and are illustrated in **Figure 1**.

2025 No Build Traffic Volumes

The existing traffic volumes were factored up 1% per year to the year 2025 as the background traffic. **Figure 2** illustrates the 2025 no build traffic volumes.

Trip Generation

The trip generation was based on the specific land uses and the initial trip generation calculation as directed by Shimp Engineering staff. **Table 1** below summarizes the trip generation.

Table 1 Trip Generation

			AM			PM		
Use Description	ITE	Qty	in	out	Total	in	out	Total
Single Family Detached	210	64 units	14	40	54	45	25	70
Multifamily Housing (Low-Rise)	220	104 units	17	42	59	41	29	70
Multifamily Housing (Mid-Rise)	221	250 units	20	55	75	62	41	103
General Office Building	710	(12,000 SF)	23	3	26	14	65	79
Walk-In Bank	911	(5,000 SF)	59	54	113	67	65	132
Shopping Center	820	(40,000 SF)	65	55	120	146	145	291
Quality Restaurant	931	(5,000 SF)	18	4	22	25	16	41
Medical-Dental Office Building	720	(10,000 SF)	23	14	37	15	23	38
Medical Clinic	630	(9,000 SF)	27	20	47	19	23	42
		Total	266	287	553	434	432	866
Internal Capture			8	21	29	22	14	36
Pass-by			36	28	64	60	56	116
On-road New Residential Trips			43	116	159	126	81	207
On-road New Commercial Trips			179	122	301	226	281	507
Total New Trips (including Pass-by)			258	266	524	412	418	830

Trip Distribution

The trip distribution was based on the distribution assumptions as directed by Shimp Engineering staff. **Figures 3-6** illustrate the distribution of the residential and commercial inbound and outbound trips.

Trip Assignment

The on-road new residential trips, on road new commercial trips, and the pass-by trips were assigned to the entrances per the trip distribution as illustrated in Figures 3-6. **Figures 7-9** illustrate the assignment of the on-road new residential trips, on road new commercial trips, and the pass-by trips.

2025 Build Traffic Volumes

The on-road new residential trips, on road new commercial trips, and the pass-by trips were added to the 2025 no build traffic volumes resulting the 2025 build traffic volumes. **Figure 10** illustrates the 2025 build traffic volumes.

Turn Lane Warrant Analysis

Turn lane warrants were examined for 2025 build conditions to evaluate the turn lane needs at the entrances 1, 2, 4, 5, 6. It should be noted that Entrance 2 and Entrance 4 were assumed as right in/out entrances and with no traffic, and thus were considered no turn lane or taper required. The turn lane warrant forms for Entrance 1, Entrance 5, and Entrance 6 per the VDOT Road Design Manual are provided in the **Attachment A** and the turn lane warrant analysis results are summarized in **Table 2**.

Table 2 Turn Lane Warrant Summary

Intersection	Movement	AM	PM
Entrance 1	Westbound Right	No Turn Lanes or Tapers Required	No Turn Lanes or Tapers Required
	Eastbound Left	No Left Turn Lane Required	200' Left Turn Lane Required
Entrance 5	Northbound Right	No Turn Lanes or Tapers Required	No Turn Lanes or Tapers Required
	Southbound Left	200' Left Turn Lane Required	200' Left Turn Lane Required
Entrance 6	Northbound Right	No Turn Lanes or Tapers Required	No Turn Lanes or Tapers Required
	Southbound Left	200' Left Turn Lane Required	200' Left Turn Lane Required

As indicated in Table 2, a 200' left turn storage lane is warranted at Entrance 1, Entrance 5, and Entrance 6 and no right turn lane or taper is warranted at any of the three entrances.

Level of Service Analysis

Level of service analysis using Sidra were performed for 2025 build conditions to evaluate the level of service at the roundabout entrance, Entrance 3, which was assumed as a one lane roundabout. The level of service and delay results are summarized in **Table 3** and included in the **Attachment B**.

Table 3 Level of Service and Delay Result Summary

Approach	Movement	AM		PM	
		LOS	Delay	LOS	Delay
Rt. 53 SEB	L/T/R	A	9.4	B	16.1
Rt. 618 NWB	L/T/R	B	18.4	B	12.8
Rt. 53 NB	L/T/R	B	14.5	B	10.7
Entrance 3 SB	L/T/R	B	13.6	A	5.3
Intersection		B	14.4	B	12.7

As indicated in Table 3, the roundabout entrance will operate at LOS B in 2025 build conditions, with all approaches operating at LOS B or better.

Findings

Based on the analysis performed in this memorandum, the principal findings are as followings –

1. Entrance 2 and Entrance 4 were assumed as right in/out entrances and with no traffic, and thus were considered no turn lane or taper required.
2. A 200' left turn storage lane is warranted at Entrance 1, Entrance 5, and Entrance 6 and no right turn lane or taper is warranted at any of the three entrances
3. The roundabout entrance will operate at LOS B in 2025 build conditions, with all approaches operating at LOS B or better.

End of Memorandum -

Attachment A: Turn Lane Warrant Forms

Attachment B: Sidra Output Reports

Figure 1 Existing Traffic Volumes

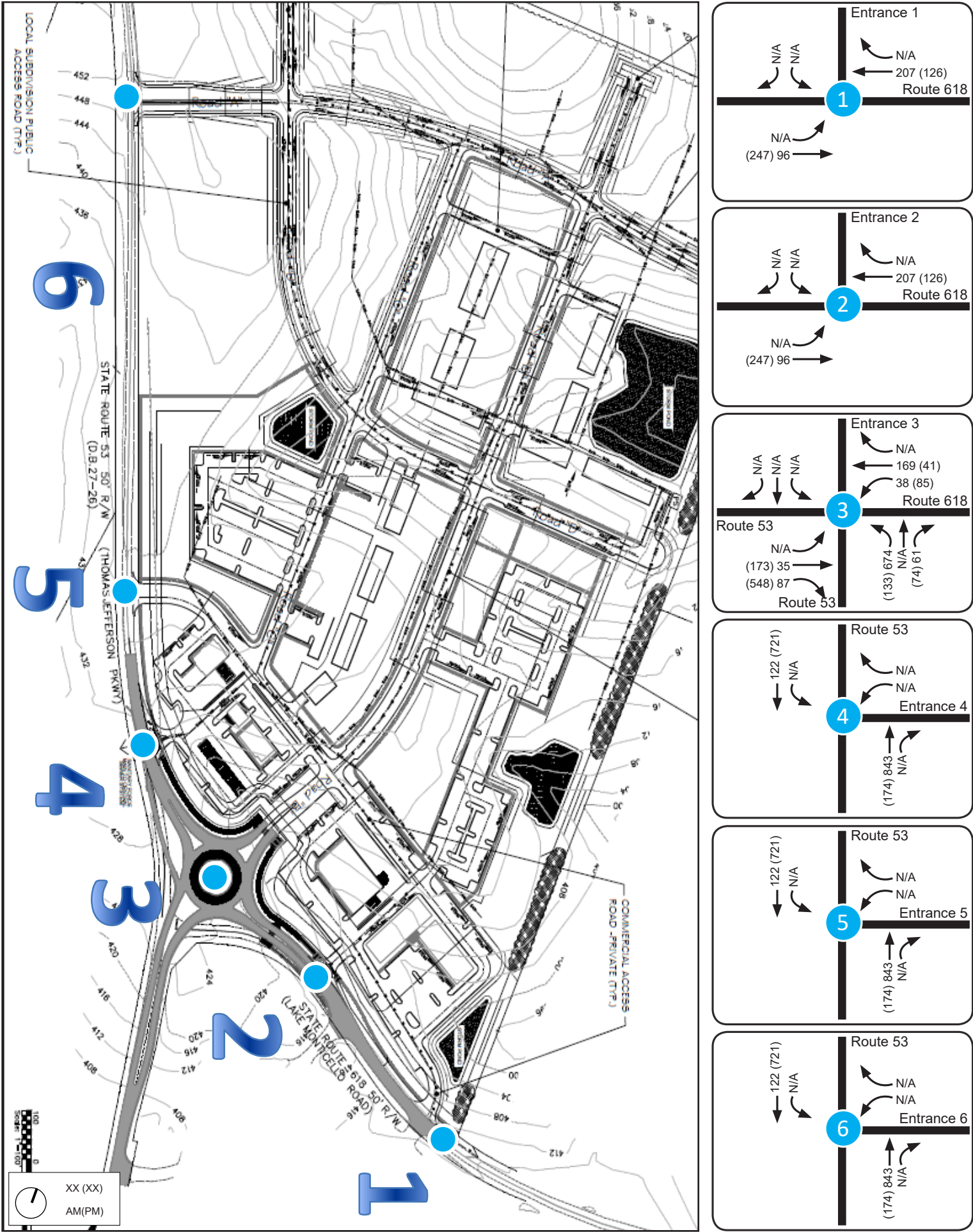


Figure 2 2025 No Build Traffic Volumes

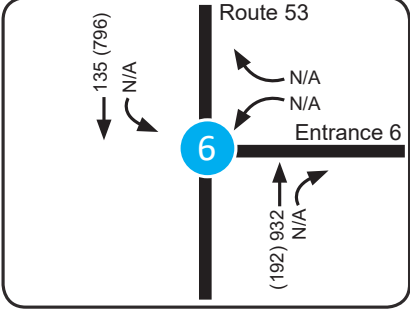
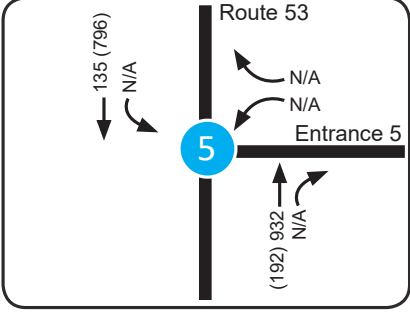
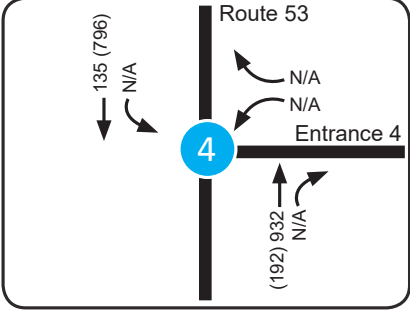
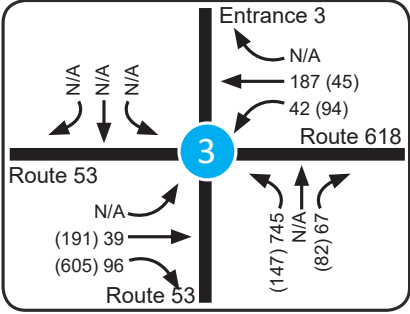
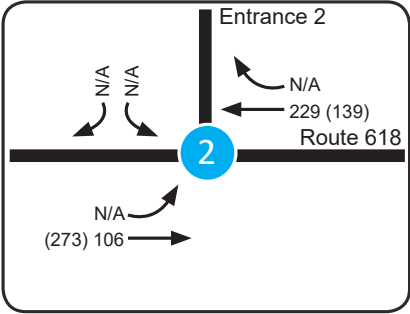
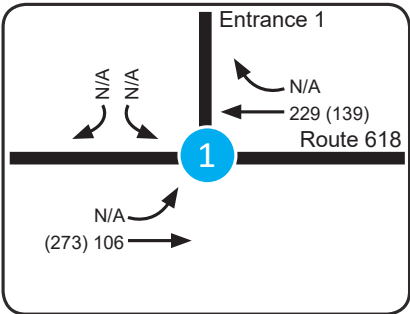
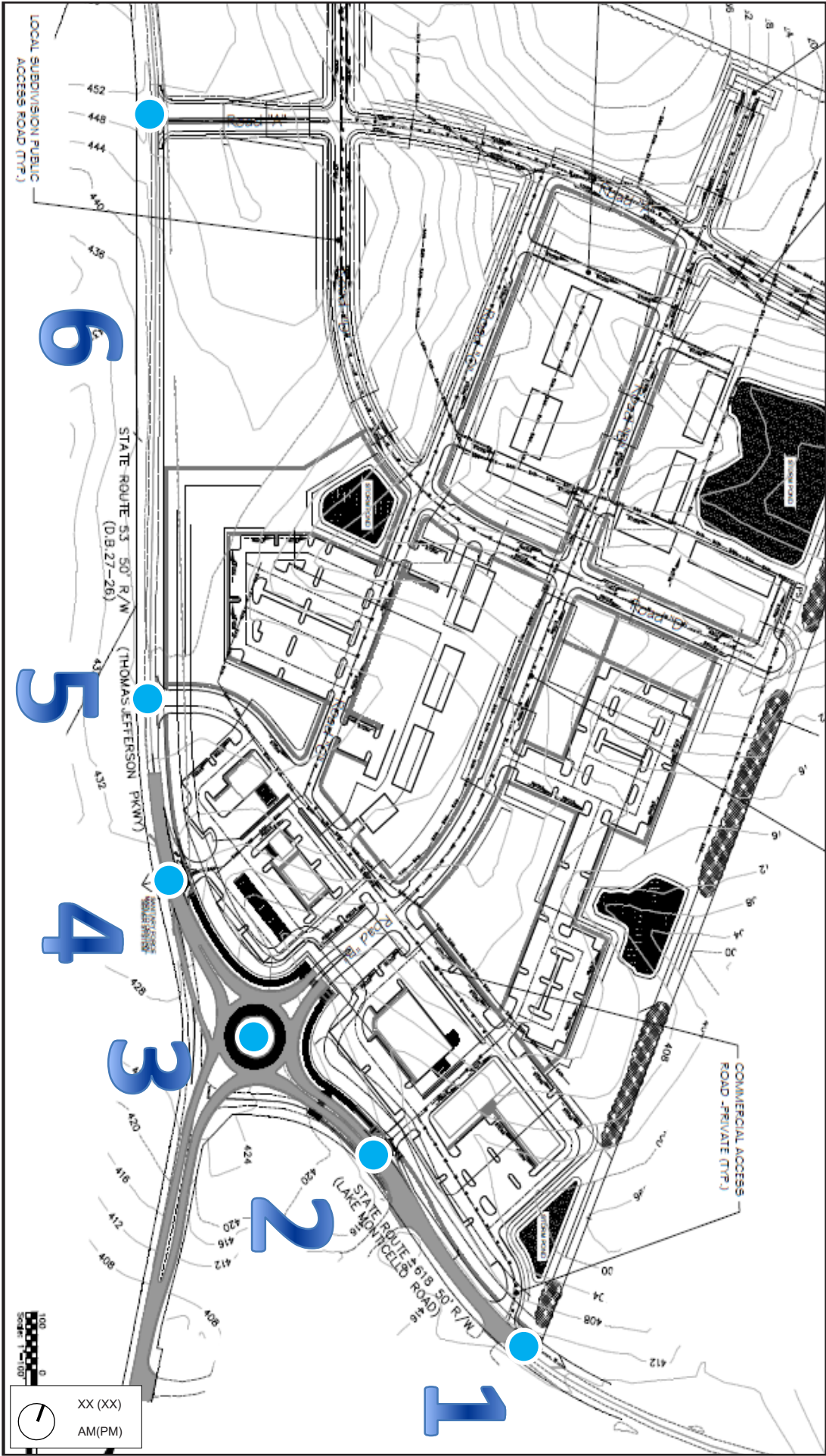
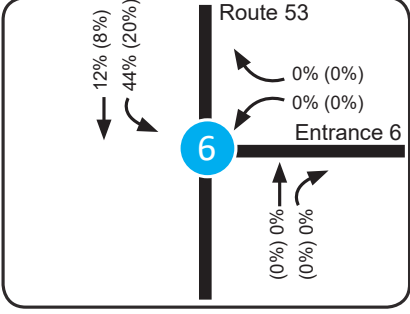
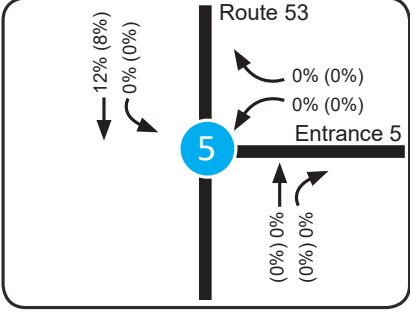
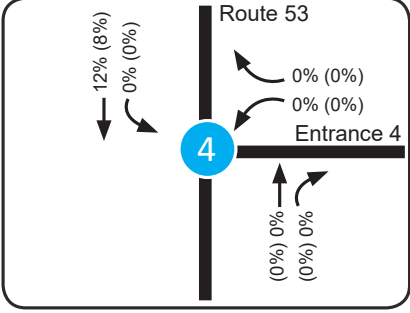
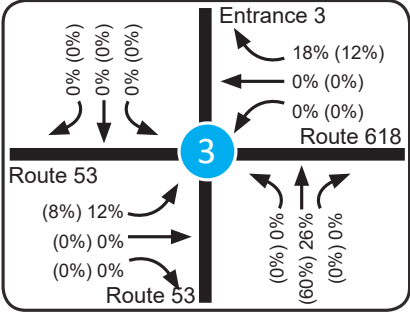
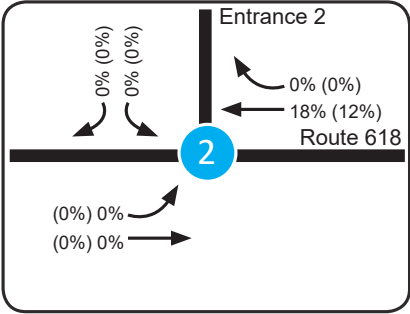
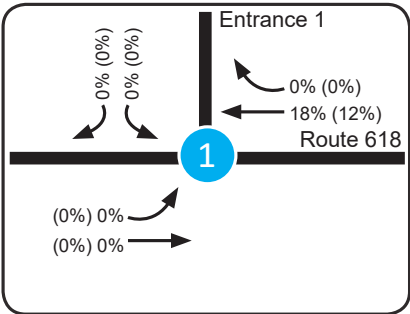
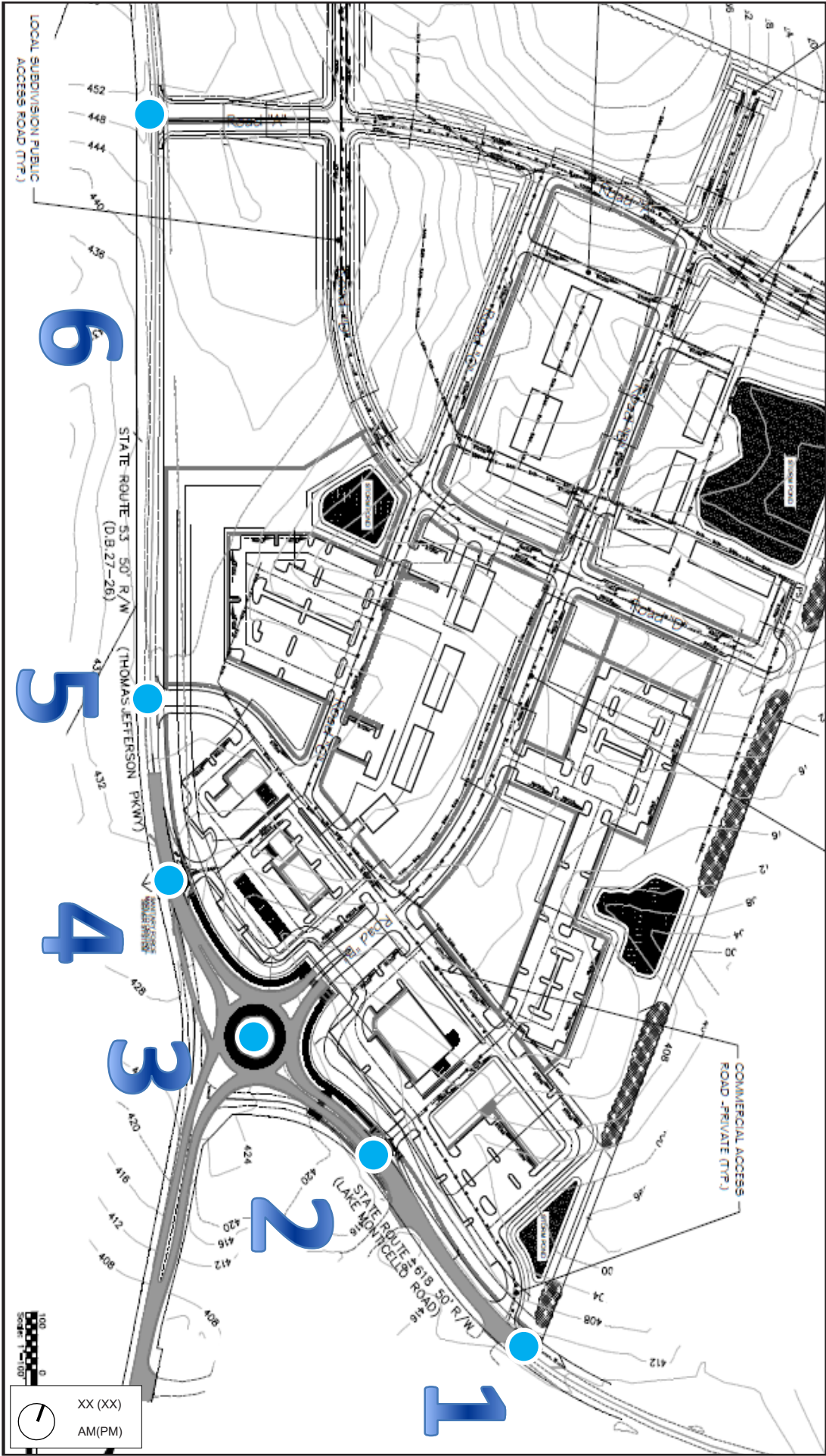


Figure 3 Residential Inbound Trip Distribution



BOS 2022-01-19 p.199/1306

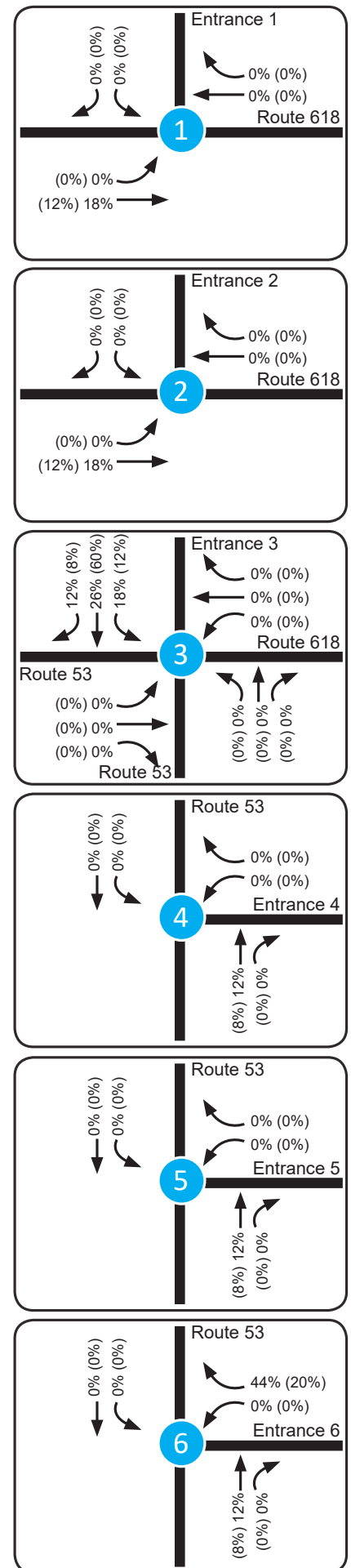
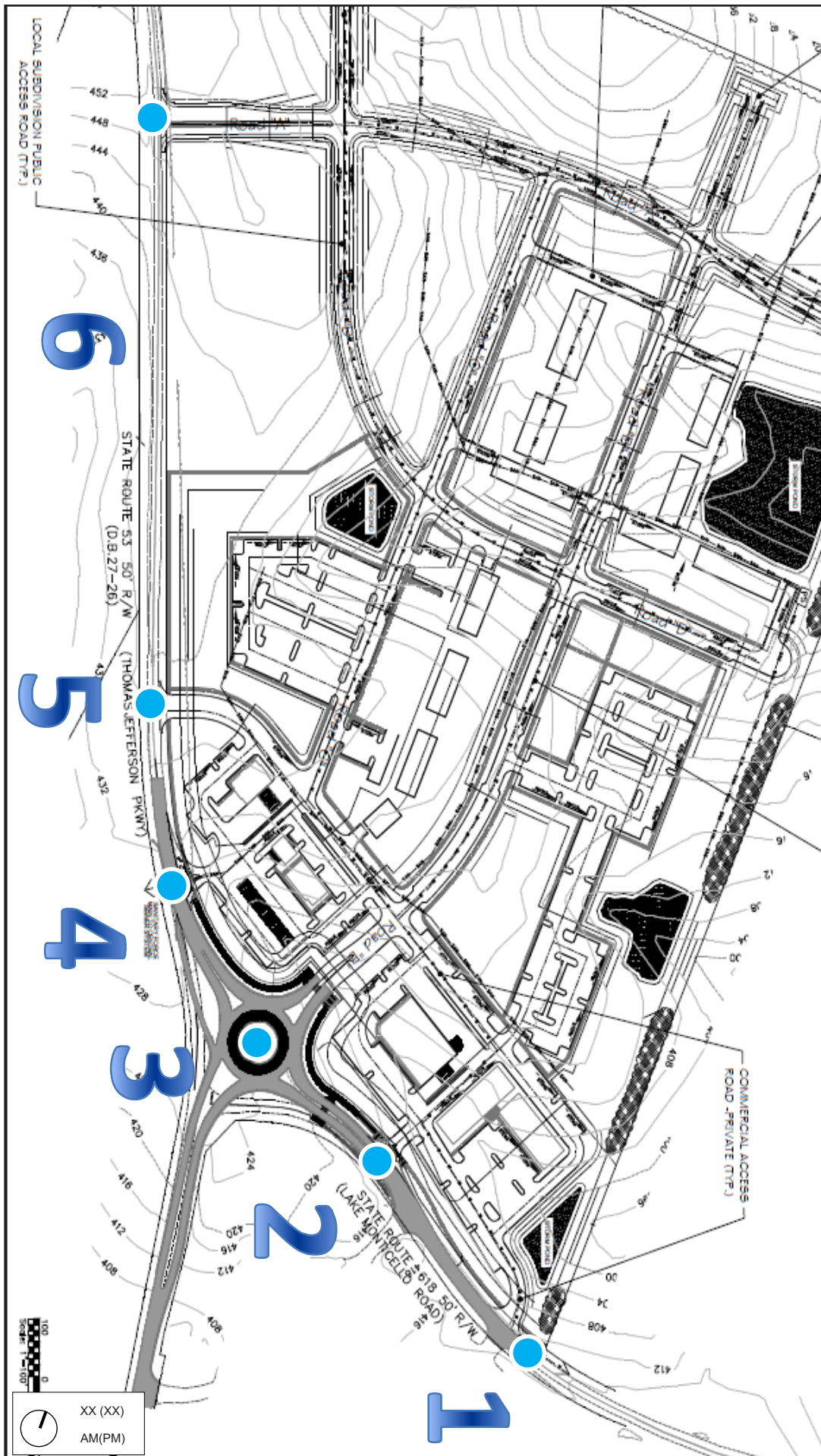
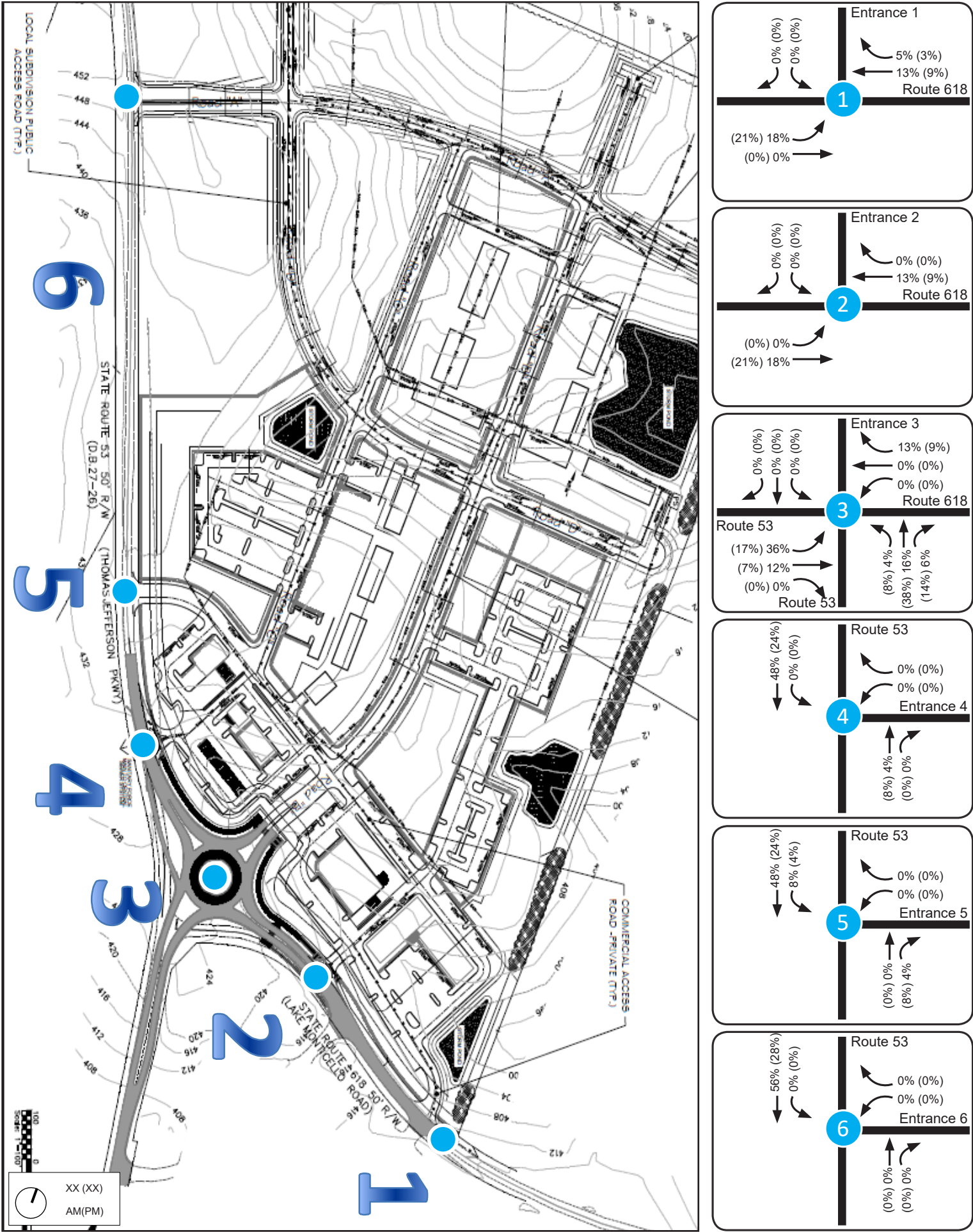


Figure 5 Commercial Inbound Trip Distribution



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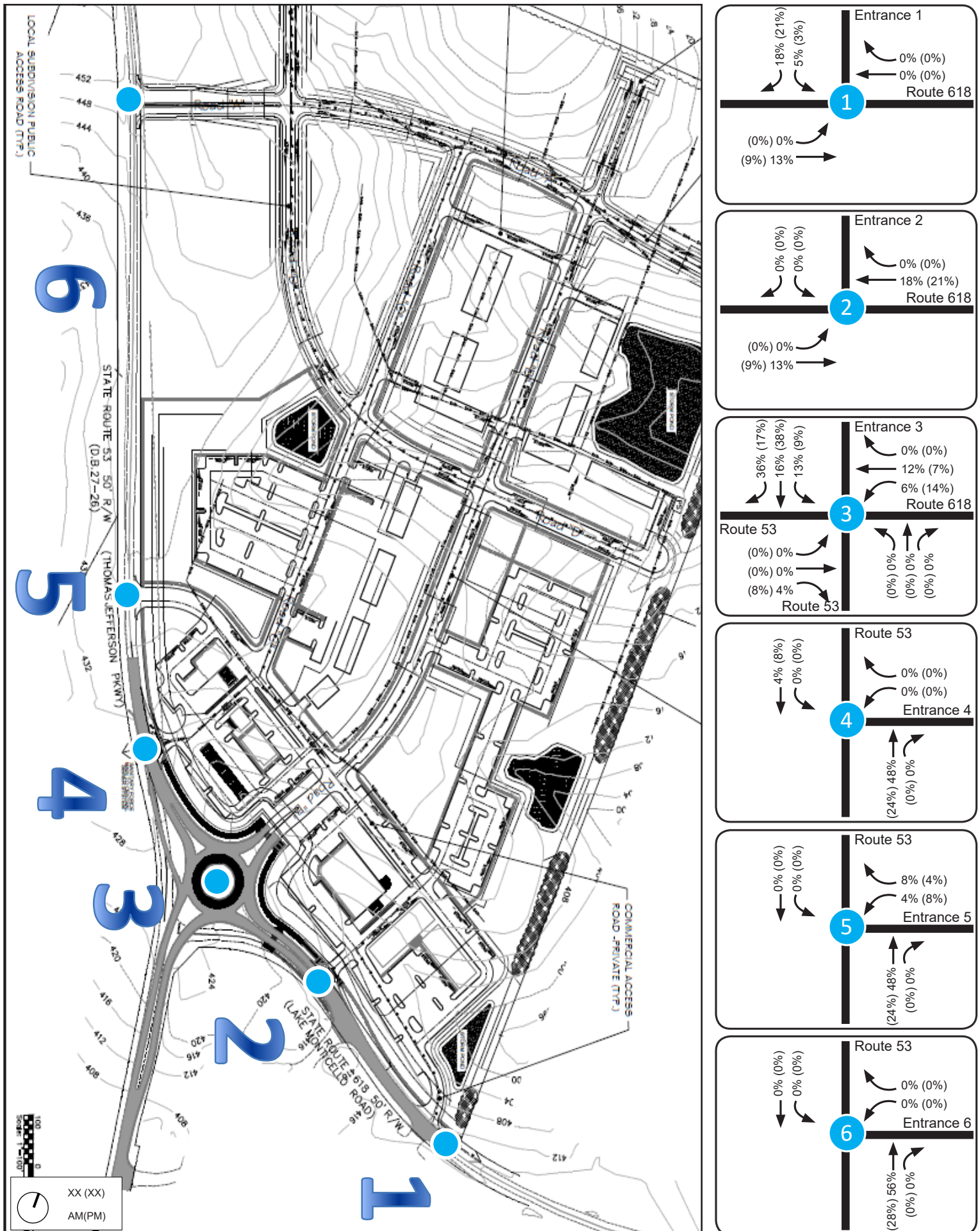


Figure 7 Residential Site Trips

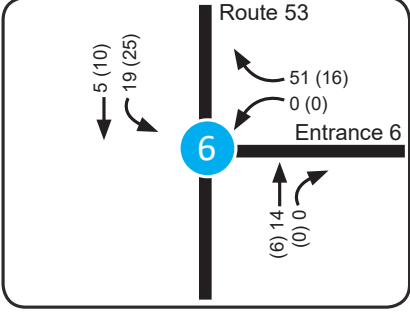
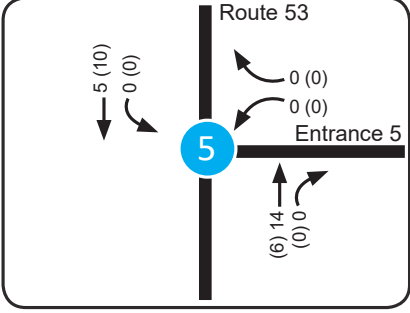
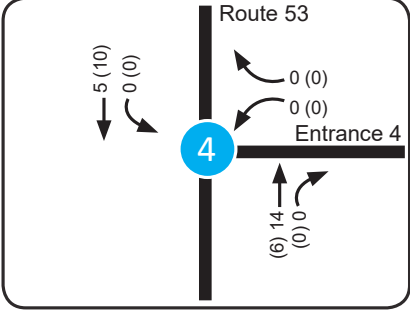
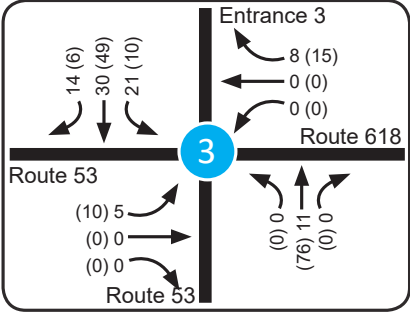
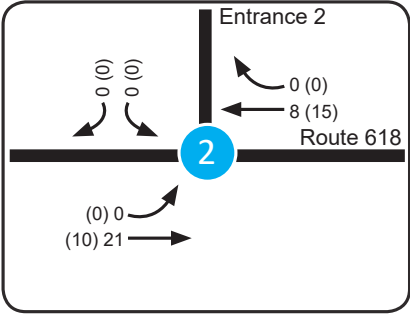
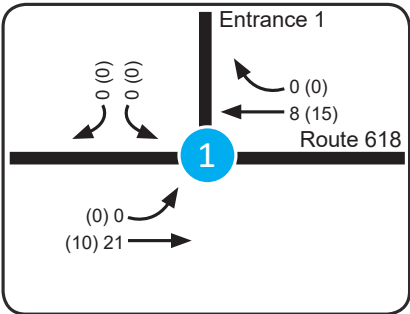
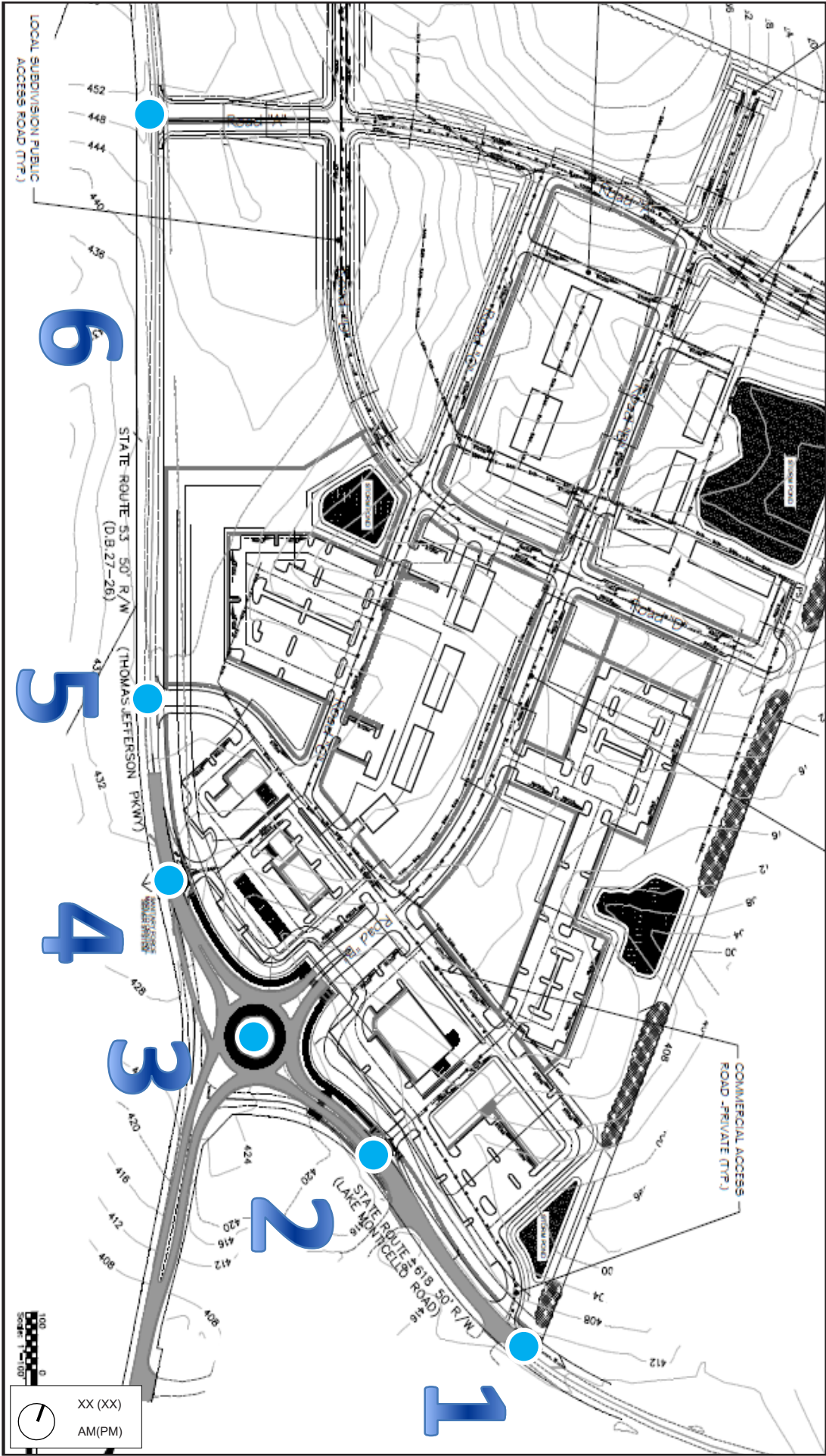


Figure 8 Commercial Site Trips

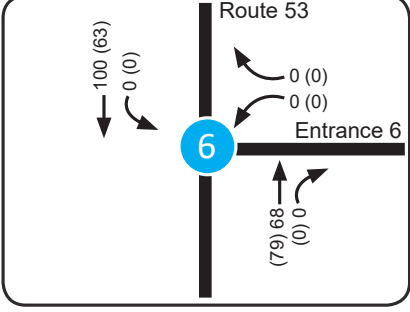
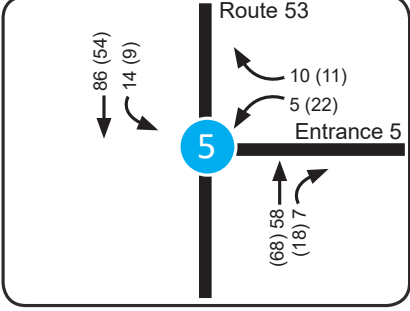
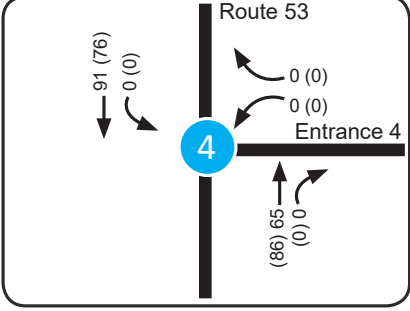
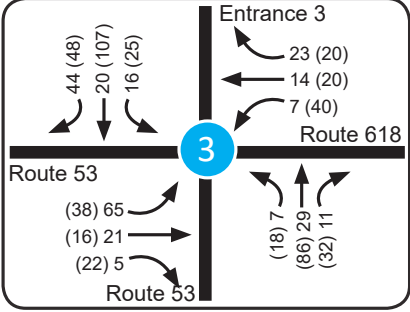
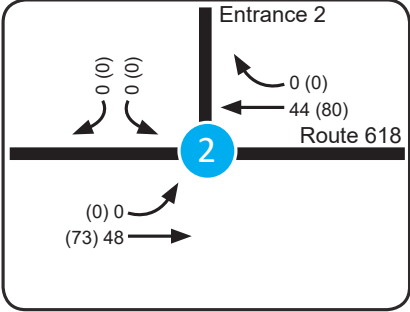
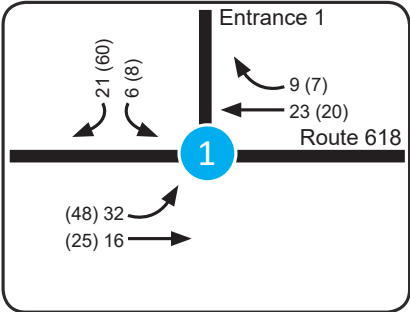
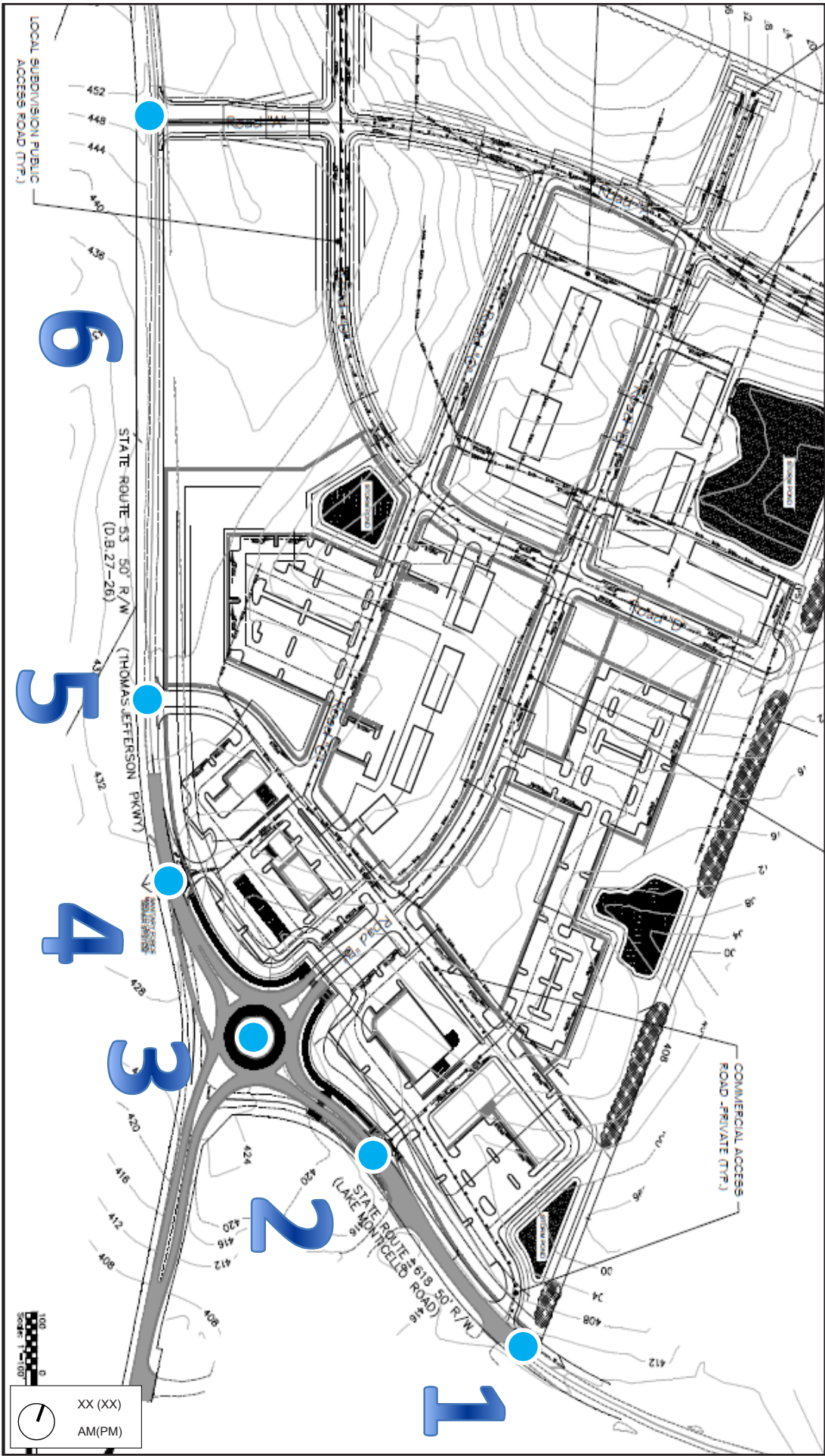


Figure 9 Commercial Pass-by Trips

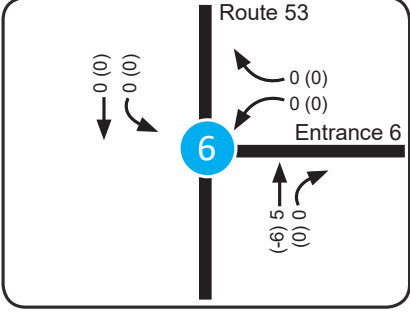
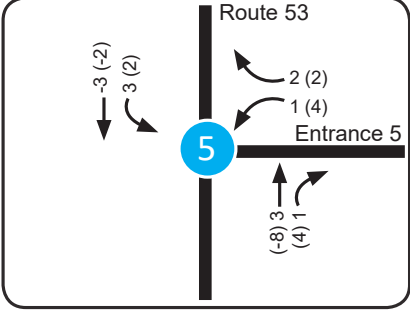
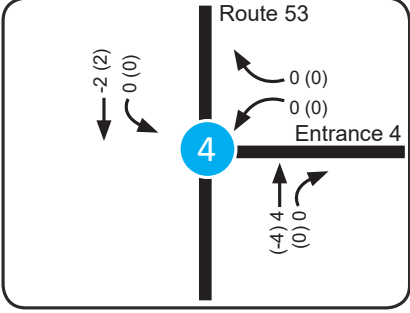
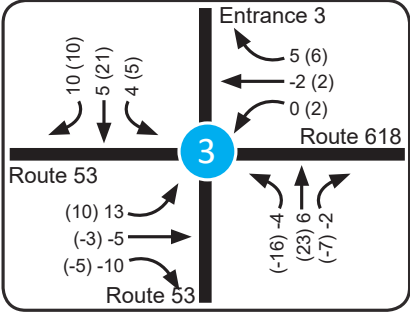
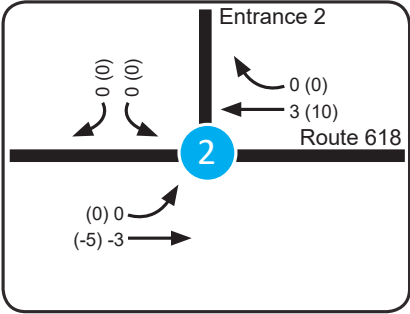
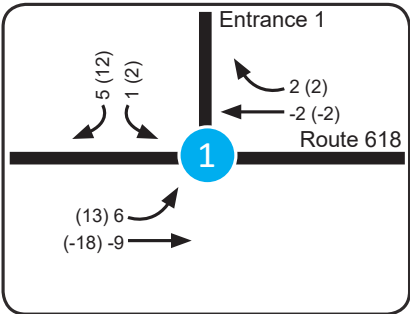
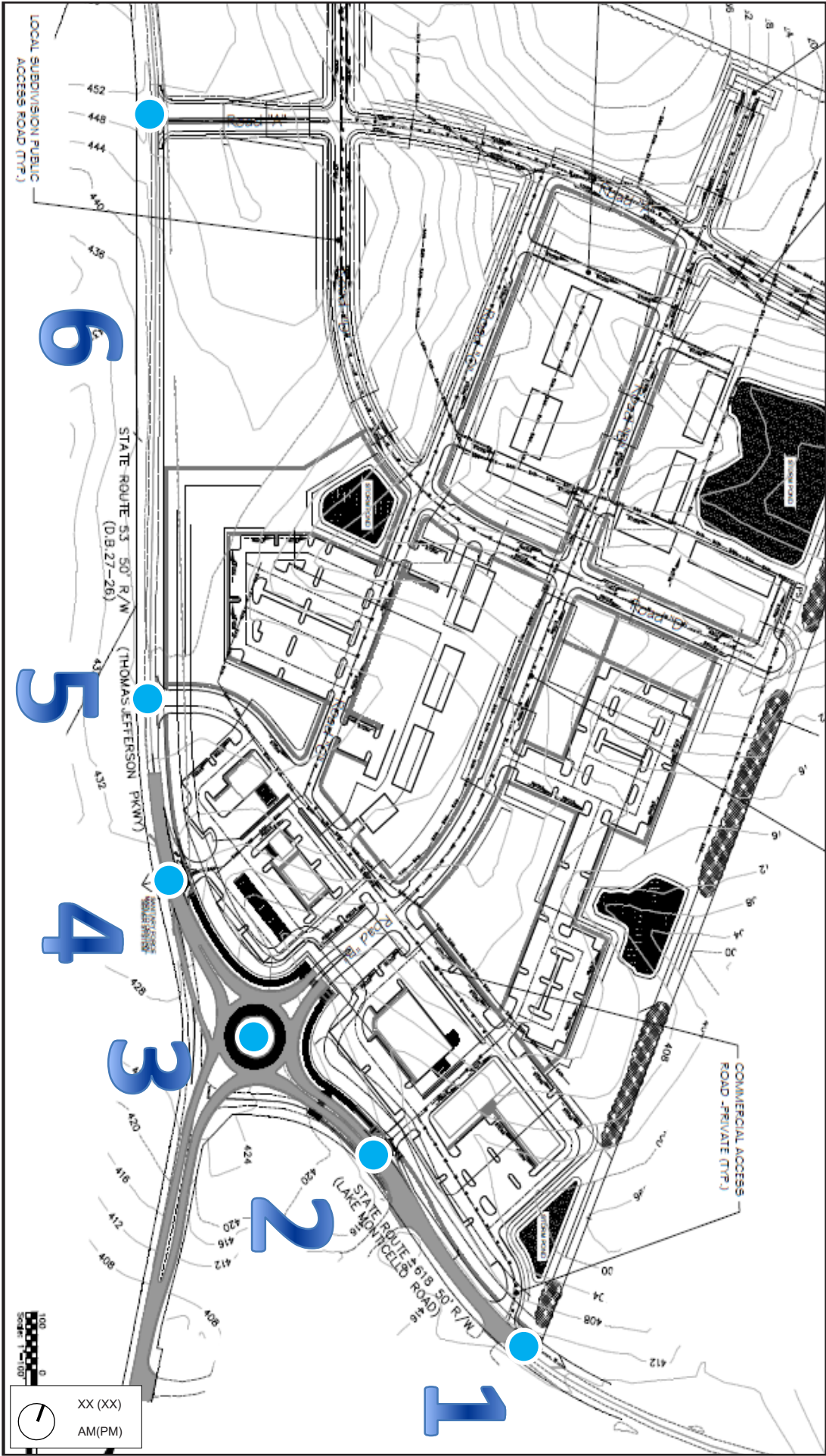
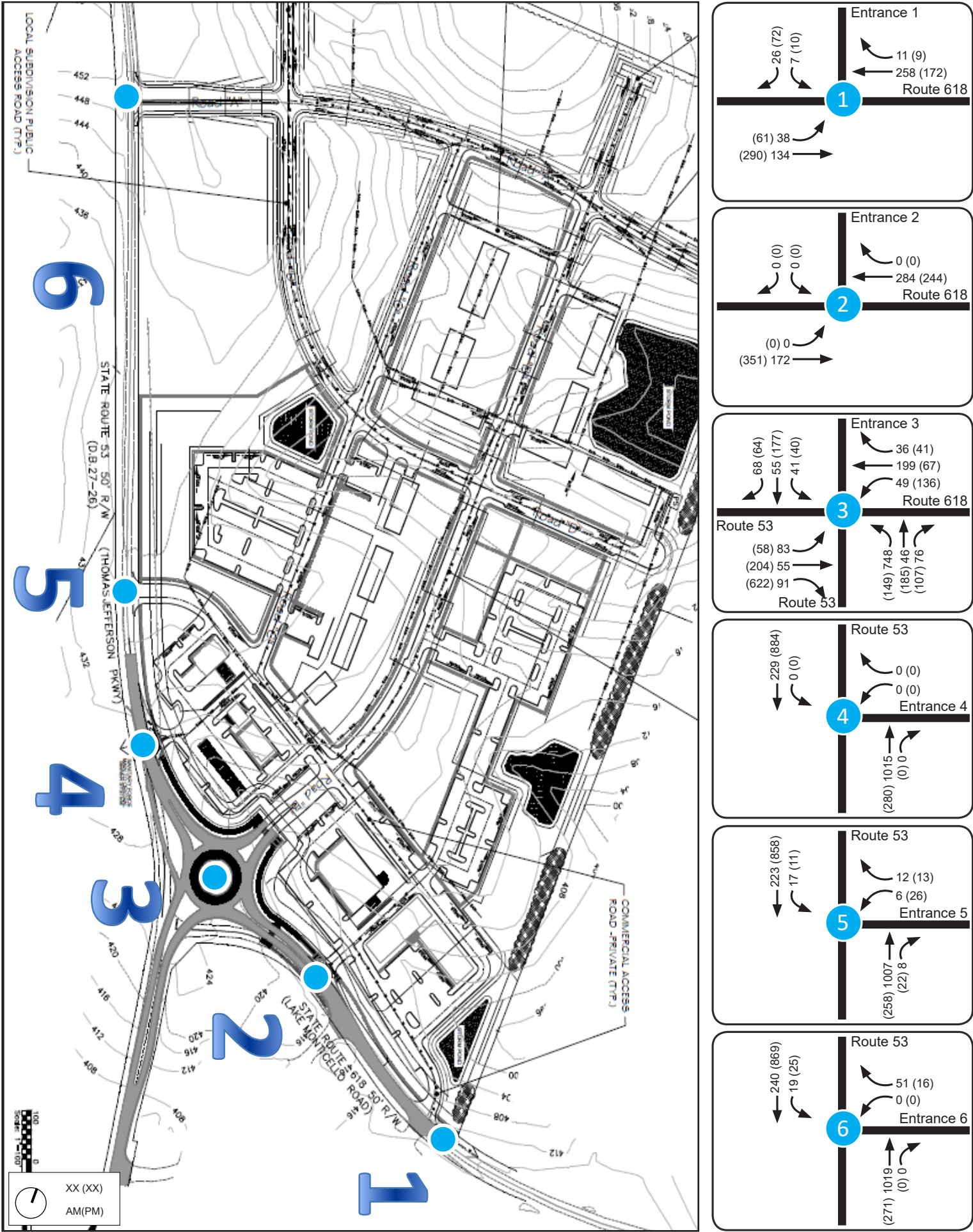


Figure 10 2025 Build Traffic Volumes



Warrant for Left-Turn Storage Lanes on Two-Lane Highway

BOS 2022-01-19 p.206/1306

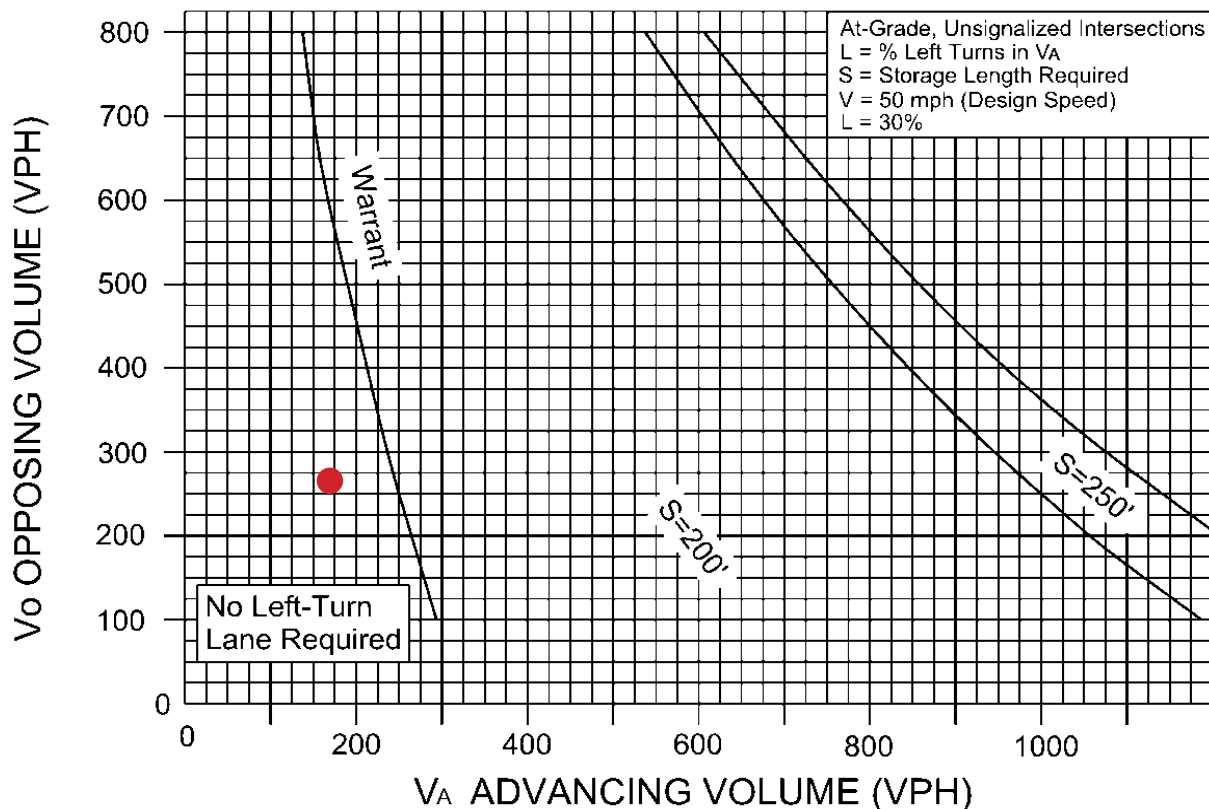
Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #1 on Route 618

Approach Direction: Eastbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 38 vph
Advancing Volume (V_A): 172 vph
Opposing Volume (V_O): 269 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 30% (Calculated Value: 22.1%)
% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on Two-Lane Highway

BOS 2022-01-19 p.207/1306

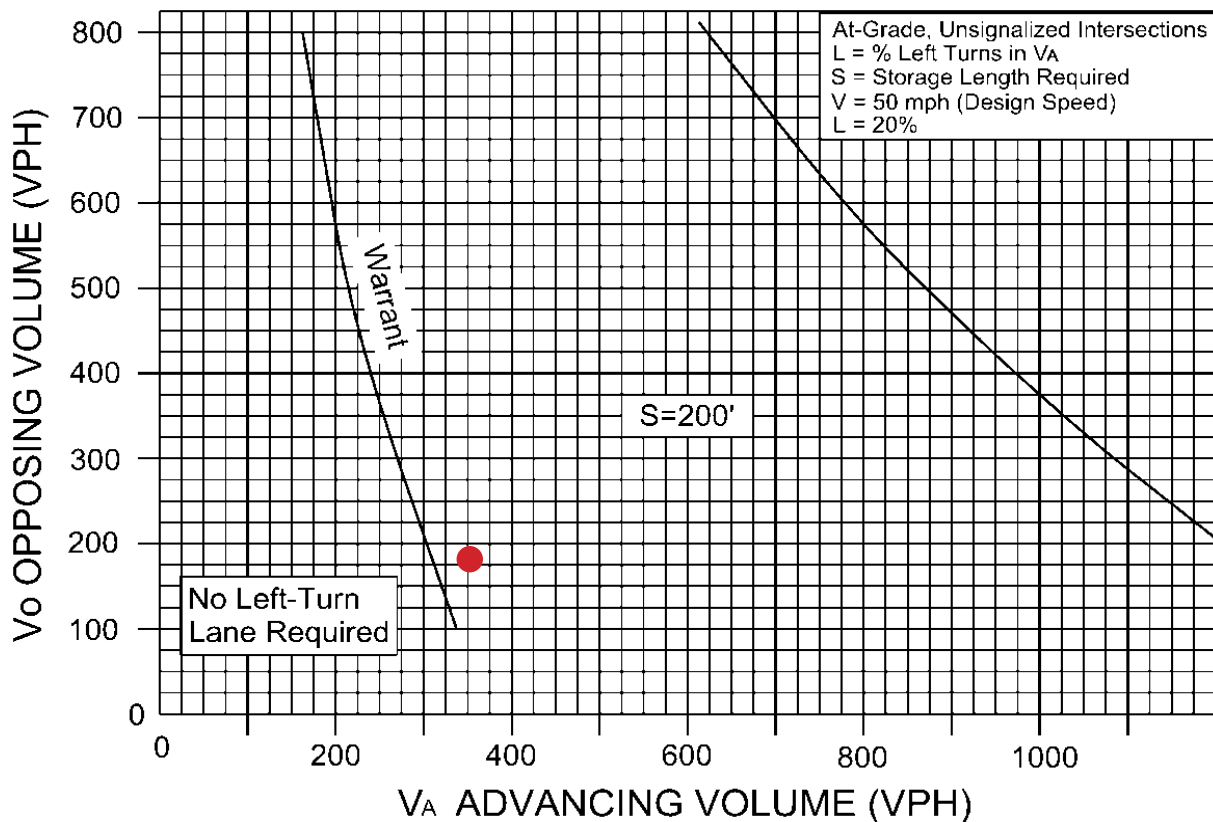
Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #1 on Route 618

Approach Direction: Eastbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 61 vph
Advancing Volume (V_A): 351 vph
Opposing Volume (V_O): 181 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 20% (Calculated Value: 17.4%)
% Trucks in V_L : 0%

Conclusion: 200' Left Turn Lane Required



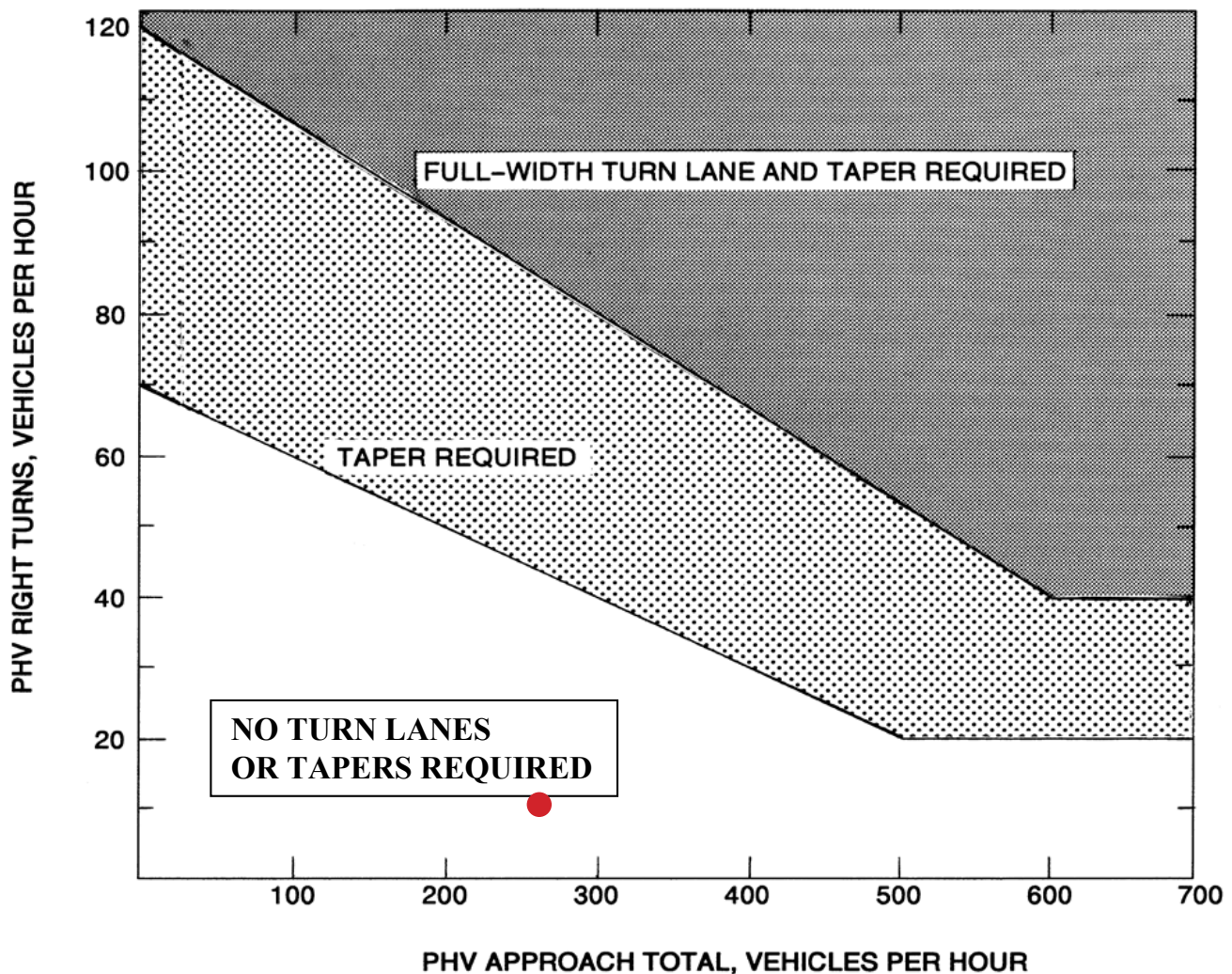
Warrant for Right-Turn Storage Lanes on Two-Lane Highway BOS 2022-01-19 p.208/1306

Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #1 on Route 618

Approach Direction: Westbound
Peak Hour: AM

PHV Right Turns: 11 vph
PHV Approach Total: 269 vph

Conclusion: No Turn Lanes or Tapers Required



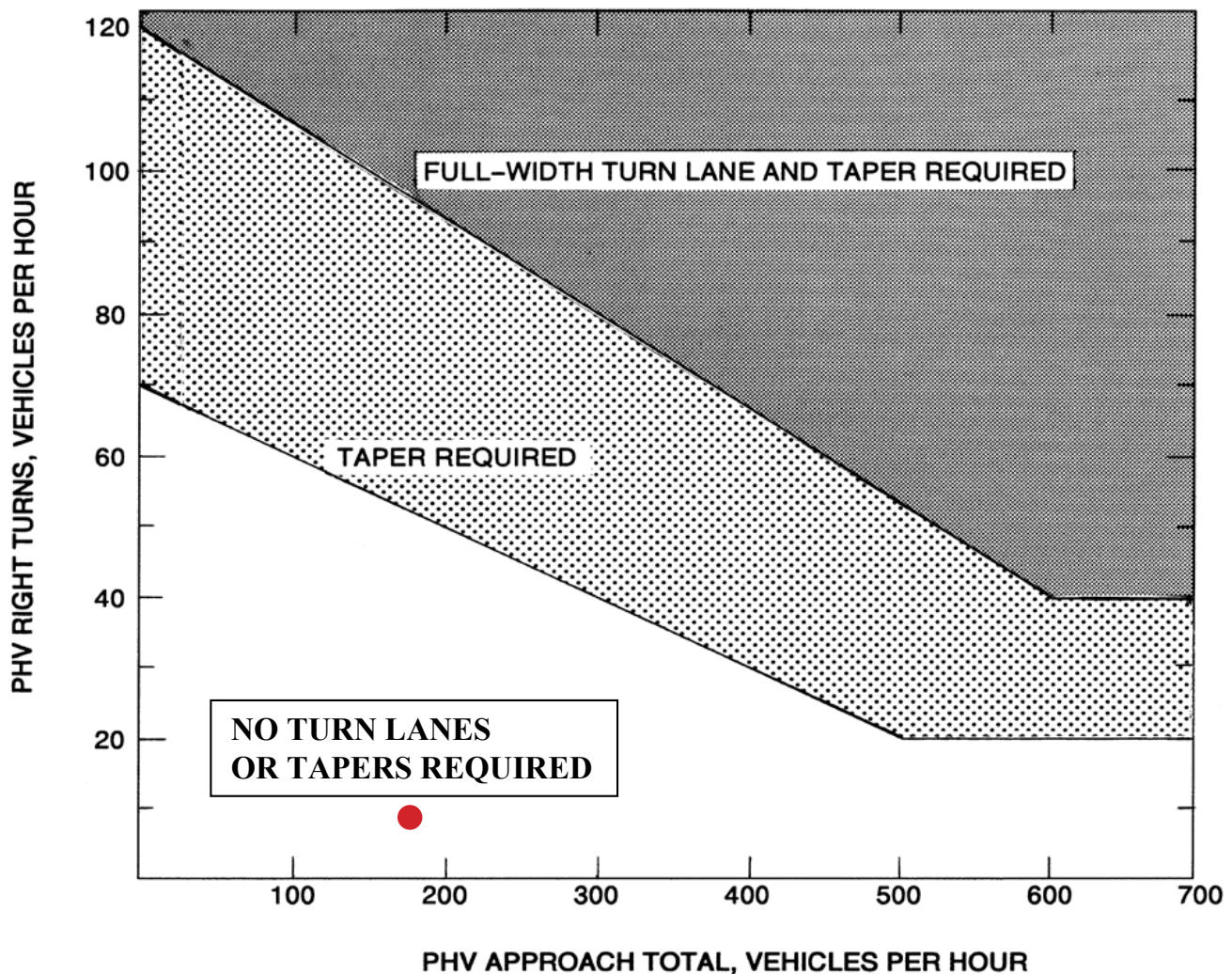
Warrant for Right-Turn Storage Lanes on Two-Lane Highway BOS 2022-01-19 p.209/1306

Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #1 on Route 618

Approach Direction: Westbound
Peak Hour: PM

PHV Right Turns: 9 vph
PHV Approach Total: 181 vph

Conclusion: No Turn Lanes or Tapers Required



Warrant for Left-Turn Storage Lanes on Two-Lane Highway

BOS 2022-01-19 p.210/1306

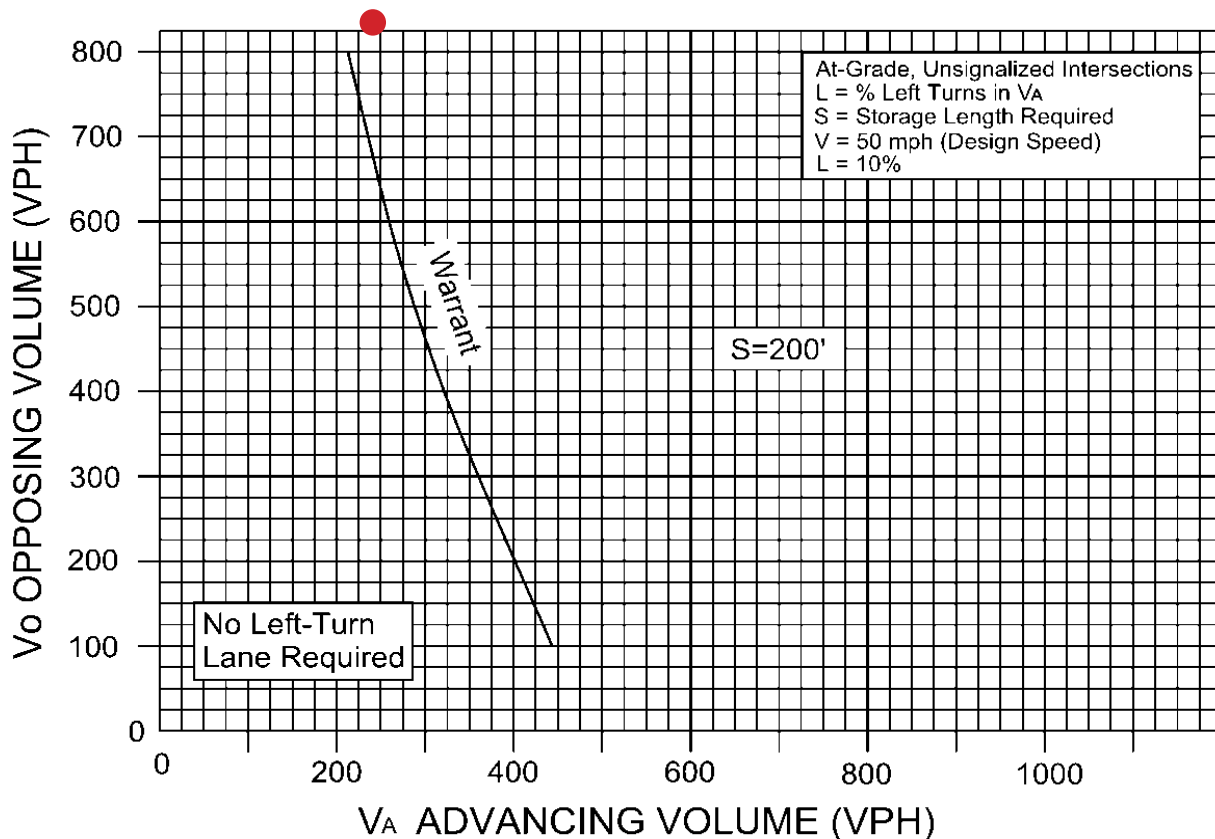
Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #5 on Route 53

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 17 vph
Advancing Volume (V_A): 240 vph
Opposing Volume (V_O): 1015 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 10% (Calculated Value: 7.1%)
% Trucks in V_L : 0%

Conclusion: 200' Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on Two-Lane Highway

BOS 2022-01-19 p.211/1306

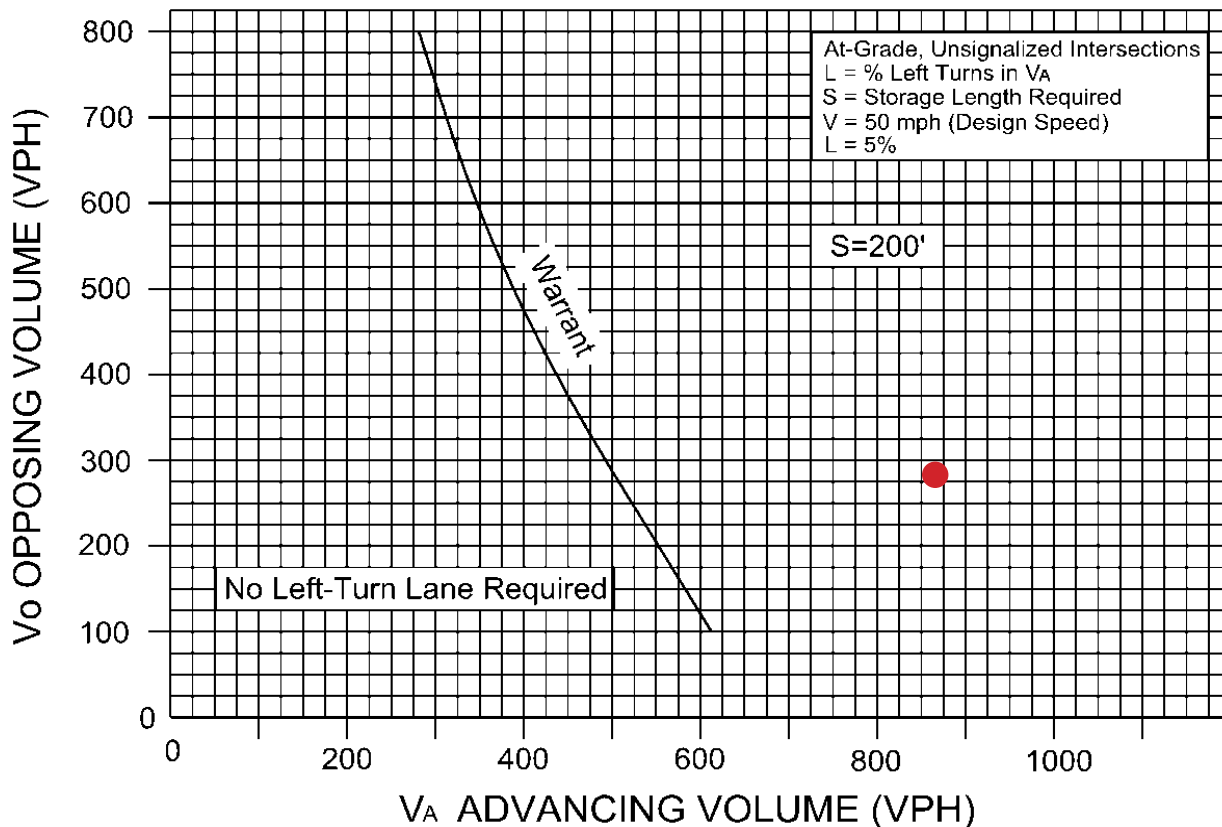
Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #5 on Route 53

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 11 vph
Advancing Volume (V_A): 869 vph
Opposing Volume (V_O): 280 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 1.3%)
% Trucks in V_L : 0%

Conclusion: 200' Left Turn Lane Required



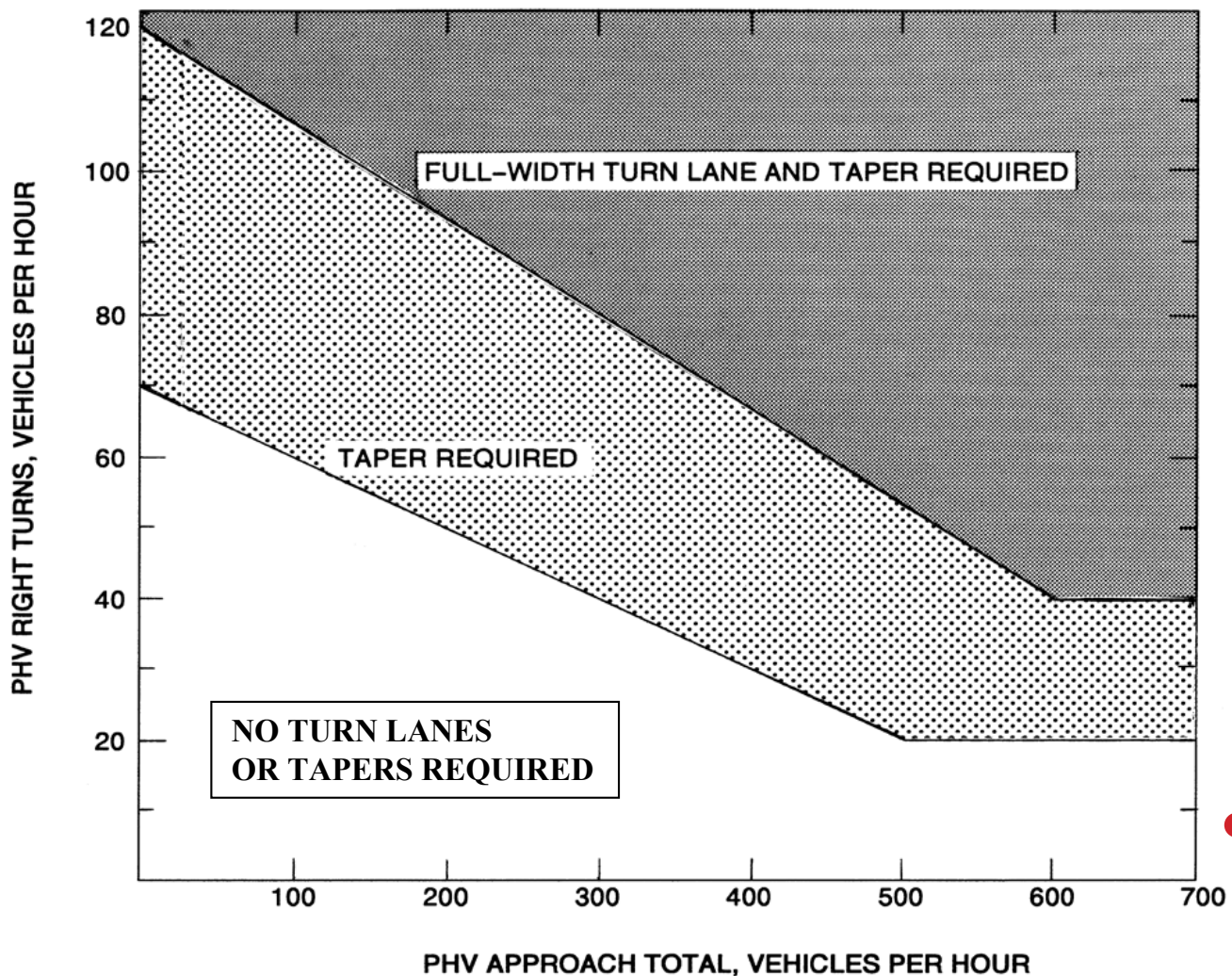
Warrant for Right-Turn Storage Lanes on Two-Lane Highway BOS 2022-01-19 p.212/1306

Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #5 on Route 53

Approach Direction: Northbound
Peak Hour: AM

PHV Right Turns: 8 vph
PHV Approach Total: 1015 vph

Conclusion: No Turn Lanes or Tapers Required



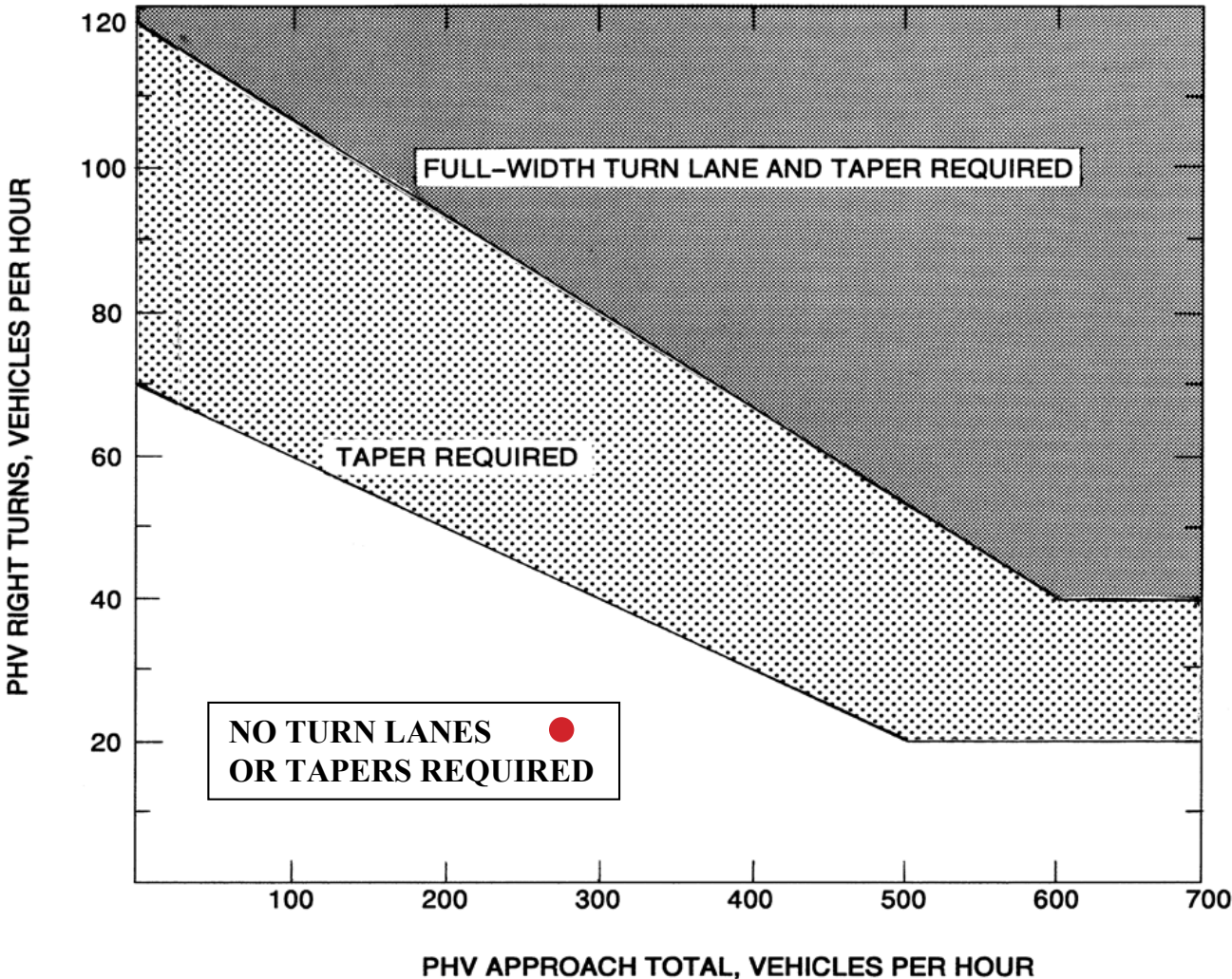
Warrant for Right-Turn Storage Lanes on Two-Lane Highway BOS 2022-01-19 p.213/1306

Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #5 on Route 53

Approach Direction: Northbound
Peak Hour: PM

PHV Right Turns: 22 vph
PHV Approach Total: 280 vph

Conclusion: No Turn Lanes or Tapers Required



Warrant for Left-Turn Storage Lanes on Two-Lane Highway

BOS 2022-01-19 p.214/1306

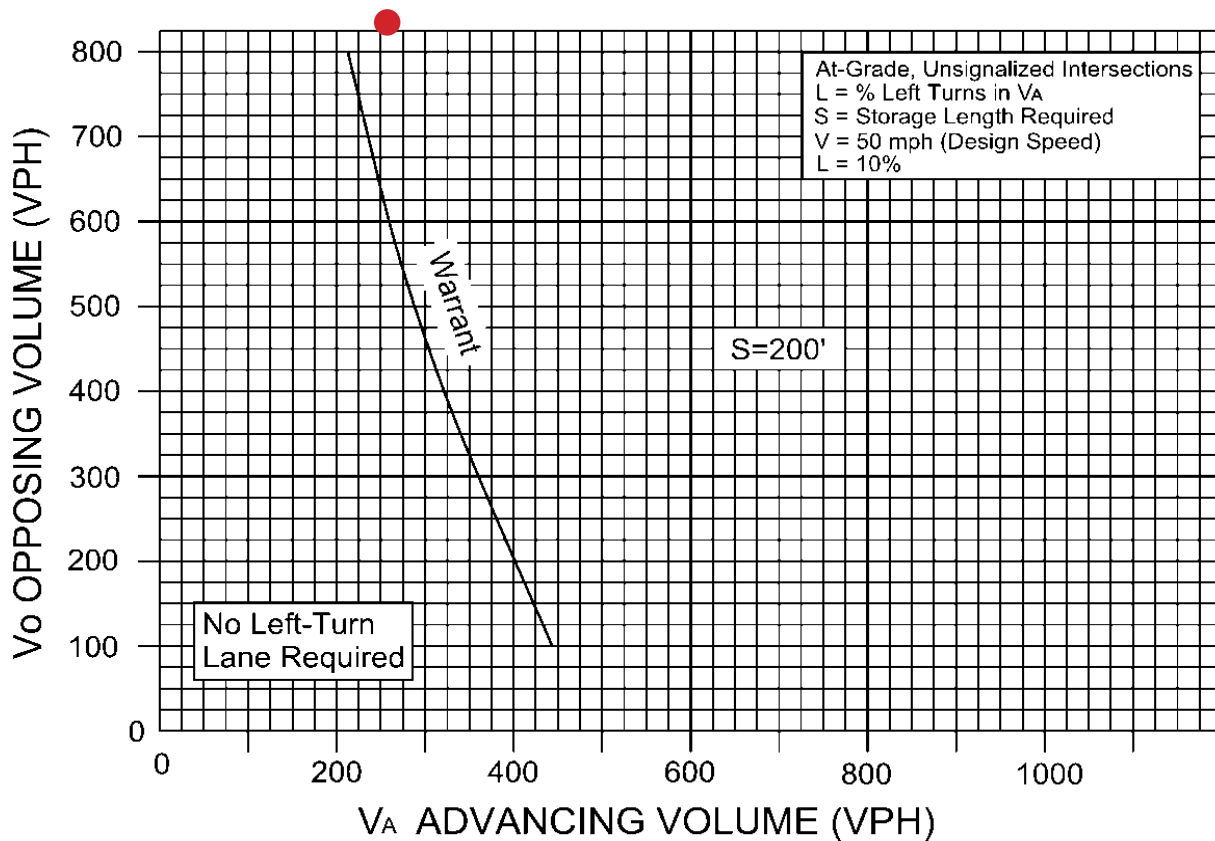
Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #6 on Route 53

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 19 vph
Advancing Volume (V_A): 259 vph
Opposing Volume (V_O): 1019 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 10% (Calculated Value: 7.3%)
% Trucks in V_L : 0%

Conclusion: 200' Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on Two-Lane Highway

BOS 2022-01-19 p.215/1306

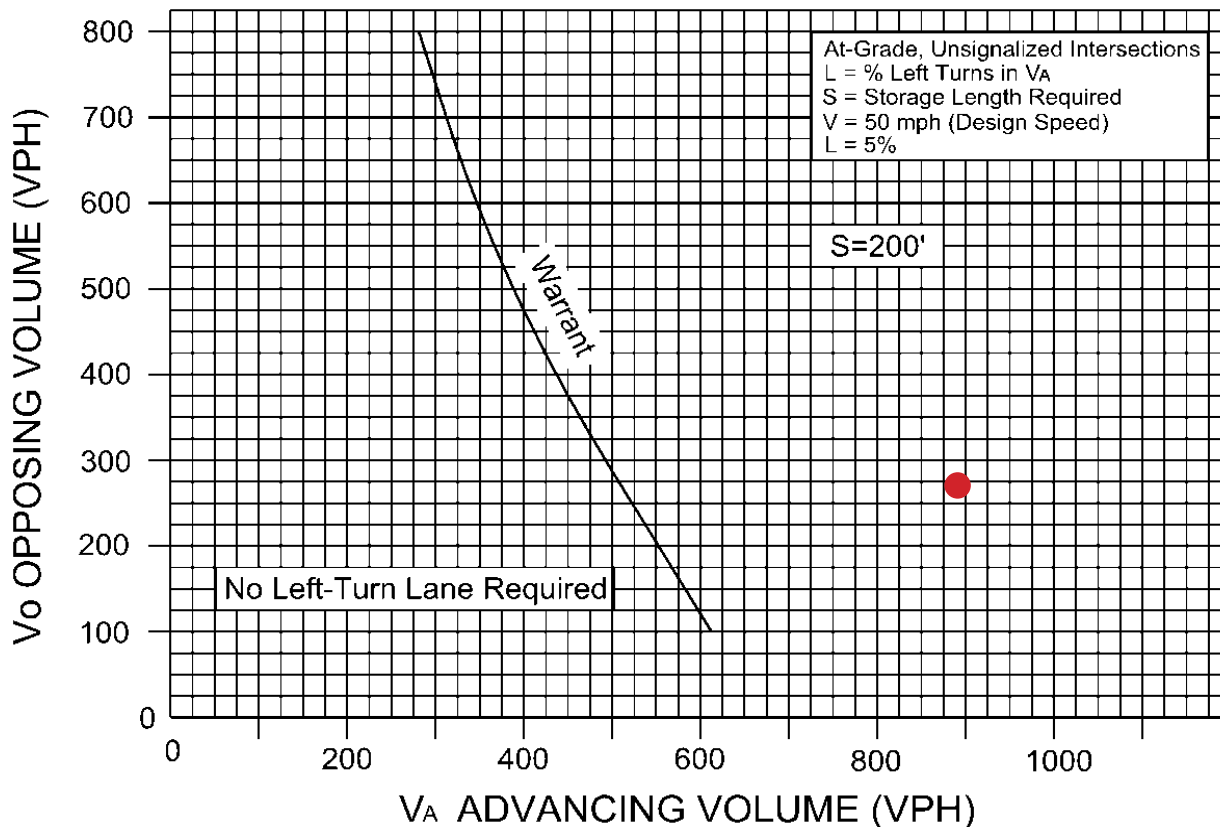
Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #6 on Route 53

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 25 vph
Advancing Volume (V_A): 894 vph
Opposing Volume (V_O): 271 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 2.8%)
% Trucks in V_L : 0%

Conclusion: 200' Left Turn Lane Required



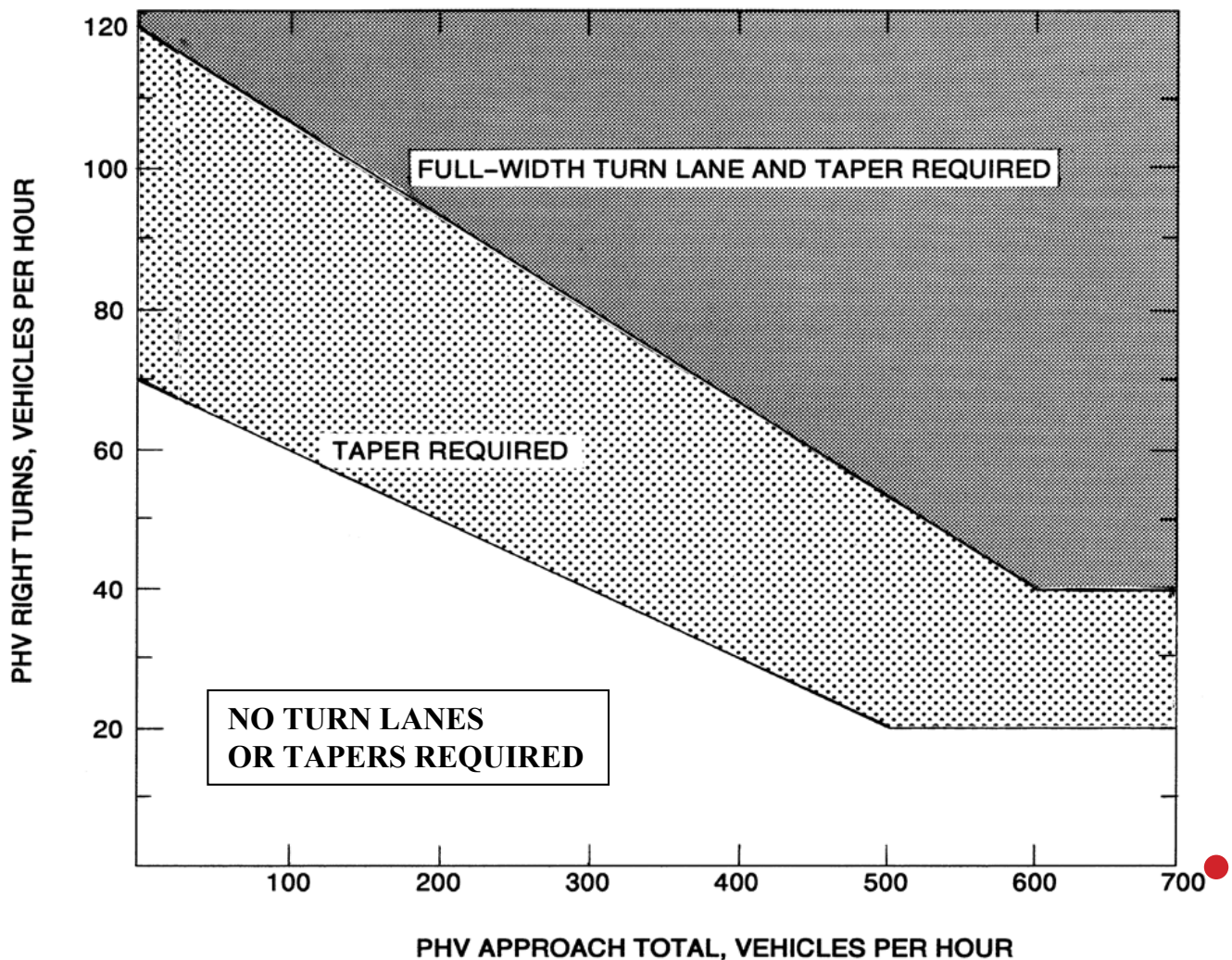
Warrant for Right-Turn Storage Lanes on Two-Lane Highway BOS 2022-01-19 p.216/1306

Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #6 on Route 53

Approach Direction: Northbound
Peak Hour: AM

PHV Right Turns: 0 vph
PHV Approach Total: 1019 vph

Conclusion: No Turn Lanes or Tapers Required



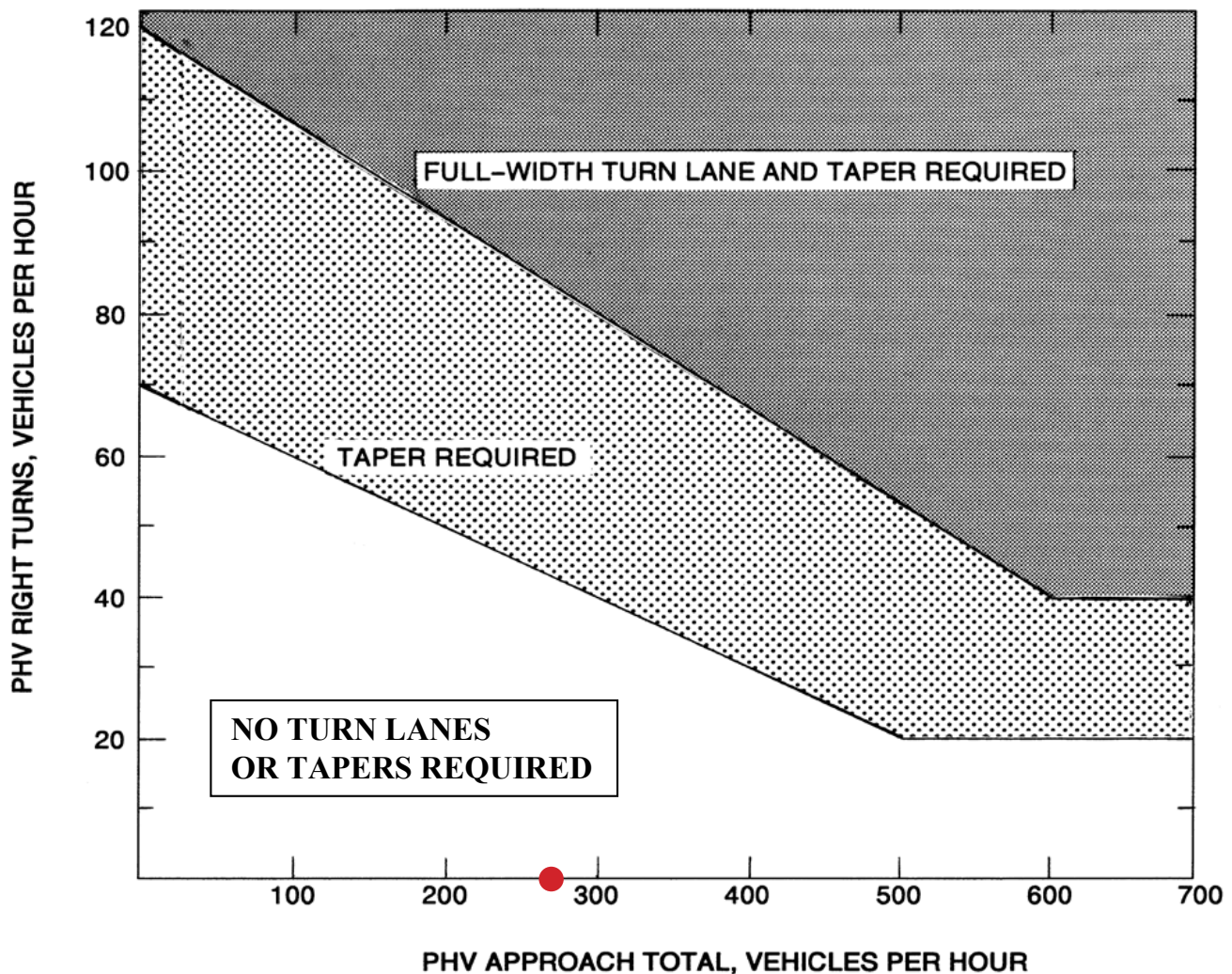
Warrant for Right-Turn Storage Lanes on Two-Lane Highway BOS 2022-01-19 p.217/1306

Project: Fluvanna, Route 618 at Route 53
Scenario: 2025 Build
Intersection: Intersection #6 on Route 53

Approach Direction: Northbound
Peak Hour: PM

PHV Right Turns: 0 vph
PHV Approach Total: 271 vph

Conclusion: No Turn Lanes or Tapers Required



LANE SUMMARY

Site: Rt618/Rt53

Rt618/Rt53 AM
Roundabout

Lane Use and Performance																
	Demand Flows			Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Lane Length m	SL Type	Cap. Adj. %	Prob. Block. %
	L veh/h	T veh/h	R veh/h													
South: Rt 53																
Lane 1	813	50	83	946	1.1	1365	0.693	100	14.5	LOS B	7.1	49.9	500	—	0.0	0.0
Approach	813	50	83	946	1.1		0.693		14.5	LOS B	7.1	49.9				
East: Rt 618																
Lane 1	53	216	39	309	1.9	599	0.516	100	18.4	LOS B	4.8	34.5	500	—	0.0	0.0
Approach	53	216	39	309	1.9		0.516		18.4	LOS B	4.8	34.5				
North: Entrance 3																
Lane 1	45	60	74	178	0.0	536	0.332	100	13.6	LOS B	2.6	18.0	500	—	0.0	0.0
Approach	45	60	74	178	0.0		0.332		13.6	LOS B	2.6	18.0				
West: Rt 53																
Lane 1	90	60	99	249	2.8	1306	0.191	100	9.4	LOS A	1.2	8.3	500	—	0.0	0.0
Approach	90	60	99	249	2.8		0.191		9.4	LOS A	1.2	8.3				
Intersection				1682	1.4		0.693		14.4	LOS B	7.1	49.9				

Level of Service (LOS) Method: Delay (HCM 2000).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

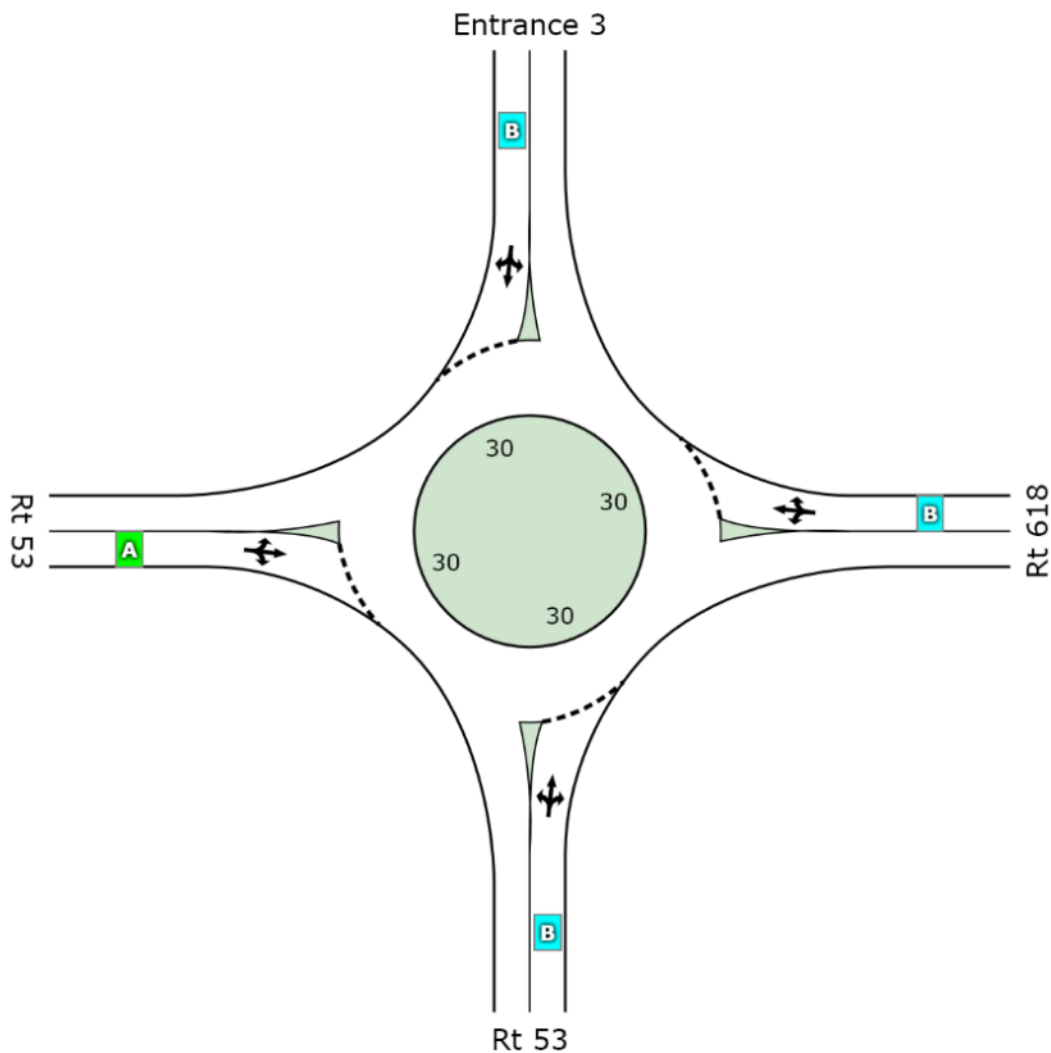
Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

LEVEL OF SERVICE SUMMARY

Site: Rt618/Rt53

Rt618/Rt53 AM
Roundabout



	South	East	North	West	Intersection
LOS	B	B	B	A	B

Level of Service (LOS) Method: Delay (HCM 2000).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model used.

LANE SUMMARY

Site: Rt618/Rt53

Rt618/Rt53 PM
Roundabout

Lane Use and Performance																
	Demand Flows			Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Vehicles Distance veh m	Lane Length m	SL Type	Cap. Adj. %	Prob. Block. %	
	L veh/h	T veh/h	R veh/h													
South: Rt 53																
Lane 1	162	201	116	479	0.7	1127	0.425	100	10.7	LOS B	3.3	23.0	500	—	0.0	0.0
Approach	162	201	116	479	0.7		0.425		10.7	LOS B	3.3	23.0				
East: Rt 618																
Lane 1	148	73	45	265	0.5	1059	0.251	100	12.8	LOS B	1.6	11.3	500	—	0.0	0.0
Approach	148	73	45	265	0.5		0.251		12.8	LOS B	1.6	11.3				
North: Entrance 3																
Lane 1	43	192	70	305	0.0	1118	0.273	100	5.3	LOS A	1.7	11.9	500	—	0.0	0.0
Approach	43	192	70	305	0.0		0.273		5.3	LOS A	1.7	11.9				
West: Rt 53																
Lane 1	63	222	676	961	0.2	1149	0.836	100	16.1	LOS B	14.9	104.3	500	—	0.0	0.0
Approach	63	222	676	961	0.2		0.836		16.1	LOS B	14.9	104.3				
Intersection				2011	0.4		0.836		12.7	LOS B	14.9	104.3				

Level of Service (LOS) Method: Delay (HCM 2000).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

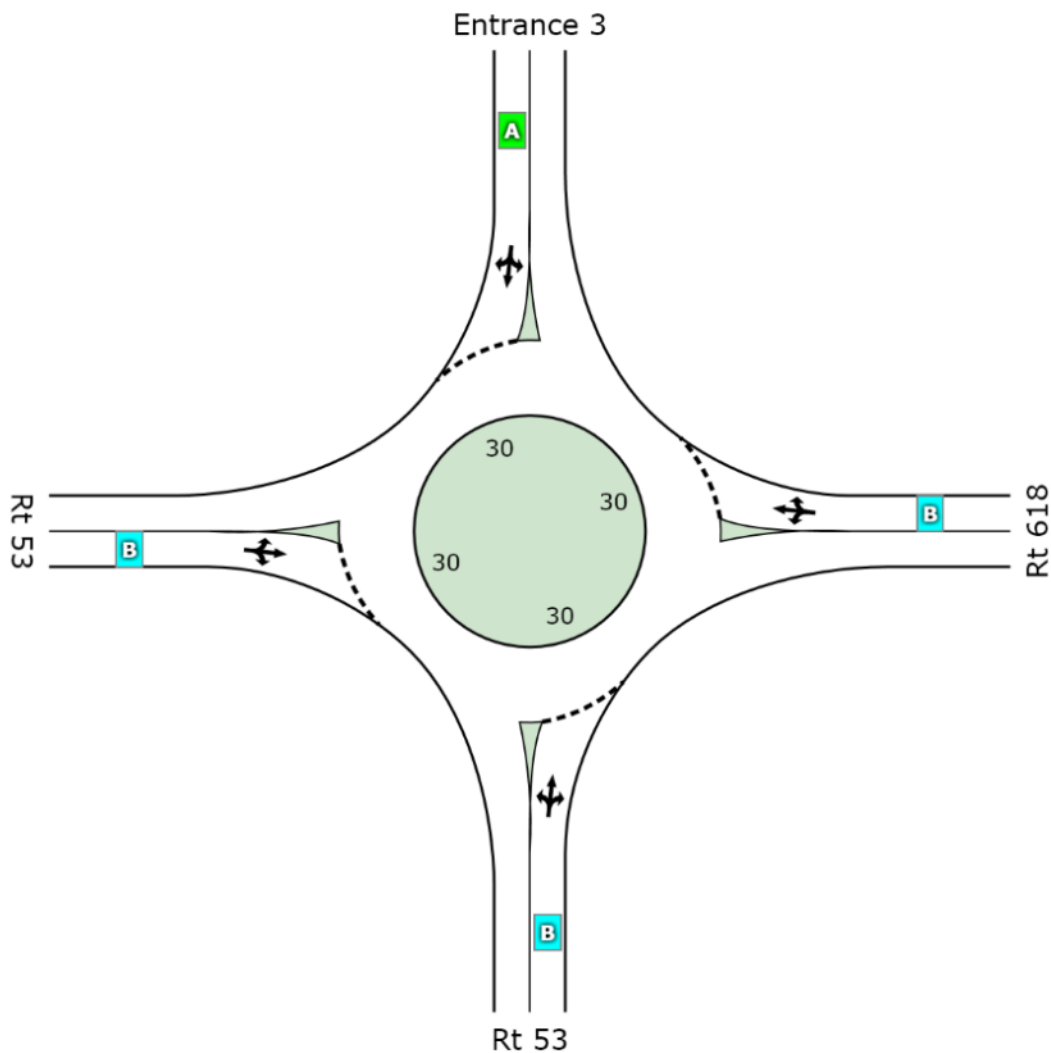
Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

LEVEL OF SERVICE SUMMARY

Site: Rt618/Rt53

Rt618/Rt53 PM
Roundabout



	South	East	North	West	Intersection
LOS	B	B	A	B	B

Level of Service (LOS) Method: Delay (HCM 2000).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model used.

Appendix B Turn Lane Warrant Forms

Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.224/1306

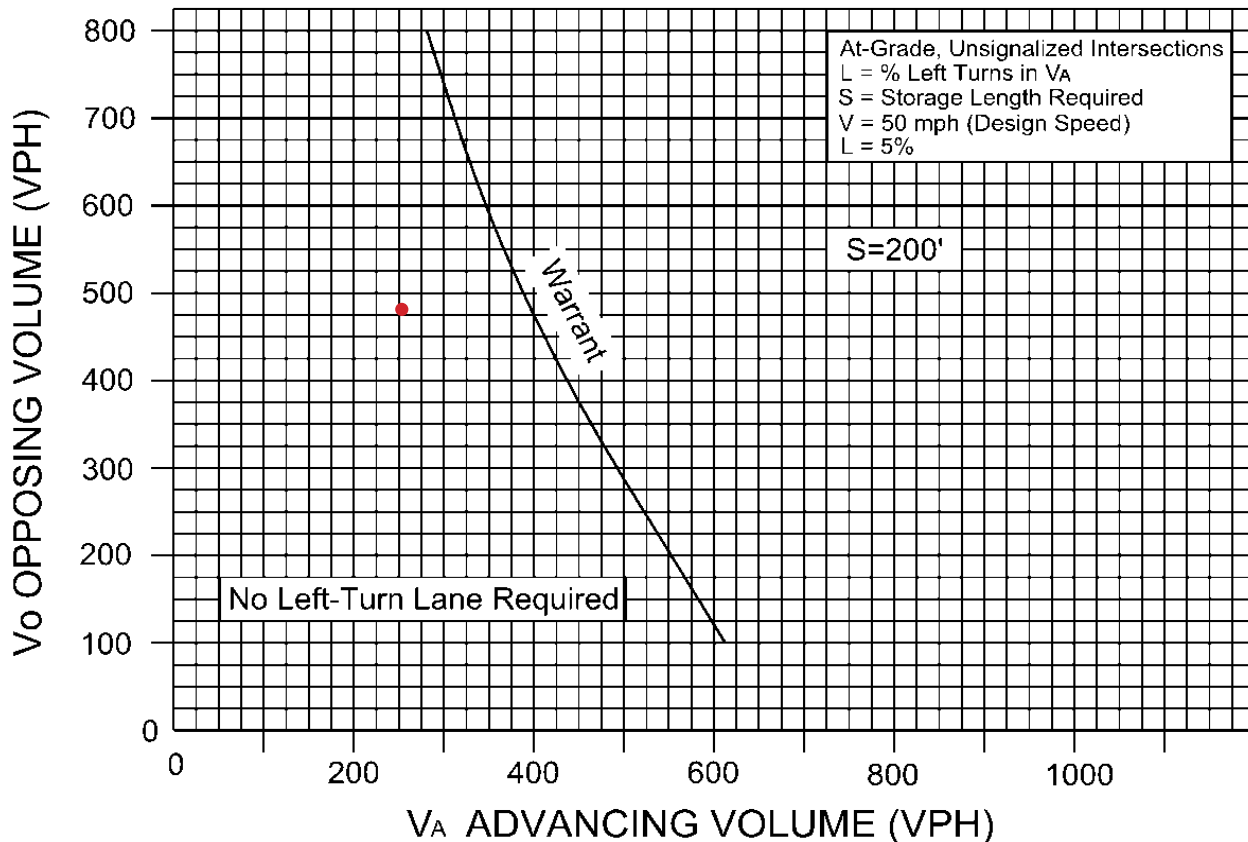
Project: Garden Lane Traffic Analysis (2026 No Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 7 vph
Advancing Volume (V_A): 252 vph
Opposing Volume (V_O): 480 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 2.8%)
% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.225/1306

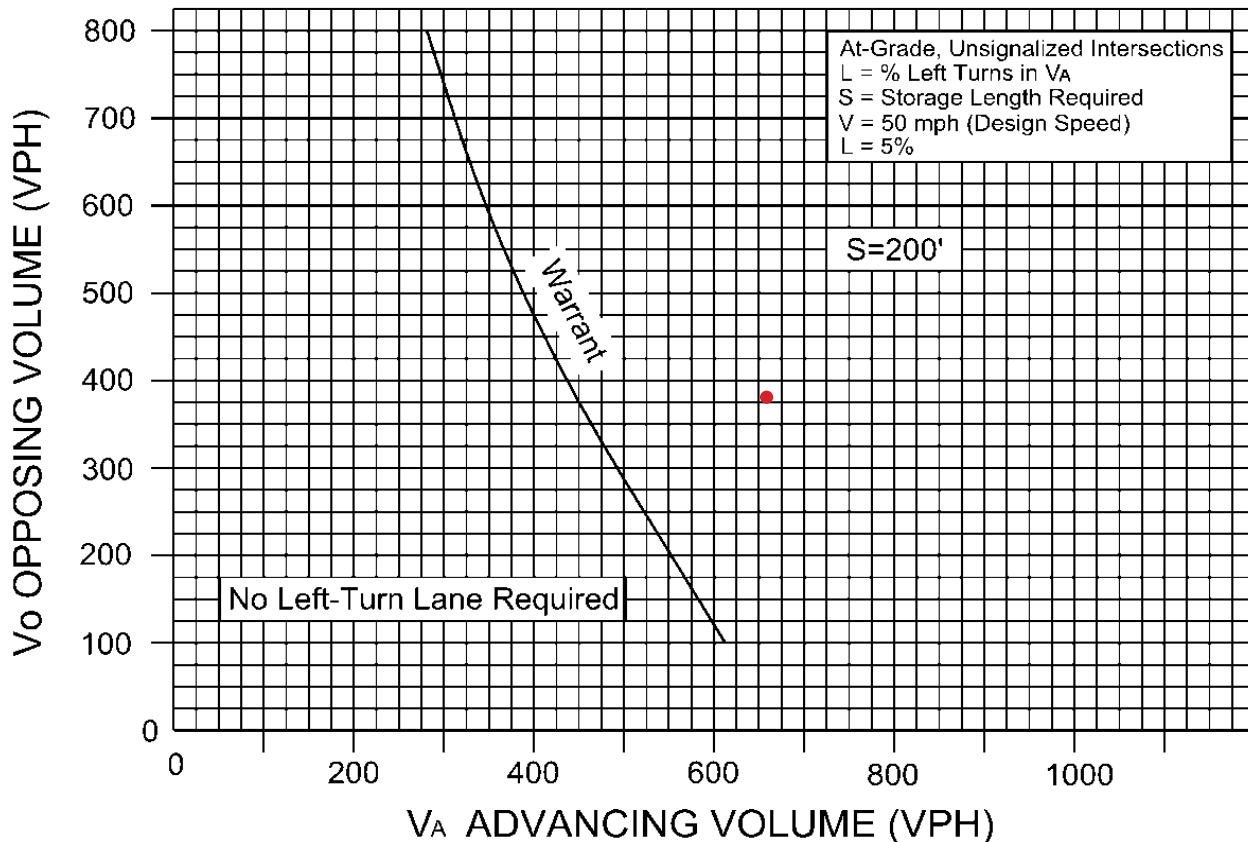
Project: Garden Lane Traffic Analysis (2026 No Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 6 vph
Advancing Volume (V_A): 657 vph
Opposing Volume (V_O): 376 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 0.9%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.226/1306

Project: Garden Lane Traffic Analysis (2026 No Build Condition)

Intersection: Route 53/Old Garden Lane

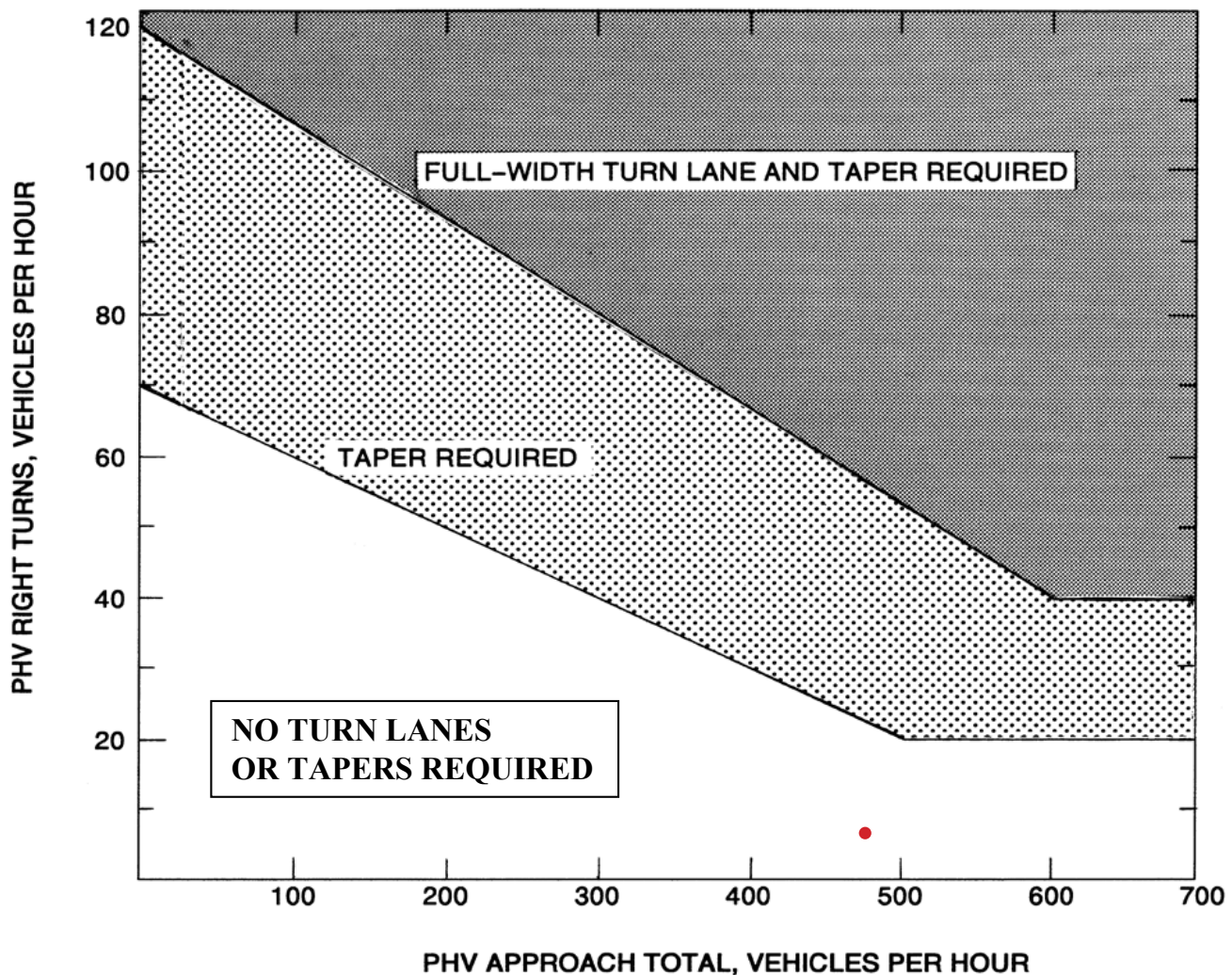
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 8 vph

PHV Approach Total: 480 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.227/1306

Project: Garden Lane Traffic Analysis (2026 No Build Condition)

Intersection: Route 53/Old Garden Lane

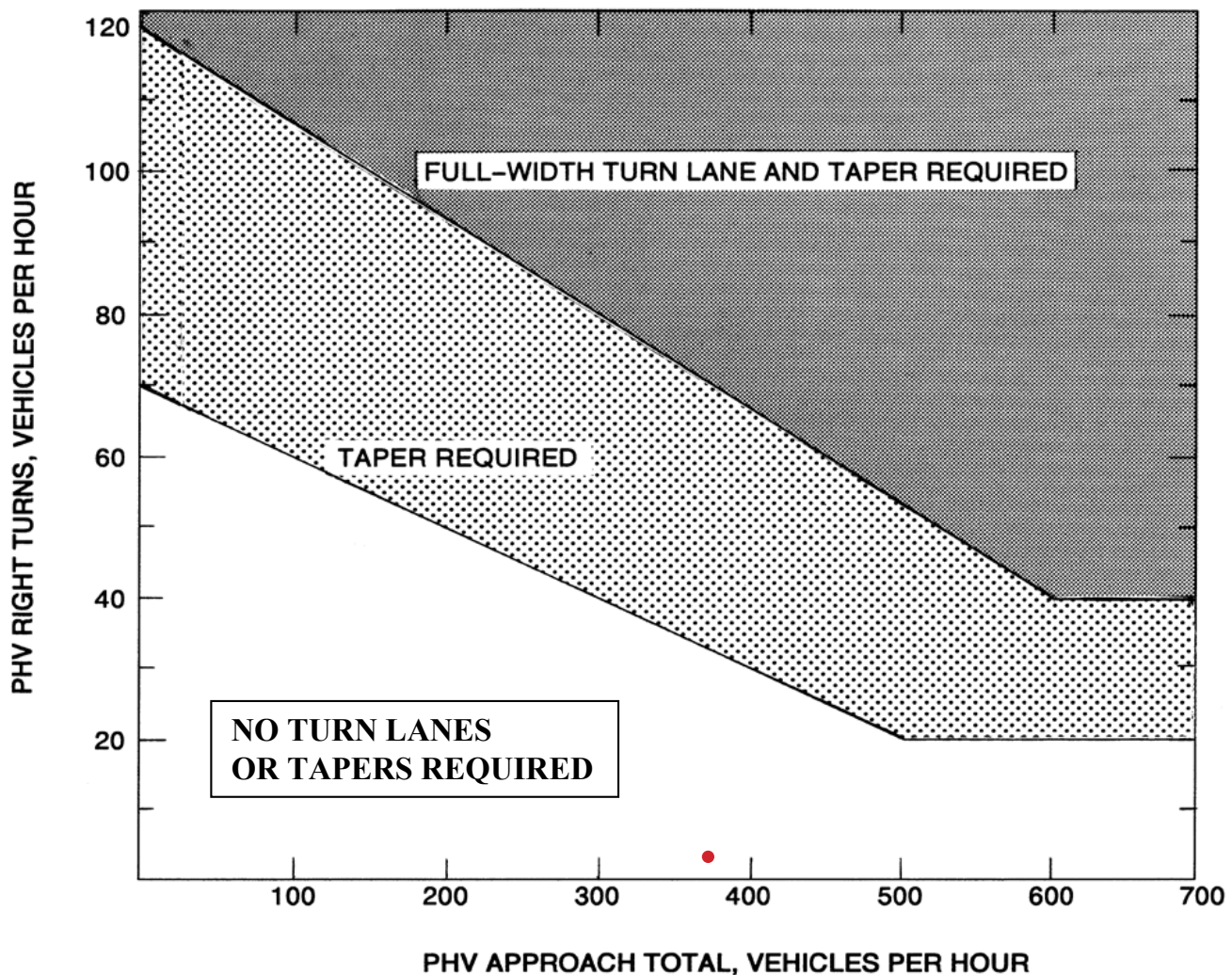
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 3 vph

PHV Approach Total: 376 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.228/1306

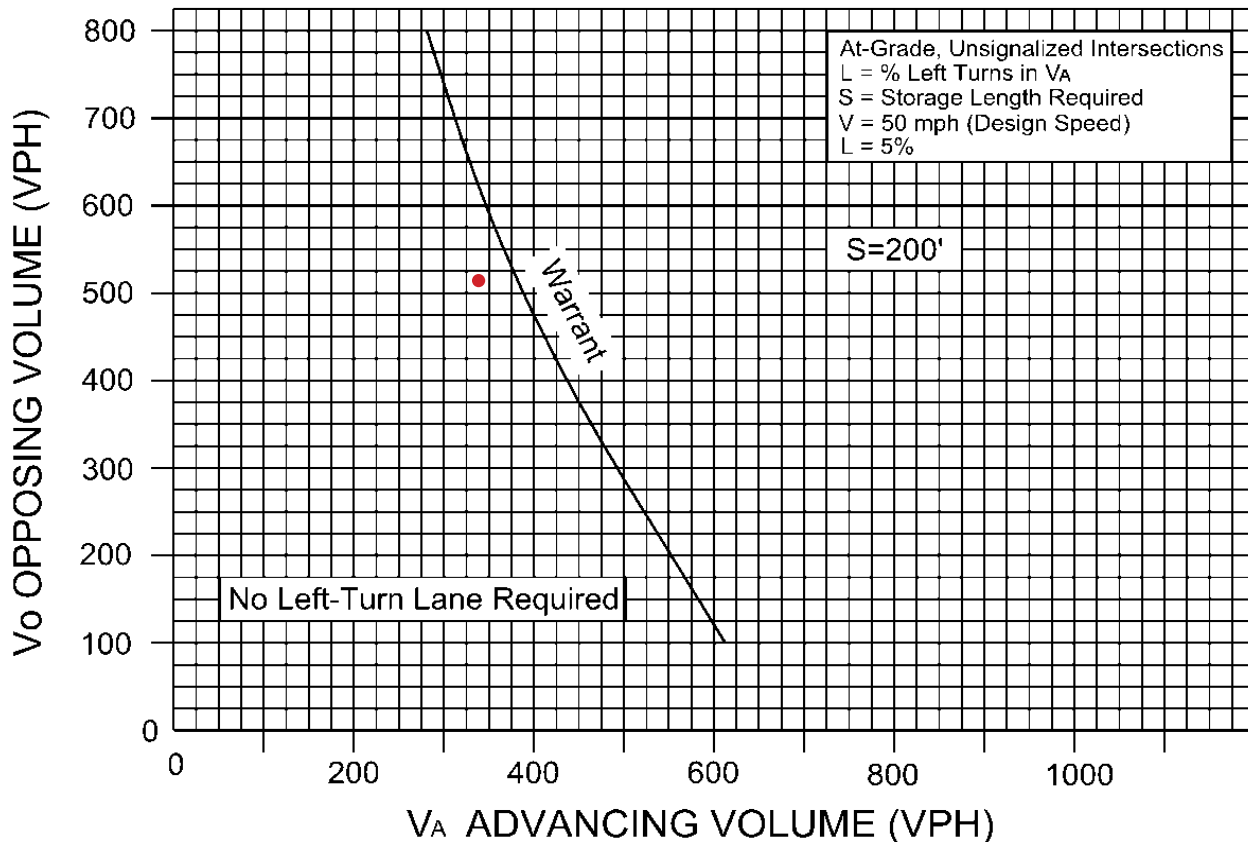
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 7 vph
Advancing Volume (V_A): 338 vph
Opposing Volume (V_O): 515 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 2.1%)
% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.229/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound

Peak Hour: PM

Peak Hour Left Turns (V_L): 6 vph

Advancing Volume (V_A): 726 vph

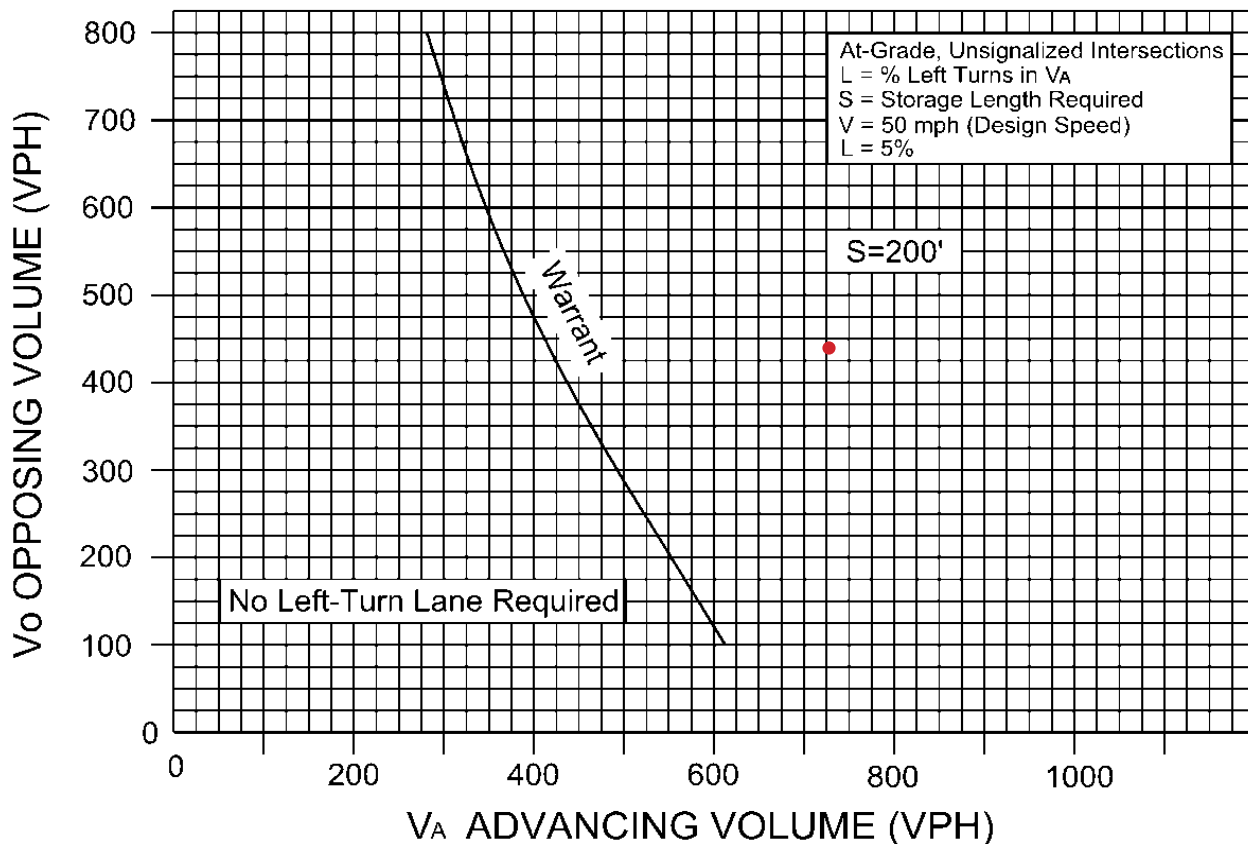
Opposing Volume (V_O): 438 vph

Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 0.8%)

% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.230/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

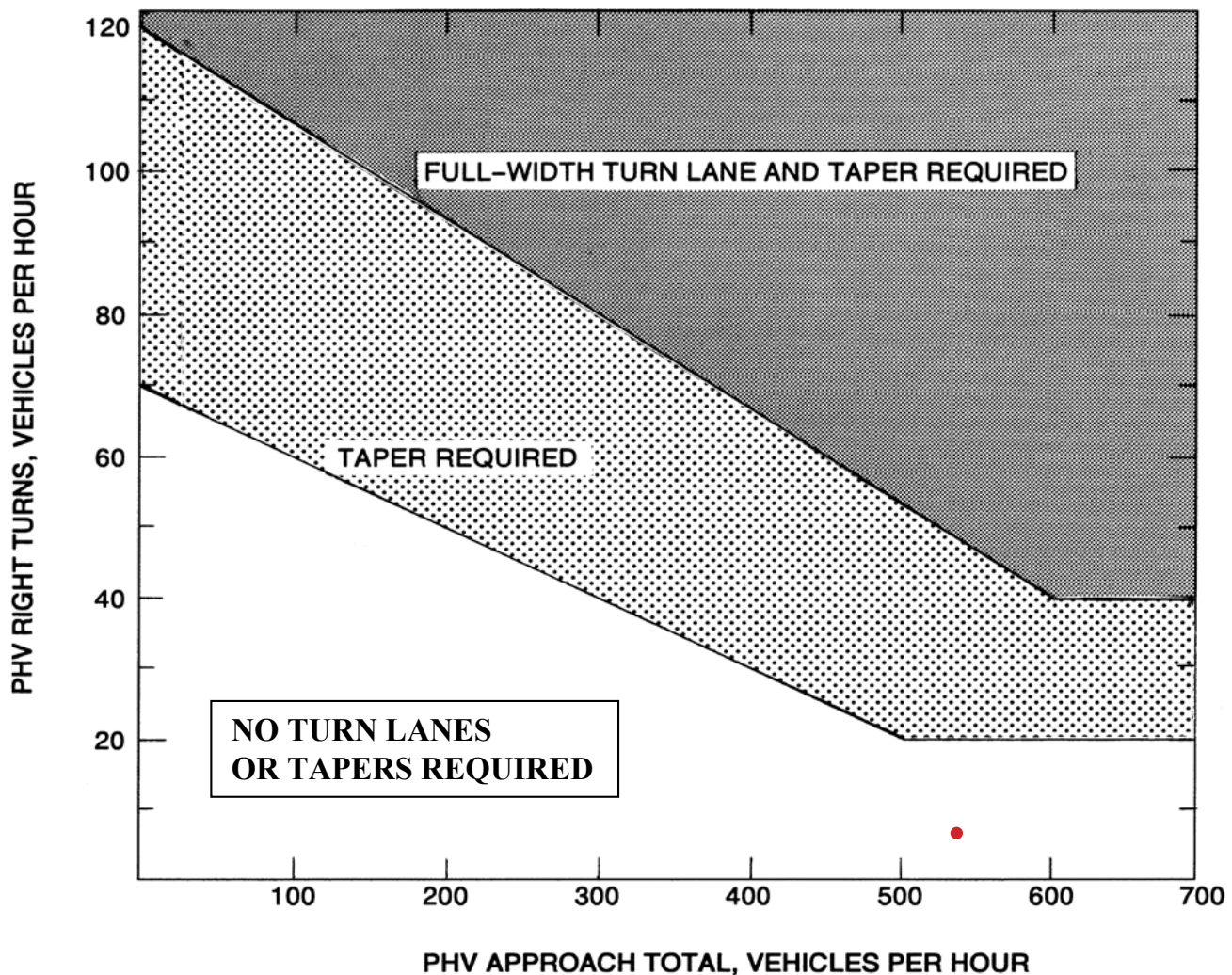
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 8 vph

PHV Approach Total: 515 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.231/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

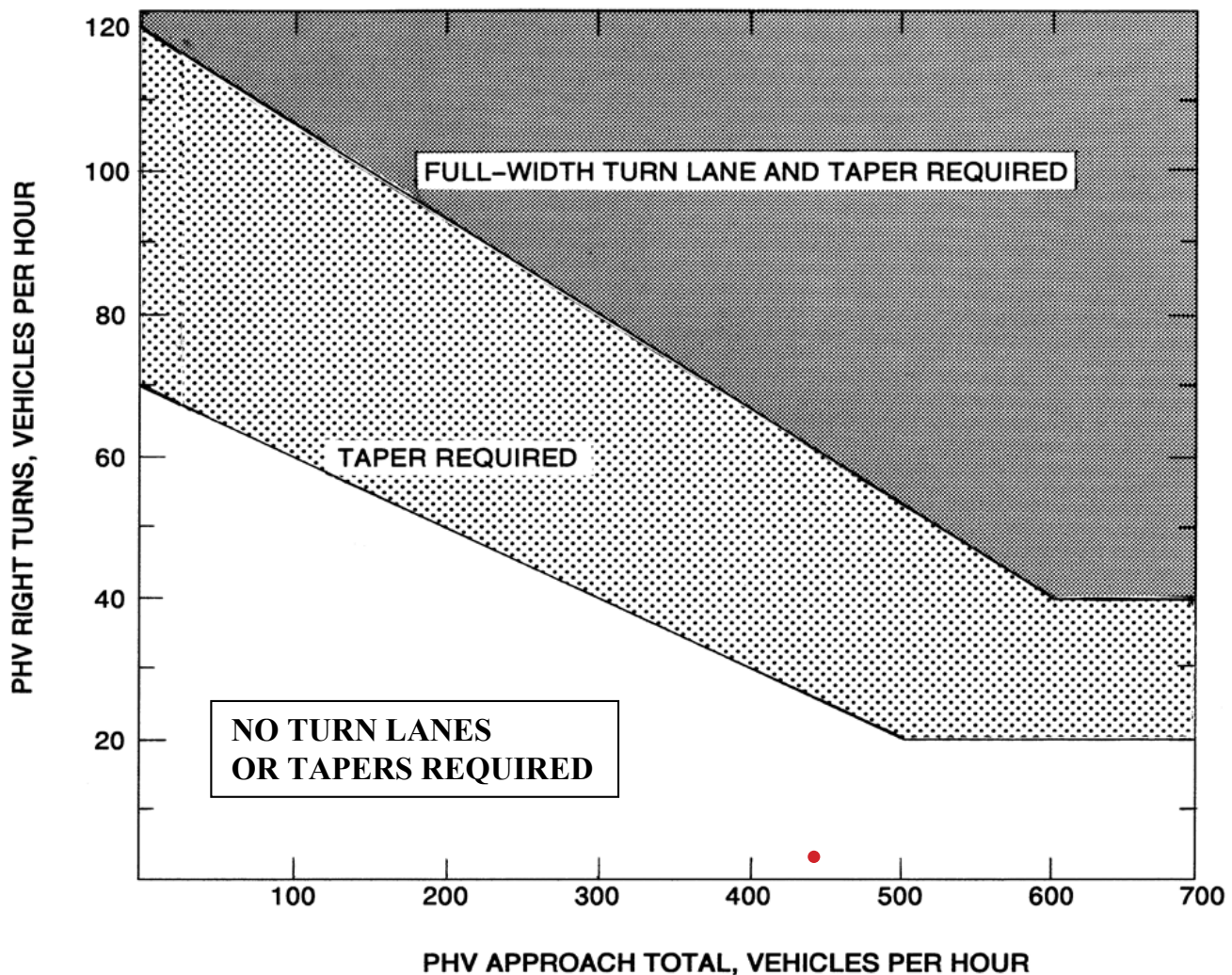
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 3 vph

PHV Approach Total: 438 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.232/1306

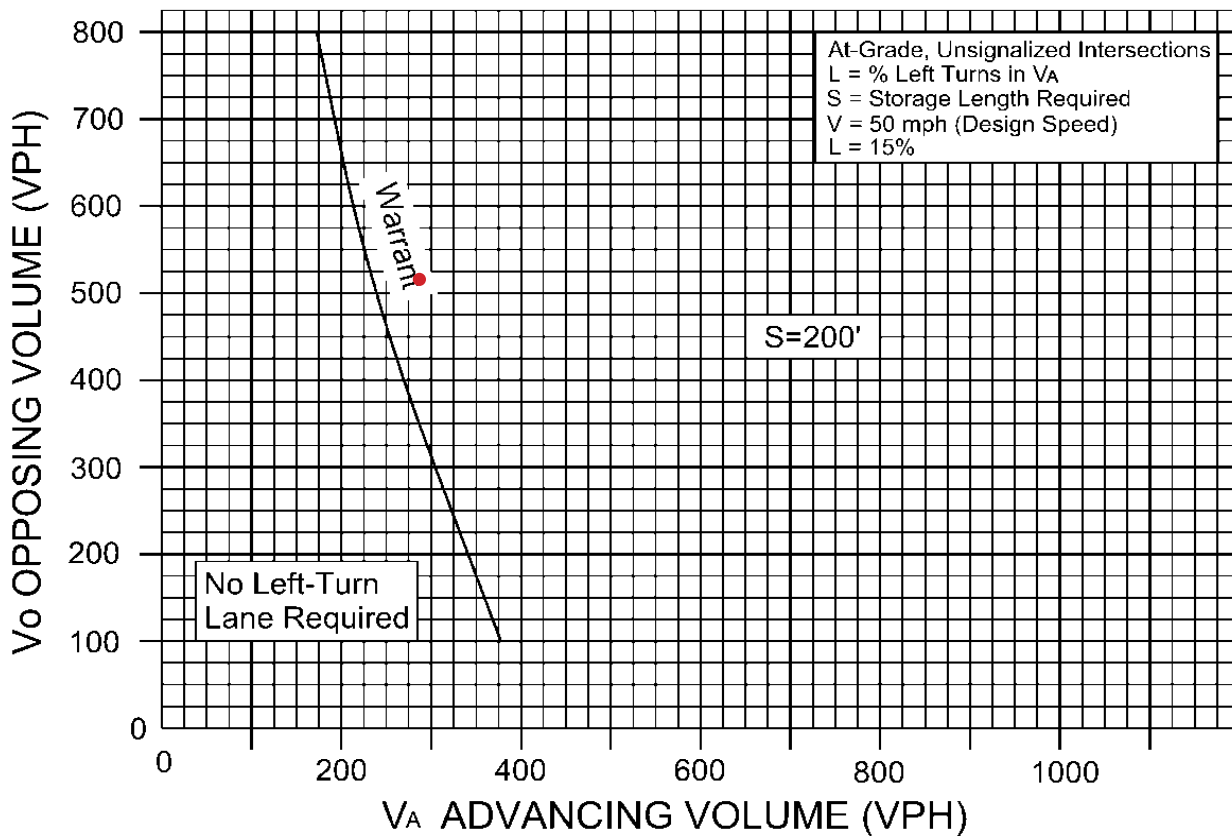
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/New Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 31 vph
Advancing Volume (V_A): 283 vph
Opposing Volume (V_O): 516 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 15% (Calculated Value: 11.0%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.233/1306

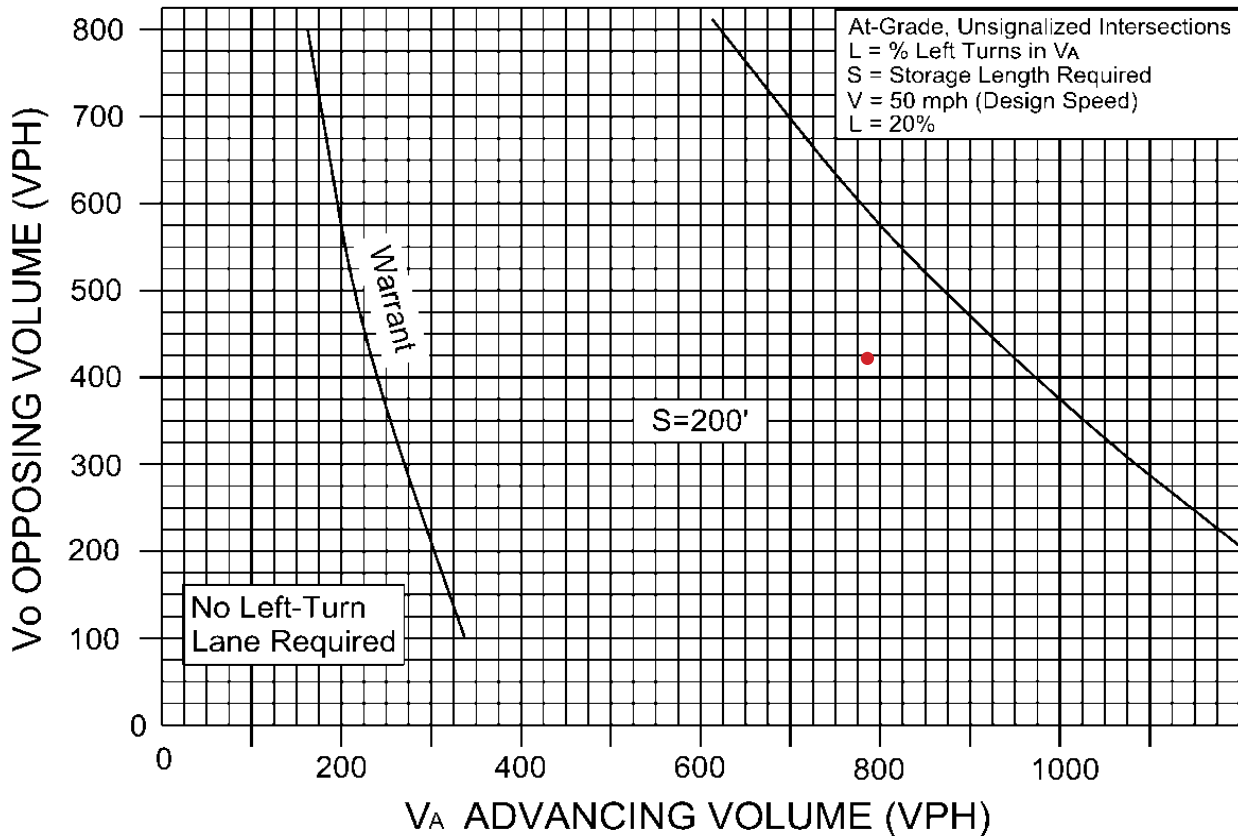
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/New Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 126 vph
Advancing Volume (V_A): 783 vph
Opposing Volume (V_O): 420 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 20% (Calculated Value: 16.1%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.234/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

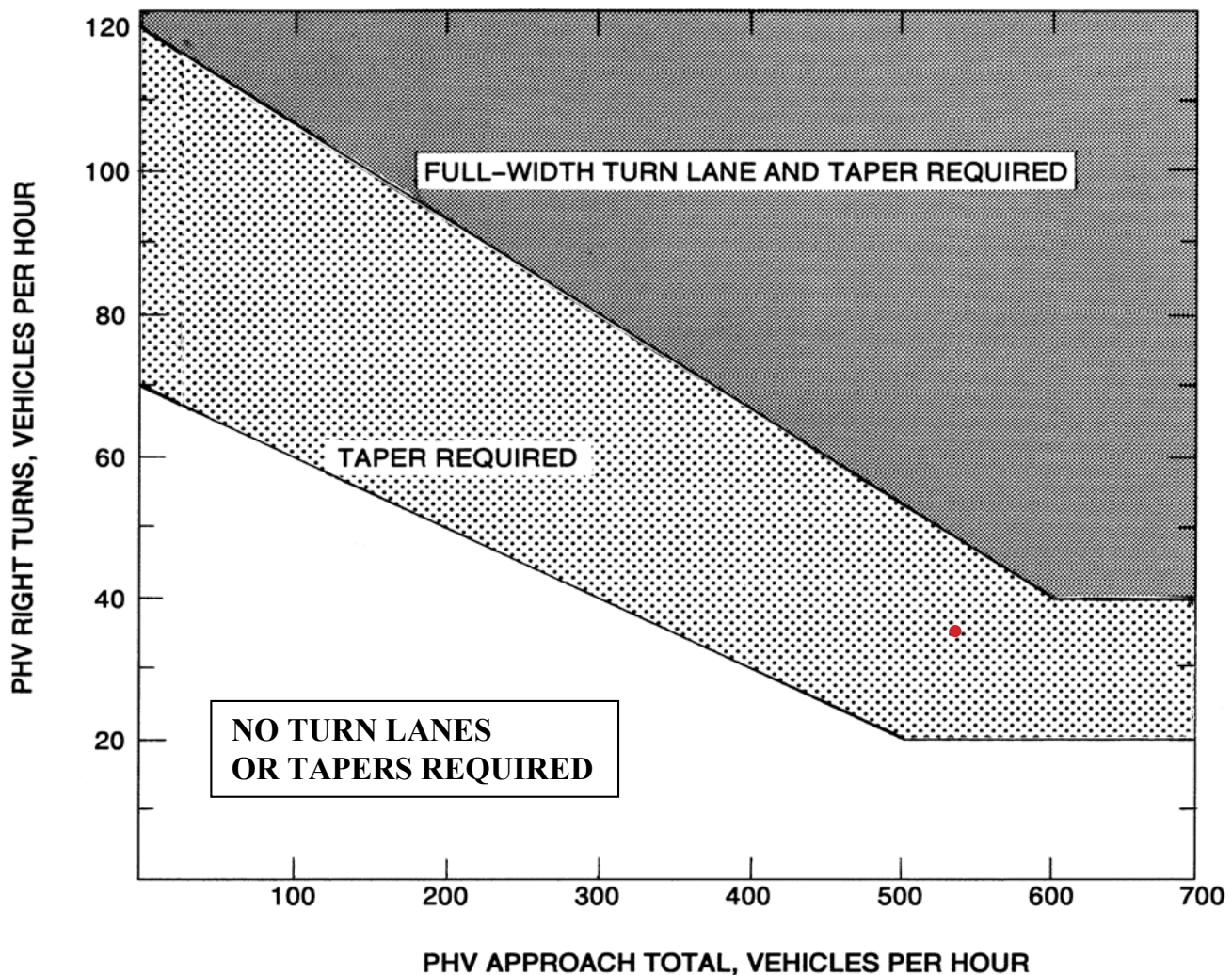
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 35 vph

PHV Approach Total: 516 vph

Conclusion: Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.235/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

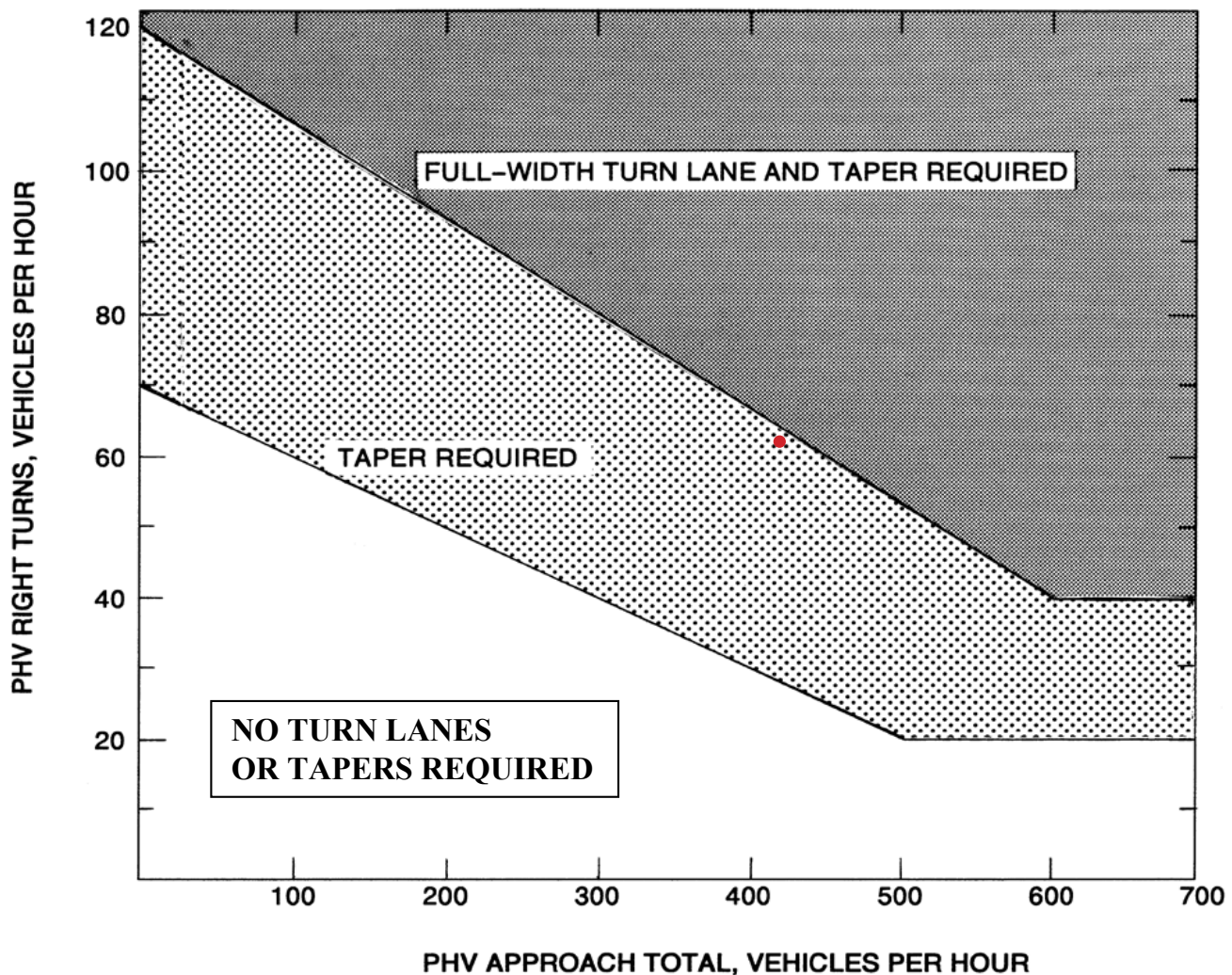
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 62 vph

PHV Approach Total: 420 vph

Conclusion: Taper Required



Appendix C 2026 Build HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane






01/04/2022

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	11	5	0	5	2	505	8	7	329	2
Future Vol, veh/h	6	0	11	5	0	5	2	505	8	7	329	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	555	9	8	362	2
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	945	947	363	949	944	560	364	0	0	564	0	0
Stage 1	379	379	-	564	564	-	-	-	-	-	-	-
Stage 2	566	568	-	385	380	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	244	263	639	219	264	532	1206	-	-	1018	-	-
Stage 1	647	618	-	472	512	-	-	-	-	-	-	-
Stage 2	513	510	-	594	617	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	239	260	639	213	261	532	1206	-	-	1018	-	-
Mov Cap-2 Maneuver	239	260	-	213	261	-	-	-	-	-	-	-
Stage 1	646	612	-	471	511	-	-	-	-	-	-	-
Stage 2	507	509	-	577	611	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	14.4		17.3		0		0.2					
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1206	-	-	402	304	1018	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.046	0.036	0.008	-	-				
HCM Control Delay (s)	8	0	-	14.4	17.3	8.6	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

2: Route 53 & New Garden Lane

01/04/2022

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	86	86	481	35	31	252
Future Vol, veh/h	86	86	481	35	31	252
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	100	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	4
Mvmt Flow	95	95	529	38	34	277
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	874	529	0	0	567	0
Stage 1	529	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	320	550	-	-	1005	-
Stage 1	591	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	309	550	-	-	1005	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	22.1	0	1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	396	1005	-	
HCM Lane V/C Ratio	-	-	0.477	0.034	-	
HCM Control Delay (s)	-	-	22.1	8.7	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	2.5	0.1	-	

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane






01/04/2022

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	30	6	0	4	27	408	3	6	708	12
Future Vol, veh/h	8	0	30	6	0	4	27	408	3	6	708	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	448	3	7	778	13
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1311	1310	785	1325	1315	450	791	0	0	451	0	0
Stage 1	799	799	-	510	510	-	-	-	-	-	-	-
Stage 2	512	511	-	815	805	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	137	160	396	134	159	613	838	-	-	1120	-	-
Stage 1	382	401	-	550	541	-	-	-	-	-	-	-
Stage 2	548	540	-	374	398	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	130	151	396	117	150	613	838	-	-	1120	-	-
Mov Cap-2 Maneuver	130	151	-	117	150	-	-	-	-	-	-	-
Stage 1	364	397	-	524	515	-	-	-	-	-	-	-
Stage 2	518	514	-	339	394	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	20.3		27.2		0.6		0.1					
HCM LOS	C		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	838	-	-	277	173	1120	-	-				
HCM Lane V/C Ratio	0.035	-	-	0.151	0.064	0.006	-	-				
HCM Control Delay (s)	9.5	0	-	20.3	27.2	8.2	0	-				
HCM Lane LOS	A	A	-	C	D	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.2	0	-	-				

HCM 6th TWSC

2: Route 53 & New Garden Lane

01/04/2022

Intersection						
Int Delay, s/veh	5.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	46	358	62	126	657
Future Vol, veh/h	69	46	358	62	126	657
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	100	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	1	2	2	1
Mvmt Flow	76	51	393	68	138	722
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1391	393	0	0	461	0
Stage 1	393	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	157	656	-	-	1100	-
Stage 1	682	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	137	656	-	-	1100	-
Mov Cap-2 Maneuver	137	-	-	-	-	-
Stage 1	682	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	49.6	0	1.4			
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	200	1100	-	
HCM Lane V/C Ratio	-	-	0.632	0.126	-	
HCM Control Delay (s)	-	-	49.6	8.7	-	
HCM Lane LOS	-	-	E	A	-	
HCM 95th %tile Q(veh)	-	-	3.7	0.4	-	

Appendix D 2026 Build SimTraffic Queue Reports

Queuing and Blocking Report

01/04/2022

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	66	41	6	22
Average Queue (ft)	17	7	0	1
95th Queue (ft)	49	25	4	11
Link Distance (ft)	905	802	730	1067
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Route 53 & New Garden Lane

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	135	42
Average Queue (ft)	49	10
95th Queue (ft)	97	32
Link Distance (ft)	752	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report

01/04/2022

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	29	77	38
Average Queue (ft)	25	6	12	2
95th Queue (ft)	53	22	44	16
Link Distance (ft)	905	802	730	1067
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Route 53 & New Garden Lane

Movement	WB	NB	SB
Directions Served	LR	R	L
Maximum Queue (ft)	148	11	70
Average Queue (ft)	47	0	27
95th Queue (ft)	105	5	56
Link Distance (ft)	752		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	300
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

2026 Build Traffic Volumes

The 2026 build traffic volumes were developed based on traffic shifts due to the closure of the existing Garden Lane, the 2026 no build traffic volumes, and the site trip generation and distribution.

Garden Lane Closure

Based on the traffic counts, the traffic volumes turning to and from Garden Lane are minimal. As a conservative estimate the traffic volumes at the existing Garden Lane intersection were not reduced to reflect the closure of Garden Lane south of Village Boulevard. However, these volumes were added to the proposed site roadway connection with Route 53 to ensure that the existing traffic generated by the uses north of the proposed closure are appropriately accounted for.

Trip Generation

The proposed Village Gardens development will include 247 single family homes and 75 townhomes and is expected to be fully occupied by 2026. The *ITE Trip Generation Manual 10th Edition* was used to estimate the trips generated by the proposed Village Gardens. **Table 1** summarizes the land use descriptions ITE land use code, size, and anticipated trips.

Table 1 Site Trip Generation

Land Use	LU Code	Number	Unit	Weekday	AM			PM		
					Total	In	Out	Total	In	Out
Single Family	210	247	du	2,389	180	45	135	242	152	90
Townhomes	220	75	du	526	36	8	28	46	29	17
Total		322	du	2,915	216	53	163	288	181	107

As shown in Table 1, the proposed Village Gardens will generate 216 morning and 288 afternoon peak hour trips.

Site Trip Distribution and Assignment

The site trip distribution percentages were based on the existing travel patterns at the Garden Lane intersection with Route 53 and are illustrated in **Figure 5**. Based on these volumes during the morning peak hour:

- 47% of the site trips arrive from the north
- 53% of the site trips arrive from the south
- 50% of the site trips depart to the north, and
- 50% of the site trips depart to the south.

During the afternoon peak hour:

- 67% of the site trips arrive from the north,
- 33% of the site trips arrive from the south,
- 40% of the site trips depart to the north, and
- 60% of the site trips depart to the south.

The estimated site trips shown in Table 1 were assigned to the roadway network per the above distribution percentages and the resulting site trip assignment is illustrated in **Figure 6**.

The site trips shown in Figure 6 were added to the 2026 no build traffic volumes shown in Figure 4 resulting in the 2026 build traffic volumes illustrated in **Figure 7**.

Turn Lane Warrant Analysis

Turn lane warrant analyses were performed for the existing Route 53 and Garden Lane intersection and the Route 53 and site entrance intersection based on the *VDOT Roadway Design Manual*. The turn lane warrant forms are included in **Appendix B** and the results are summarized in **Table 2**.

Table 2 Turn Lane Warrant Analysis Summary

Location	Movement	2026 No Build		2026 Build	
		AM	PM	AM	PM
Route 53 at Garden Lane	Southbound left turn	Not Warranted	Warranted	Not Warranted	Warranted
	Northbound right turn	Not Warranted	Not Warranted	Not Warranted	Not Warranted
Route 53 at Site Driveway	Southbound left turn	NA	NA	Warranted	Warranted
	Northbound right turn	NA	NA	Taper Only	Taper Only

The results in Table 4 indicate that a southbound left turn lane is warranted at the existing Route 53 intersection with Garden Lane. The results also indicate that a 200 foot southbound left turn lane with a 200 foot taper and a 200 foot northbound right turn taper are warranted at the site driveway intersection with Route 53.

Traffic Operations Analysis

Traffic operations analyses were completed using Synchro/SimTraffic 11.0, a computer-based traffic operations model that replicates procedures from the *Highway Capacity Manual (HCM)*. The average vehicle delays (in seconds) for the intersection overall and for each turning movement, as well as the Level of Service (LOS) on a scale of A (best) to F (worst) as defined in the *HCM* are reported in Synchro, and the maximum queue lengths (in feet) for each turning movement are reported in SimTraffic. Both the Synchro and SimTraffic analyses were performed based on the latest *VDOT Traffic Operations and Safety Analysis Manual (TOSAM)*.

2021 Existing Conditions Analysis

The 2021 existing conditions analysis is based on the current intersection configuration, existing traffic control, 2021 existing traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix C** and the SimTraffic queue reports in **Appendix D**. **Table 3** summarizes the 2021 existing delays, levels of service, and maximum queue lengths.

Table 3 2021 Existing Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	Existing AM			Existing PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane								
Unsignalized								
Nahor Manor Road	EBL/T/R	-	B	12.1	59	B	14.2	52
Garden Lane	WBL/T/R	-	B	14.2	45	C	16.4	25
Route 53	NBL/T/R*	-	A	7.7	6	A	8.7	53
Route 53	SBL/T/R*	-	A	8.3	18	A	7.7	23

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

As shown in Table 2, all movements at the study intersections currently operate at LOS C or better and the queuing analysis results indicate that all queues are minimal.

2026 No Build Conditions Analysis

The 2026 no build conditions Synchro models are based on the current intersection configuration, existing traffic control, 2026 no build traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix E** and the SimTraffic queue reports in **Appendix F**. **Table 4** summarizes the 2026 no build delays, levels of service, and maximum queue lengths.

Table 4 2030 No Build Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	2026 No Build AM			2026 No Build PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane Unsignalized								
Nahor Manor Road	EBL/T/R	-	B	12.3	58	B	14.6	54
Garden Lane	WBL/T/R	-	B	14.5	49	C	16.9	29
Route 53	NBL/T/R*	-	A	7.7	8	A	8.7	56
Route 53	SBL/T/R*	-	A	8.4	18	A	7.8	19

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

As shown in Table 3, all movements at the study intersections will operate at LOS C or better and the queuing analysis results indicate all queues will be minimal.

2026 Build Conditions Analysis

The 2026 build conditions Synchro models were based on the current intersection configuration (at Garden Lane), previous turn lane warrants (at site entrance), existing traffic control, 2026 build traffic volumes, and the current *VDOT TOSAM* guidance. The Synchro HCM reports are provided in **Appendix G** and the SimTraffic queue reports in **Appendix H**. **Table 5** summarizes the 2026 build delays, levels of service, and maximum queue lengths. As shown in Table 5, all movements at the study intersections will operate at LOS D or better and the queuing analysis results indicate that all queues will be minimal.

Table 5 2026 Build Delays, Levels of Service, and Queues

Approach	Movement	Effective Storage	2026 Build AM			2026 Build PM		
			LOS	Delay (seconds)	Maximum Queue (feet)	LOS	Delay (seconds)	Maximum Queue (feet)
Route 53/Nahor Manor Road/Garden Lane Unsignalized								
Nahor Manor Road	EBL/T/R	-	B	13.7	65	C	16.3	63
Garden Lane	WBL/T/R	-	C	16.3	46	C	19.9	24
Route 53	NBL/T/R*	-	A	7.9	6	A	9.0	70
Route 53	SBL/T/R*	-	A	8.5	25	A	7.9	19
Route 53/Site Entrance Unsignalized								
Site Entrance	WBL/R	-	C	21.1	125	D	30.9	105
Route 53	NBT/R	-	A	0.0	2	A	0.0	11
Route 53	SBL	300	A	8.6	36	A	8.4	68
	SBT	-	A	0.0	0	A	0.0	0

* Results reported for the major movement (left turn) at unsignalized shared left/through lanes

Crash Analysis

Crash analysis was performed at the Garden Lane intersection with Route 53 using VDOT Crash Data and is summarized in **Appendix I**. The data includes crashes from January 2014 through September 2021. Based on the data, there was only one crash at the intersection, a sideswipe between vehicles traveling in the same direction. Within 500 feet to the north and south of the intersection there were three crashes, one angle collision south of Garden Lane and two fixed object collisions north of Garden Lane.

While the crash history does not illustrate a safety issue at the intersection of Garden Lane with Route 53, the proposed site entrance is expected to have greater sight distance than exists at Garden Lane.

Findings and Recommendations

Based on the analyses summarized in this memorandum, the principal findings are as follows:

- The proposed Village Gardens development will generate 216 morning and 288 afternoon peak hour trips.
- All movements at the study intersection currently operate at LOS C or better and queues are minimal. These conditions are expected to continue in 2026 without the addition of the Village Gardens development.
- With the addition of the Village Gardens development, all movements at the study intersections are expected to operate at LOS D or better with minimal queues.
- **The impact of the proposed Village Gardens development on the study intersections will be minimal.**
- At the Route 53 and site entrance intersection, a southbound left turn lane (200 feet of storage and a 200 foot taper) and a northbound right turn taper (200 feet) will be warranted.
- Based on the crash history over the most recent eight year period safety issues are not found. However, the new site driveway connection will have improved sight lines compared to the existing intersection of Garden Lane with Route 53.

Based on the above findings, construction of a 200 foot southbound left turn lane with a 200 foot taper is recommended along with a 200 foot northbound right turn taper.

End of Memorandum

Attachments

Figures

Appendix A Traffic Count Reports

Appendix B Turn Lane Warrant Forms

Appendix C Existing HCM Reports

Appendix D Existing SimTraffic Queue Reports

Appendix E 2026 No Build HCM Reports

Appendix F 2026 No Build SimTraffic Queue Reports

Appendix G 2026 Build HCM Reports

Appendix H 2026 Build SimTraffic Queue Reports

Appendix I Crash Analysis

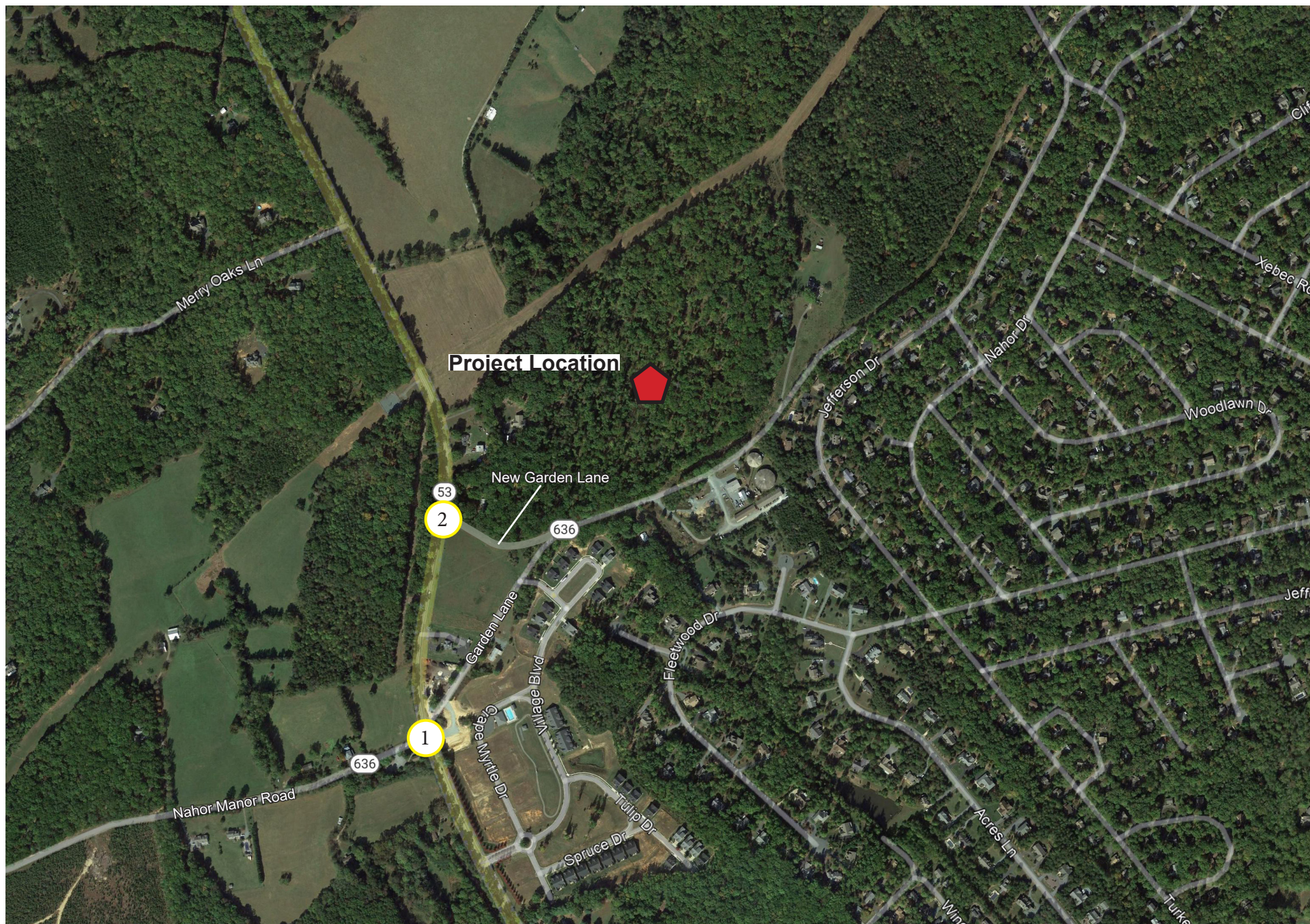


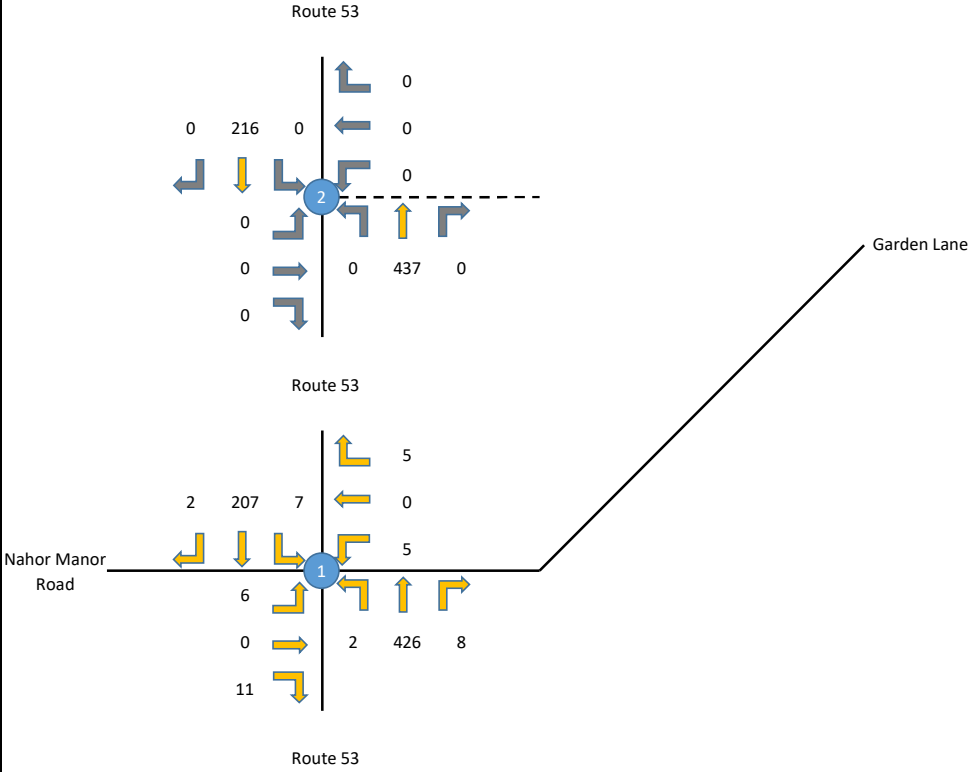
Figure 1 Site Location and Study Intersections

Figure 2 Conceptual Site Plan

Adjusted Existing 2021 Traffic Volumes AM

Covid Adjustment Rate

1.21



Adjusted Existing 2021 Traffic Volumes PM

Covid Adjustment Rate

1.05

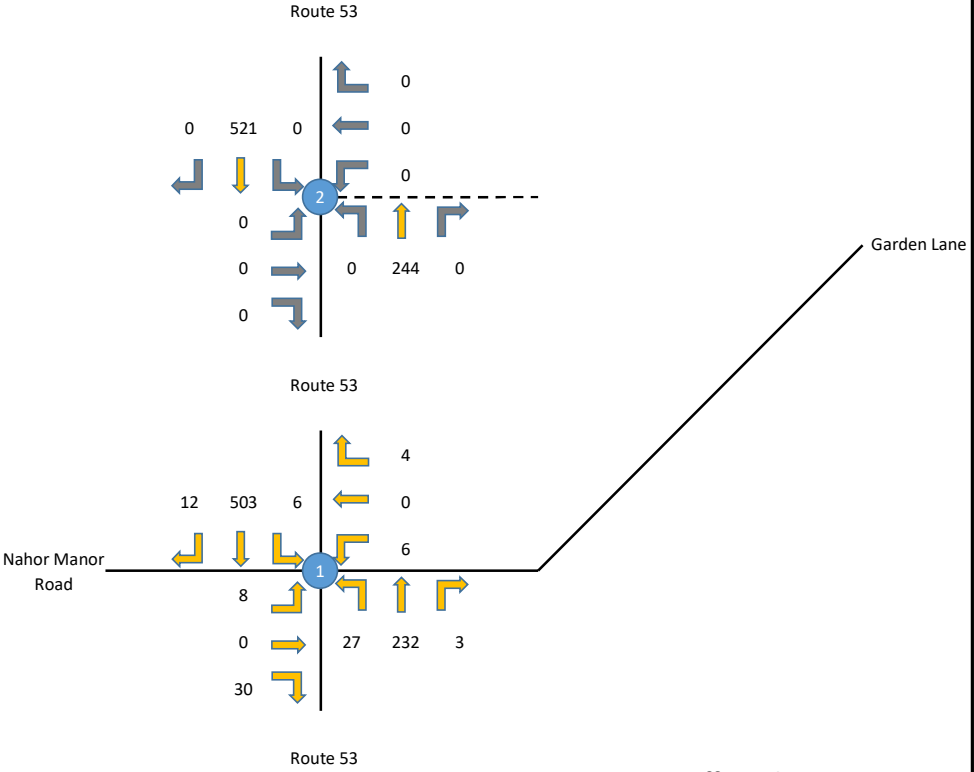
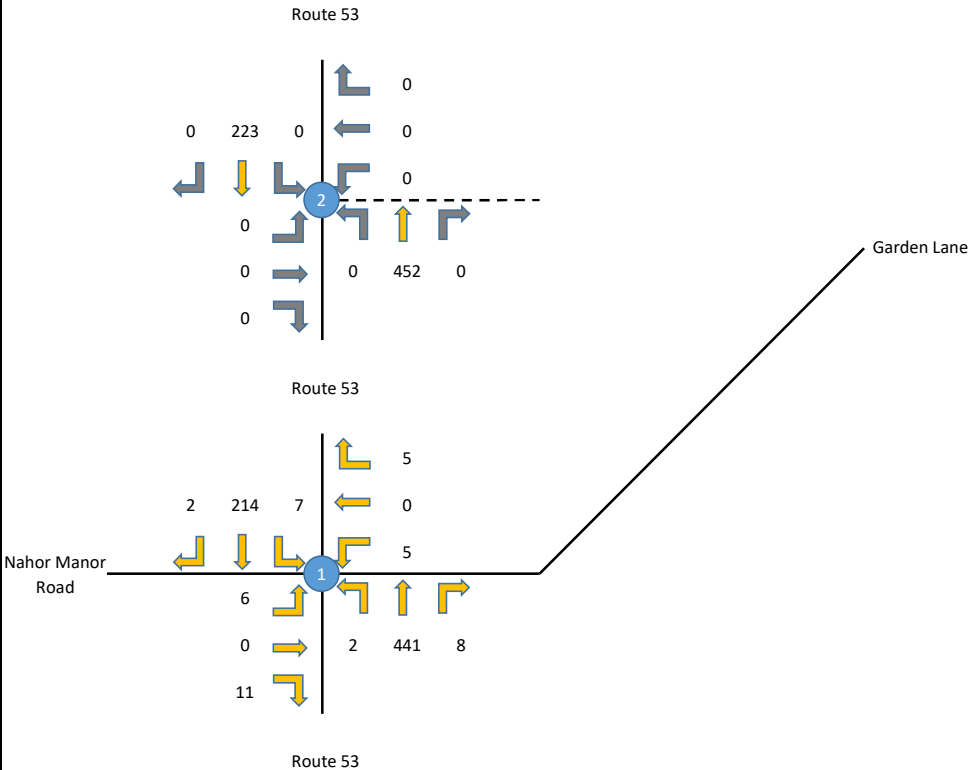


Figure 3 2021 Traffic Volumes

2026 No Build Traffic Volumes AM



2026 No Build Traffic Volumes PM

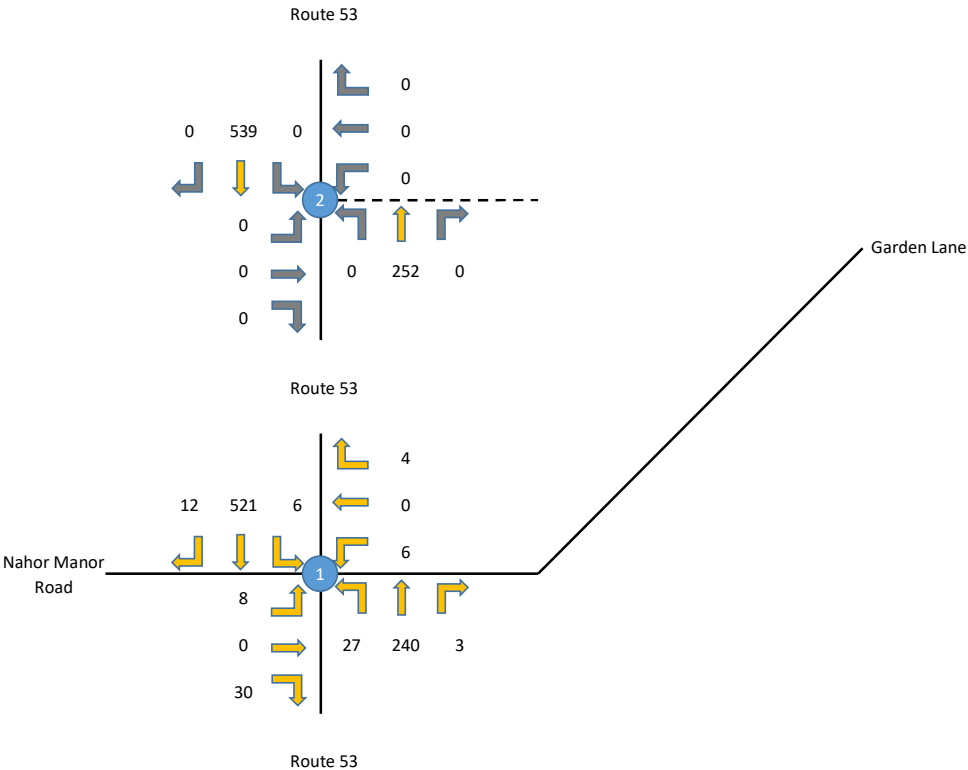
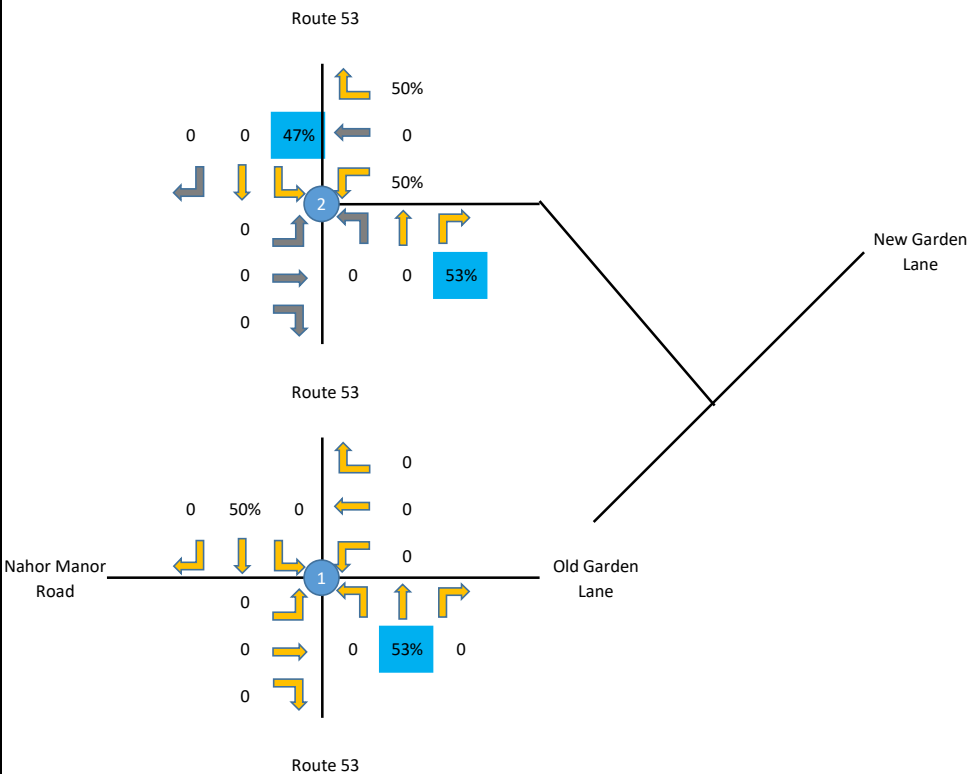


Figure 4 2026 No Build Traffic Volumes

Site Trip Distribution AM



Site Trip Distribution PM

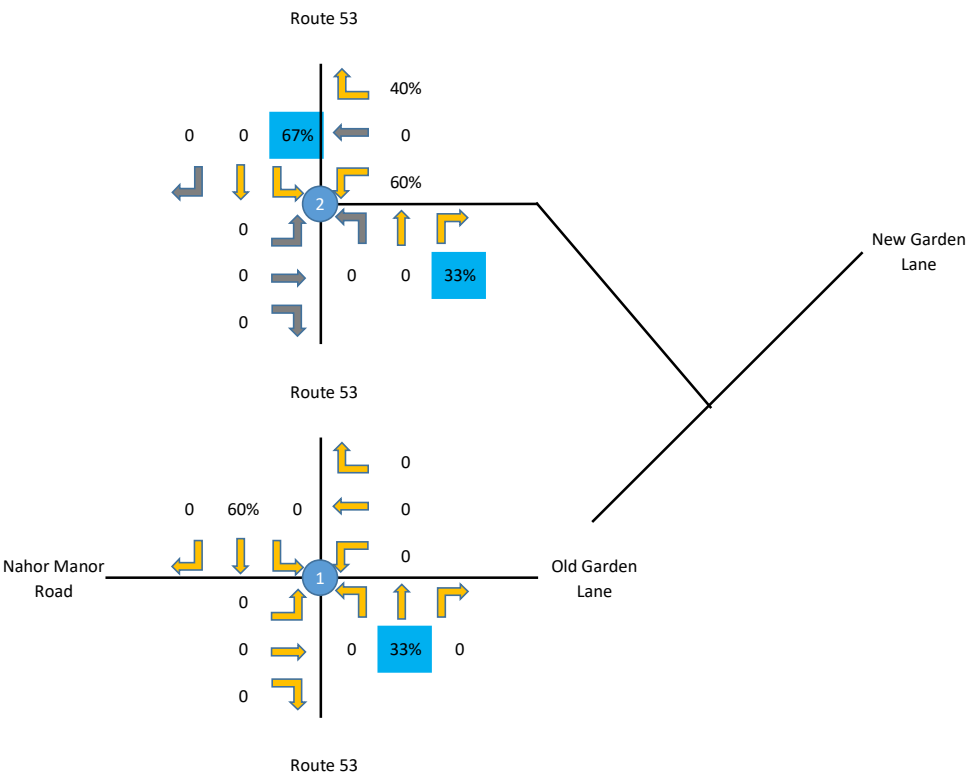
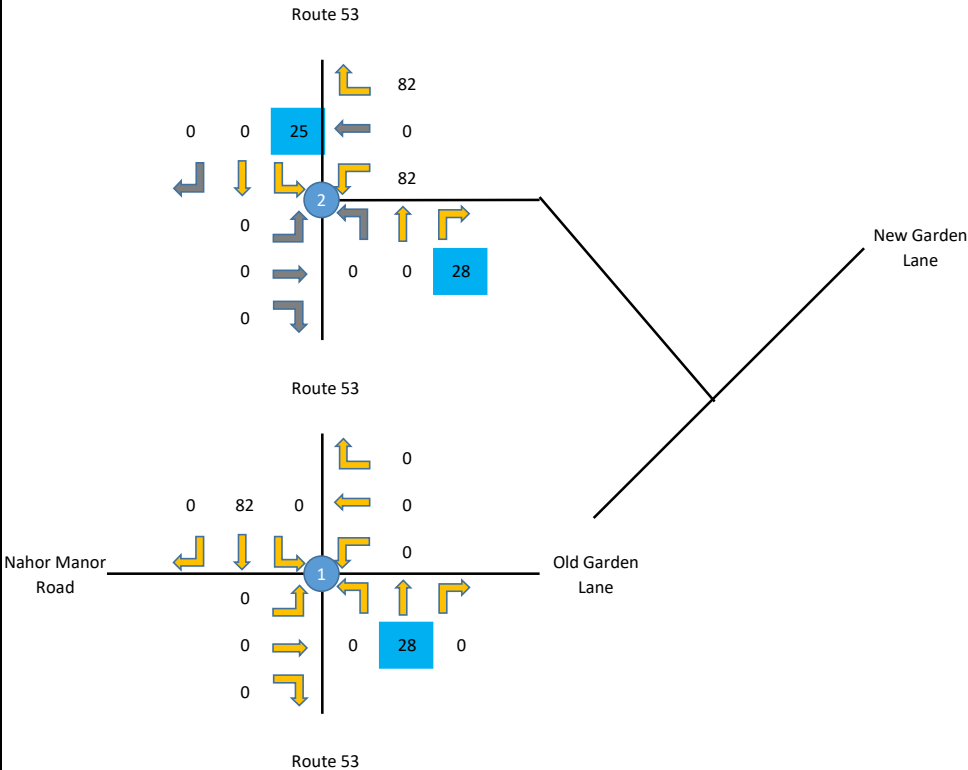


Figure 5 Site Trip Distribution

Site Trip Assignment AM



Site Trip Assignment PM

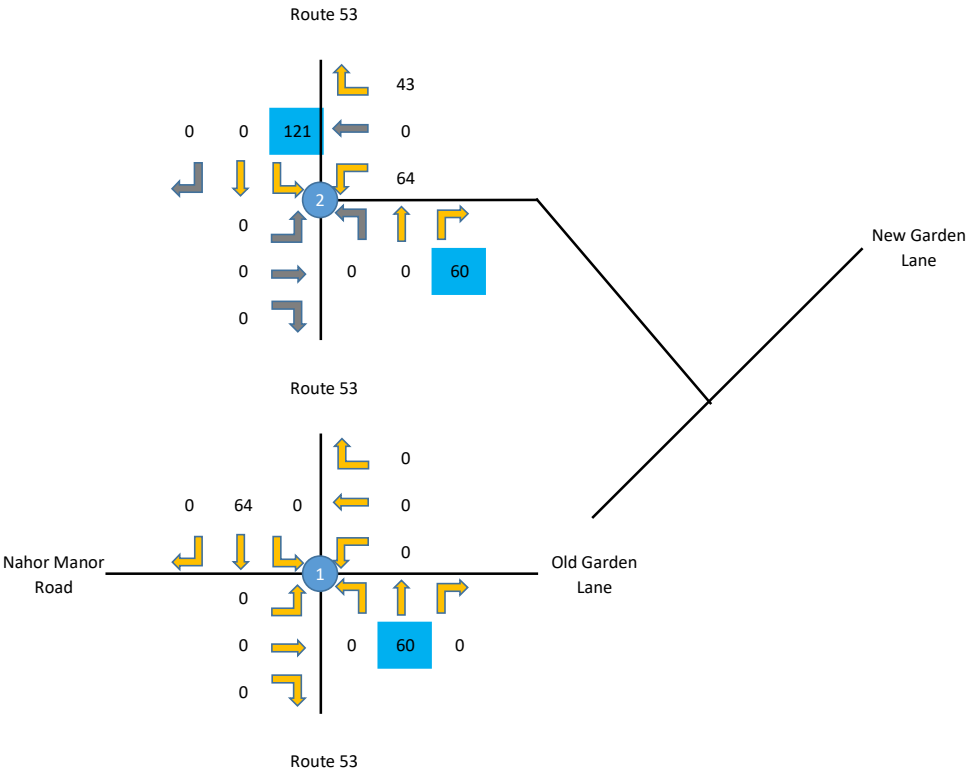
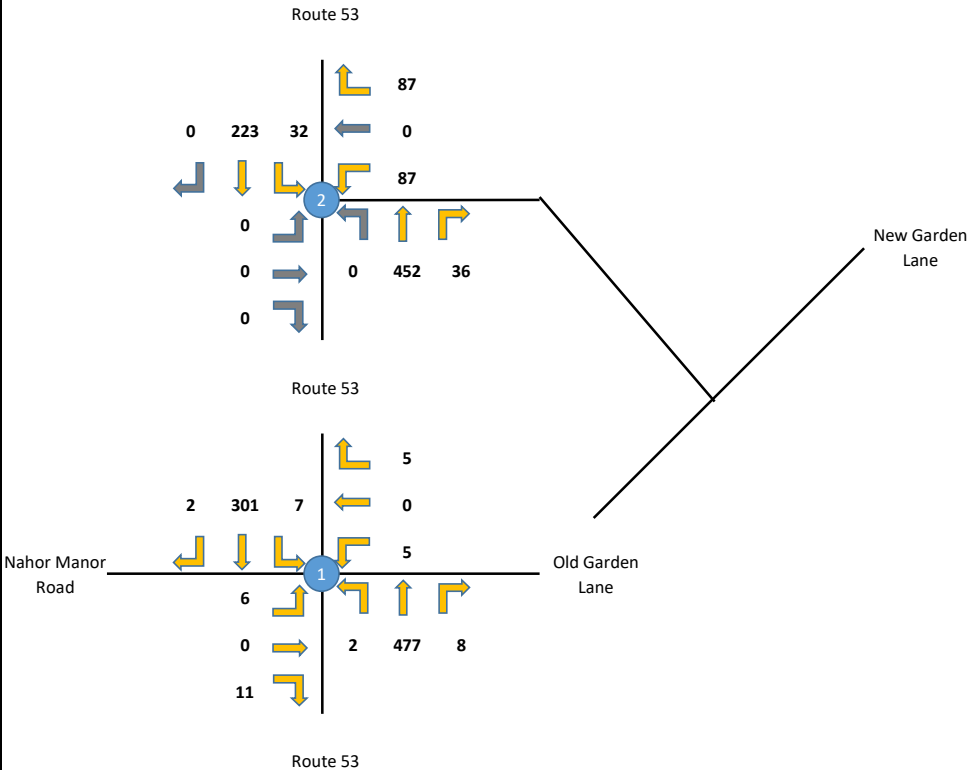


Figure 6 Site Trip Assignment

2026 Build Traffic Volumes AM



2026 Build Traffic Volumes PM

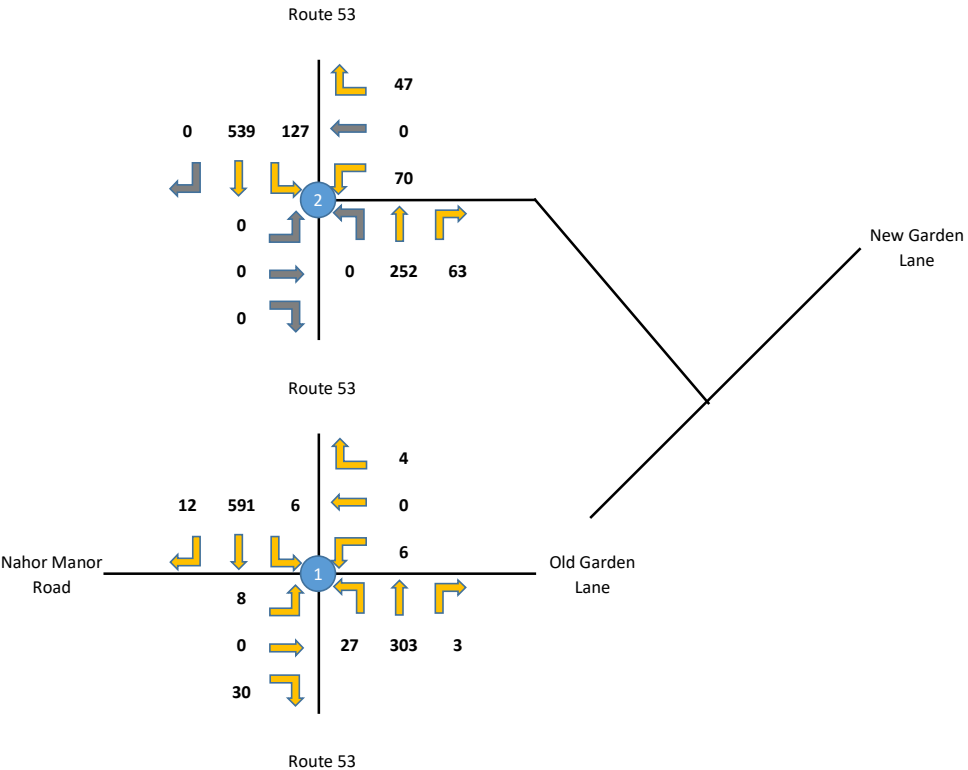


Figure 7 2026 Build Traffic Volumes

Appendices

Appendix A Traffic Count Reports

Peggy Malone & Associates

(888) 247-8602

BOS 2022-01-19 p.262/1306

File Name : Garden Ln & RT 53 AM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Cars

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	44	2	0	46	2	0	0	0	2	2	66	0	0	68	1	0	4	0	5	121
07:15 AM	0	39	1	0	40	3	0	0	0	3	0	79	0	0	79	0	0	0	0	0	122
07:30 AM	0	25	0	0	25	0	0	0	0	0	3	88	0	0	91	0	0	1	0	1	117
07:45 AM	0	42	3	0	45	0	0	0	0	0	3	85	0	0	88	0	0	1	0	1	134
Total	0	150	6	0	156	5	0	0	0	5	8	318	0	0	326	1	0	6	0	7	494
08:00 AM	0	41	1	0	42	1	0	1	0	2	1	103	0	0	104	2	0	2	0	4	152
08:15 AM	0	53	1	0	54	3	0	0	0	3	2	70	1	0	73	5	0	0	0	5	135
08:30 AM	1	28	1	0	30	0	0	2	0	2	0	86	1	0	87	0	0	2	0	2	121
08:45 AM	0	34	3	0	37	0	0	0	0	0	4	81	0	0	85	0	0	1	0	1	123
Total	1	156	6	0	163	4	0	3	0	7	7	340	2	0	349	7	0	5	0	12	531
Grand Total	1	306	12	0	319	9	0	3	0	12	15	658	2	0	675	8	0	11	0	19	1025
Apprch %	0.3	95.9	3.8	0		75	0	25	0		2.2	97.5	0.3	0		42.1	0	57.9	0		
Total %	0.1	29.9	1.2	0	31.1	0.9	0	0.3	0	1.2	1.5	64.2	0.2	0	65.9	0.8	0	1.1	0	1.9	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	42	3	45	0	0	0	0	3	85	0	88	0	0	1	1	134
08:00 AM	0	41	1	42	1	0	1	2	1	103	0	104	2	0	2	4	152
08:15 AM	0	53	1	54	3	0	0	3	2	70	1	73	5	0	0	5	135
08:30 AM	1	28	1	30	0	0	2	2	0	86	1	87	0	0	2	2	121
Total Volume	1	164	6	171	4	0	3	7	6	344	2	352	7	0	5	12	542
% App. Total	0.6	95.9	3.5		57.1	0	42.9		1.7	97.7	0.6		58.3	0	41.7		
PHF	.250	.774	.500	.792	.333	.000	.375	.583	.500	.835	.500	.846	.350	.000	.625	.600	.891

Peggy Malone & Associates
(888) 247-8602

BOS 2022-01-19 p.263/1306

File Name : Garden Ln & RT 53 AM
Site Code :
Start Date : 10/21/2021
Page No : 1

Groups Printed- Trucks

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	5
07:15 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:45 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
Total	1	7	0	0	8	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	14
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
08:15 AM	1	3	0	0	4	0	0	1	0	1	1	2	0	0	3	2	0	0	0	2	10
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Total	1	6	0	0	7	0	0	1	0	1	1	9	0	0	10	2	0	0	0	2	20
Grand Total	2	13	0	0	15	0	0	1	0	1	1	14	0	0	15	3	0	0	0	3	34
Apprch %	13.3	86.7	0	0		0	0	100	0		6.7	93.3	0	0		100	0	0	0		
Total %	5.9	38.2	0	0	44.1	0	0	2.9	0	2.9	2.9	41.2	0	0	44.1	8.8	0	0	0	8.8	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
08:00 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:15 AM	1	3	0	4	0	0	1	1	1	2	0	3	2	0	0	2	10
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	1	7	0	8	0	0	1	1	1	8	0	9	2	0	0	2	20
% App. Total	12.5	87.5	0		0	0	100		11.1	88.9	0		100	0	0		
PHF	.250	.583	.000	.500	.000	.000	.250	.250	.250	.667	.000	.750	.250	.000	.000	.250	.500

Peggy Malone & Associates
(888) 247-8602

BOS 2022-01-19 p.264/1306

File Name : Garden Ln & RT 53 AM
Site Code :
Start Date : 10/21/2021
Page No : 1

Groups Printed- Combined

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	46	2	0	49	2	0	0	0	2	2	67	0	0	69	2	0	4	0	6	126
07:15 AM	0	42	1	0	43	3	0	0	0	3	0	79	0	0	79	0	0	0	0	0	125
07:30 AM	0	25	0	0	25	0	0	0	0	0	3	89	0	0	92	0	0	1	0	1	118
07:45 AM	0	44	3	0	47	0	0	0	0	0	3	88	0	0	91	0	0	1	0	1	139
Total	1	157	6	0	164	5	0	0	0	5	8	323	0	0	331	2	0	6	0	8	508
08:00 AM	0	43	1	0	44	1	0	1	0	2	1	104	0	0	105	2	0	2	0	4	155
08:15 AM	1	56	1	0	58	3	0	1	0	4	3	72	1	0	76	7	0	0	0	7	145
08:30 AM	1	28	1	0	30	0	0	2	0	2	0	88	1	0	89	0	0	2	0	2	123
08:45 AM	0	35	3	0	38	0	0	0	0	0	4	85	0	0	89	0	0	1	0	1	128
Total	2	162	6	0	170	4	0	4	0	8	8	349	2	0	359	9	0	5	0	14	551
Grand Total	3	319	12	0	334	9	0	4	0	13	16	672	2	0	690	11	0	11	0	22	1059
Apprch %	0.9	95.5	3.6	0		69.2	0	30.8	0		2.3	97.4	0.3	0		50	0	50	0		
Total %	0.3	30.1	1.1	0	31.5	0.8	0	0.4	0	1.2	1.5	63.5	0.2	0	65.2	1	0	1	0	2.1	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	44	3	47	0	0	0	0	3	88	0	91	0	0	1	1	139
08:00 AM	0	43	1	44	1	0	1	2	1	104	0	105	2	0	2	4	155
08:15 AM	1	56	1	58	3	0	1	4	3	72	1	76	7	0	0	7	145
08:30 AM	1	28	1	30	0	0	2	2	0	88	1	89	0	0	2	2	123
Total Volume	2	171	6	179	4	0	4	8	7	352	2	361	9	0	5	14	562
% App. Total	1.1	95.5	3.4		50	0	50		1.9	97.5	0.6		64.3	0	35.7		
PHF	.500	.763	.500	.772	.333	.000	.500	.500	.583	.846	.500	.860	.321	.000	.625	.500	.906

Peggy Malone & Associates

(888) 247-8602

BOS 2022-01-19 p.265/1306

File Name : Garden Ln & RT 53 PM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Cars

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	90	1	0	93	0	0	3	0	3	1	77	9	0	87	3	0	1	0	4	187
04:15 PM	7	85	0	0	92	0	0	1	0	1	1	56	6	0	63	3	0	2	0	5	161
04:30 PM	0	90	3	0	93	0	0	1	0	1	0	58	3	0	61	5	0	0	0	5	160
04:45 PM	2	120	2	0	124	2	0	3	0	5	0	56	6	0	62	4	0	0	0	4	195
Total	11	385	6	0	402	2	0	8	0	10	2	247	24	0	273	15	0	3	0	18	703
05:00 PM	2	95	3	0	100	1	0	3	0	4	1	50	3	0	54	2	0	1	0	3	161
05:15 PM	4	118	1	0	123	0	0	0	0	0	0	65	17	0	82	6	0	2	0	8	213
05:30 PM	3	143	0	0	146	1	0	0	0	1	2	48	0	0	50	17	0	5	0	22	219
05:45 PM	4	95	0	0	99	1	0	2	0	3	0	54	2	1	57	4	0	1	0	5	164
Total	13	451	4	0	468	3	0	5	0	8	3	217	22	1	243	29	0	9	0	38	757
Grand Total	24	836	10	0	870	5	0	13	0	18	5	464	46	1	516	44	0	12	0	56	1460
Apprch %	2.8	96.1	1.1	0		27.8	0	72.2	0		1	89.9	8.9	0.2		78.6	0	21.4	0		
Total %	1.6	57.3	0.7	0	59.6	0.3	0	0.9	0	1.2	0.3	31.8	3.2	0.1	35.3	3	0	0.8	0	3.8	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	120	2	124	2	0	3	5	0	56	6	62	4	0	0	4	195
05:00 PM	2	95	3	100	1	0	3	4	1	50	3	54	2	0	1	3	161
05:15 PM	4	118	1	123	0	0	0	0	0	65	17	82	6	0	2	8	213
05:30 PM	3	143	0	146	1	0	0	1	2	48	0	50	17	0	5	22	219
Total Volume	11	476	6	493	4	0	6	10	3	219	26	248	29	0	8	37	788
% App. Total	2.2	96.6	1.2		40	0	60		1.2	88.3	10.5		78.4	0	21.6		
PHF	.688	.832	.500	.844	.500	.000	.500	.500	.375	.842	.382	.756	.426	.000	.400	.420	.900

Peggy Malone & Associates
(888) 247-8602

BOS 2022-01-19 p.266/1306

File Name : Garden Ln & RT 53 PM
Site Code :
Start Date : 10/21/2021
Page No : 1

Groups Printed- Trucks

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	3
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	9	0	0	9	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	14
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	11	0	0	11	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	16
Apprch %	0	100	0	0		0	0	0	0		0	75	25	0		100	0	0	0		
Total %	0	68.8	0	0	68.8	0	0	0	0	0	0	18.8	6.2	0	25	6.2	0	0	0	6.2	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total Volume	0	9	0	9	0	0	0	0	0	3	1	4	1	0	0	1	14
% App. Total	0	100	0		0	0	0		0	75	25		100	0	0		
PHF	.000	.450	.000	.450	.000	.000	.000	.000	.000	.375	.250	.500	.250	.000	.000	.250	.700

Peggy Malone & Associates

(888) 247-8602

BOS 2022-01-19 p.267/1306

File Name : Garden Ln & RT 53 PM
 Site Code :
 Start Date : 10/21/2021
 Page No : 1

Groups Printed- Combined

	RT 53 Southbound					Garden Ln Westbound					RT 53 Northbound					Nahor Manor Rd Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	95	1	0	98	0	0	3	0	3	1	77	9	0	87	3	0	1	0	4	192
04:15 PM	7	88	0	0	95	0	0	1	0	1	1	56	6	0	63	3	0	2	0	5	164
04:30 PM	0	90	3	0	93	0	0	1	0	1	0	59	4	0	63	6	0	0	0	6	163
04:45 PM	2	121	2	0	125	2	0	3	0	5	0	58	6	0	64	4	0	0	0	4	198
Total	11	394	6	0	411	2	0	8	0	10	2	250	25	0	277	16	0	3	0	19	717
05:00 PM	2	95	3	0	100	1	0	3	0	4	1	50	3	0	54	2	0	1	0	3	161
05:15 PM	4	120	1	0	125	0	0	0	0	0	0	65	17	0	82	6	0	2	0	8	215
05:30 PM	3	143	0	0	146	1	0	0	0	1	2	48	0	0	50	17	0	5	0	22	219
05:45 PM	4	95	0	0	99	1	0	2	0	3	0	54	2	1	57	4	0	1	0	5	164
Total	13	453	4	0	470	3	0	5	0	8	3	217	22	1	243	29	0	9	0	38	759
Grand Total	24	847	10	0	881	5	0	13	0	18	5	467	47	1	520	45	0	12	0	57	1476
Apprch %	2.7	96.1	1.1	0		27.8	0	72.2	0		1	89.8	9	0.2		78.9	0	21.1	0		
Total %	1.6	57.4	0.7	0	59.7	0.3	0	0.9	0	1.2	0.3	31.6	3.2	0.1	35.2	3	0	0.8	0	3.9	

	RT 53 Southbound				Garden Ln Westbound				RT 53 Northbound				Nahor Manor Rd Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	121	2	125	2	0	3	5	0	58	6	64	4	0	0	4	198
05:00 PM	2	95	3	100	1	0	3	4	1	50	3	54	2	0	1	3	161
05:15 PM	4	120	1	125	0	0	0	0	0	65	17	82	6	0	2	8	215
05:30 PM	3	143	0	146	1	0	0	1	2	48	0	50	17	0	5	22	219
Total Volume	11	479	6	496	4	0	6	10	3	221	26	250	29	0	8	37	793
% App. Total	2.2	96.6	1.2		40	0	60		1.2	88.4	10.4		78.4	0	21.6		
PHF	.688	.837	.500	.849	.500	.000	.500	.500	.375	.850	.382	.762	.426	.000	.400	.420	.905

Appendix B Turn Lane Warrant Forms

Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.269/1306

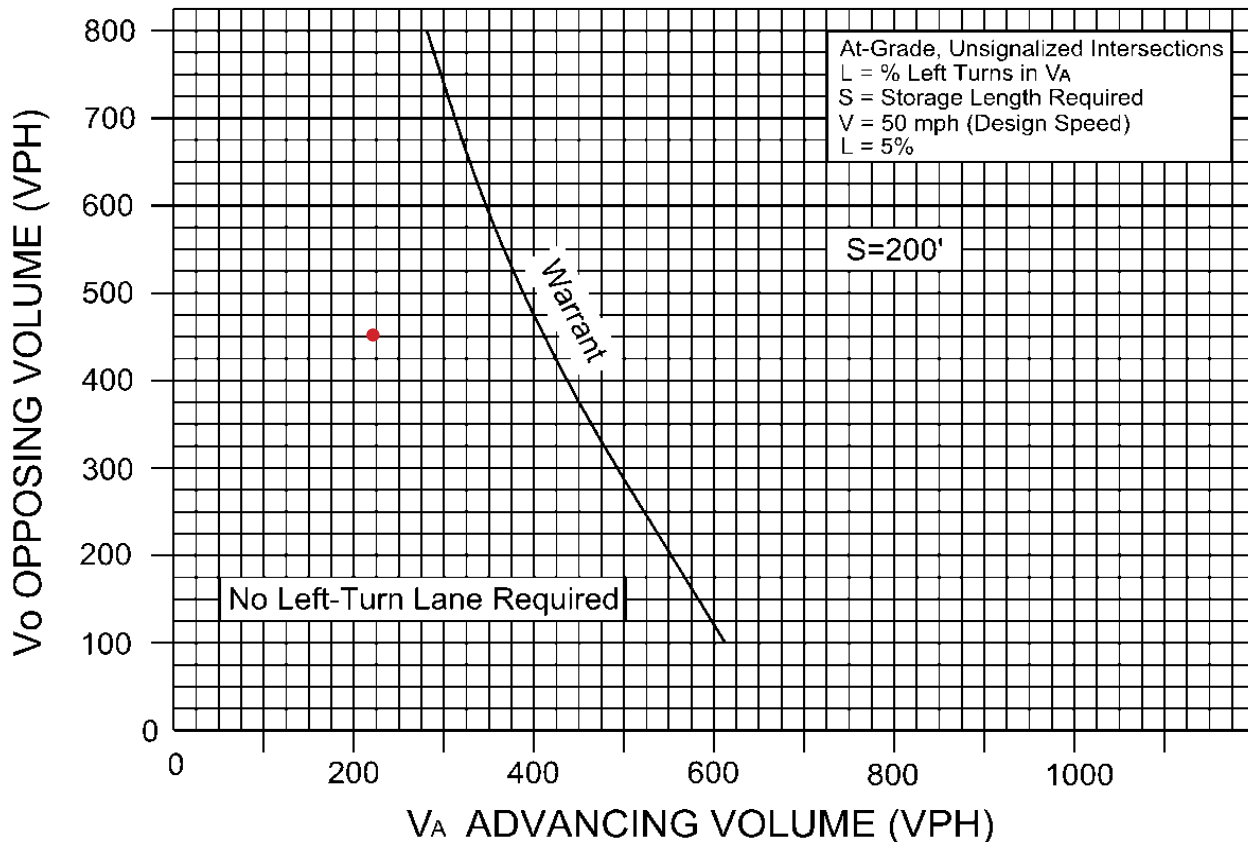
Project: Garden Lane Traffic Analysis (2026 No Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 7 vph
Advancing Volume (V_A): 223 vph
Opposing Volume (V_O): 451 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 3.1%)
% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.270/1306

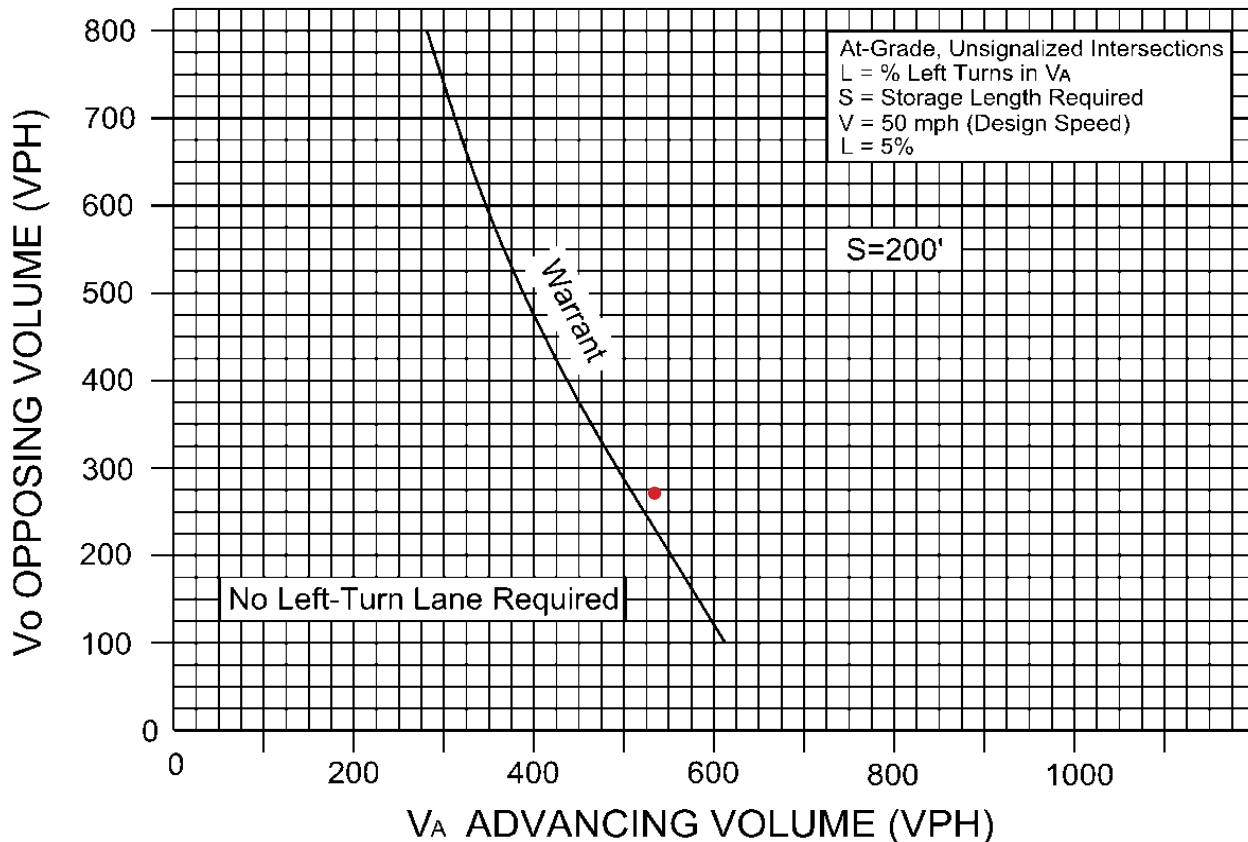
Project: Garden Lane Traffic Analysis (2026 No Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 6 vph
Advancing Volume (V_A): 539 vph
Opposing Volume (V_O): 270 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 1.1%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.271/1306

Project: Garden Lane Traffic Analysis (2026 No Build Condition)

Intersection: Route 53/Old Garden Lane

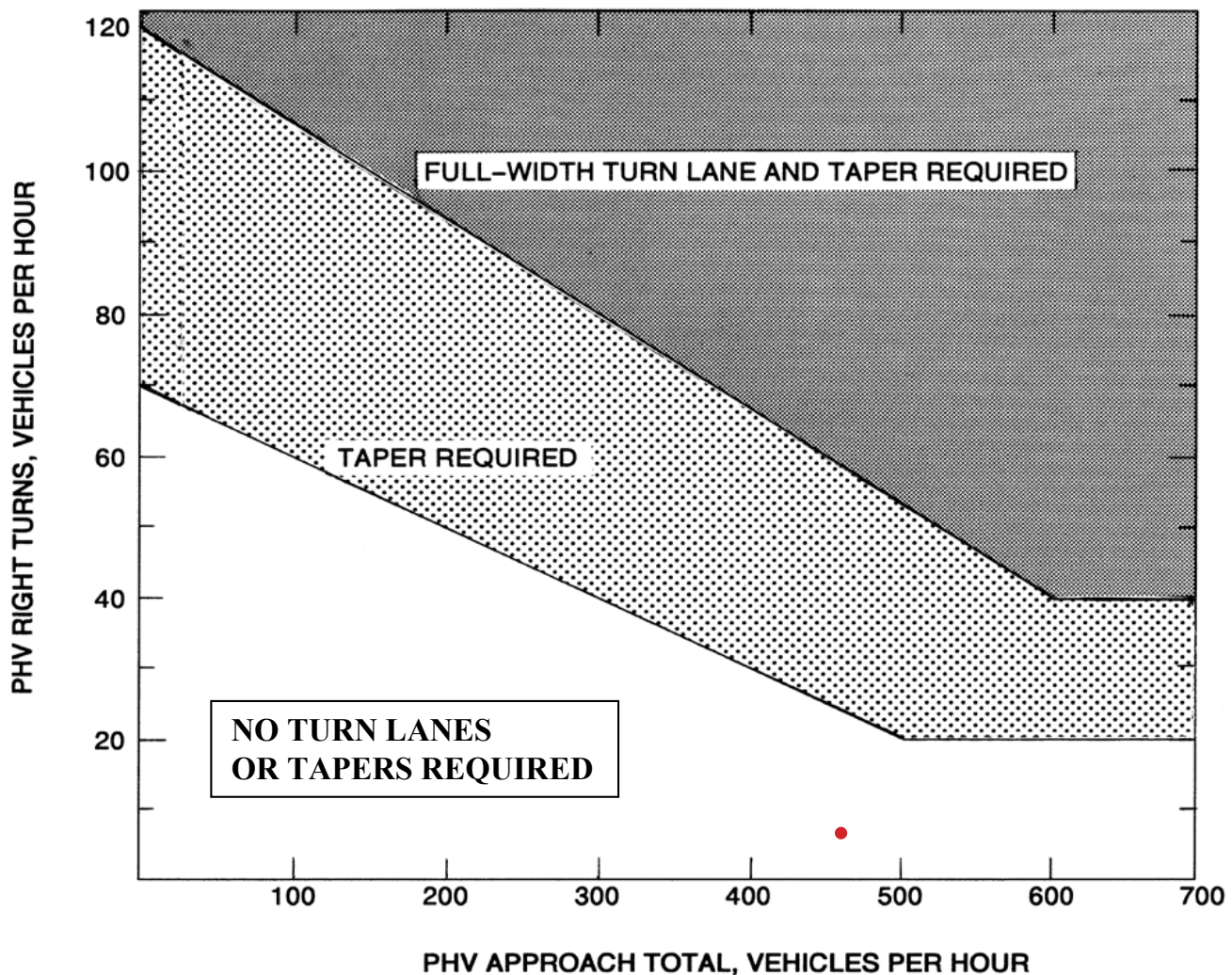
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 8 vph

PHV Approach Total: 451 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.272/1306

Project: Garden Lane Traffic Analysis (2026 No Build Condition)

Intersection: Route 53/Old Garden Lane

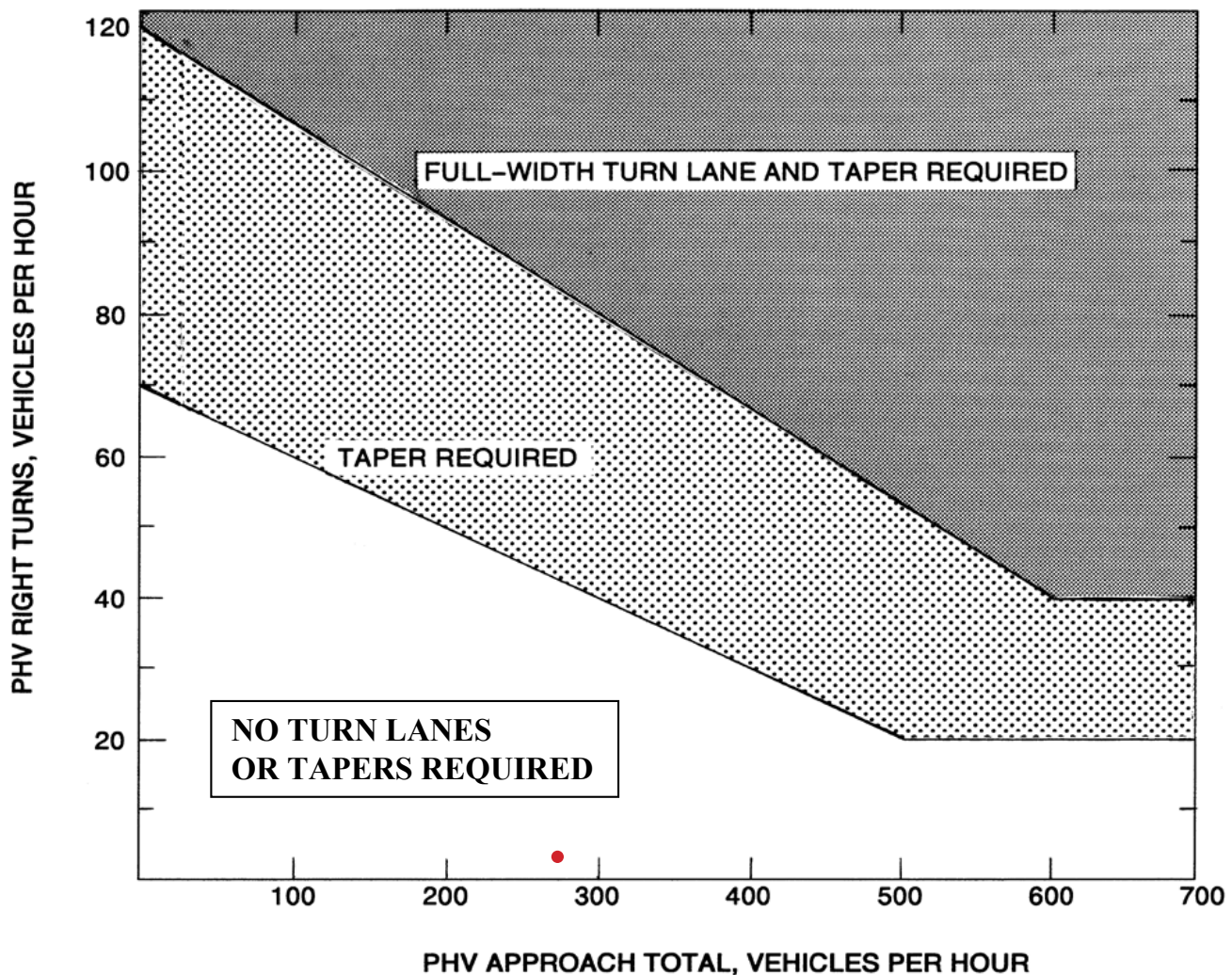
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 3 vph

PHV Approach Total: 270 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.273/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound

Peak Hour: AM

Peak Hour Left Turns (V_L): 7 vph

Advancing Volume (V_A): 310 vph

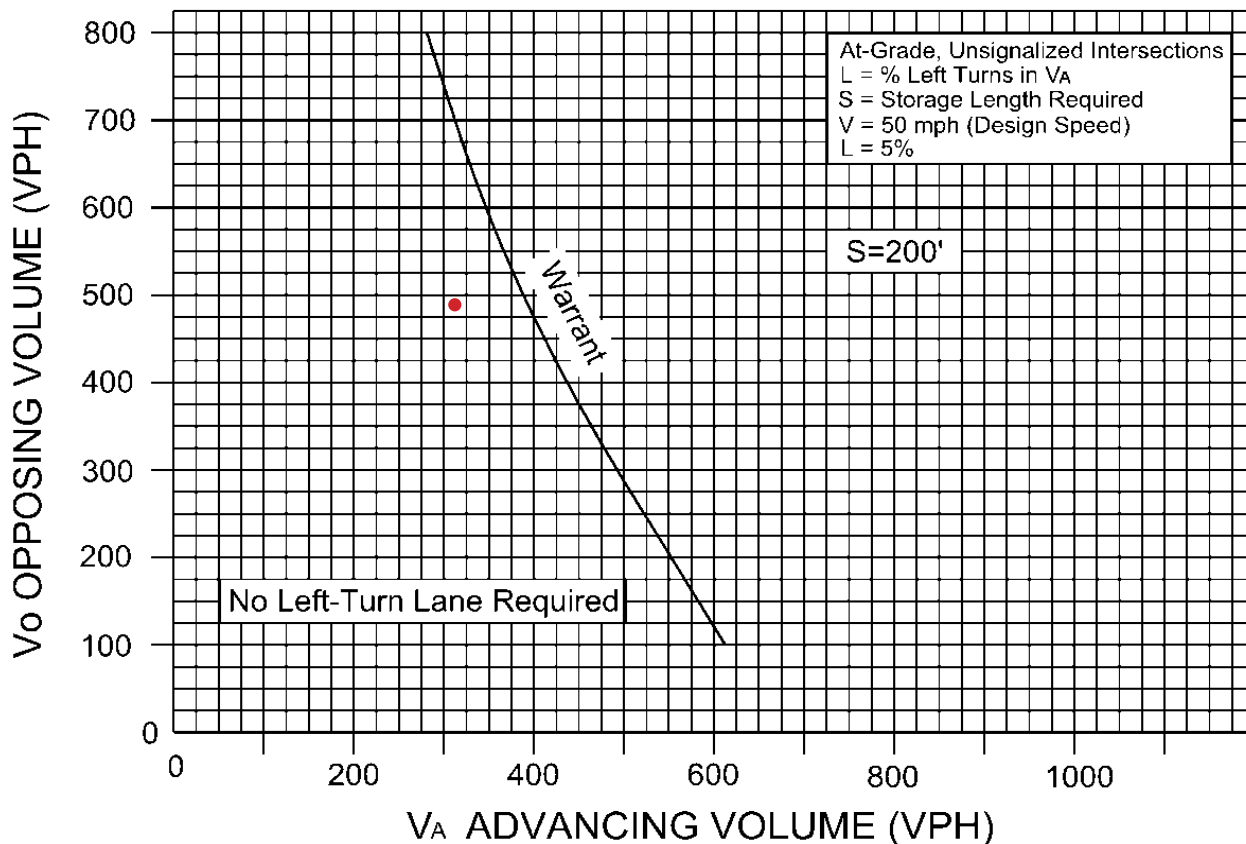
Opposing Volume (V_O): 487 vph

Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 2.3%)

% Trucks in V_L : 0%

Conclusion: No Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.274/1306

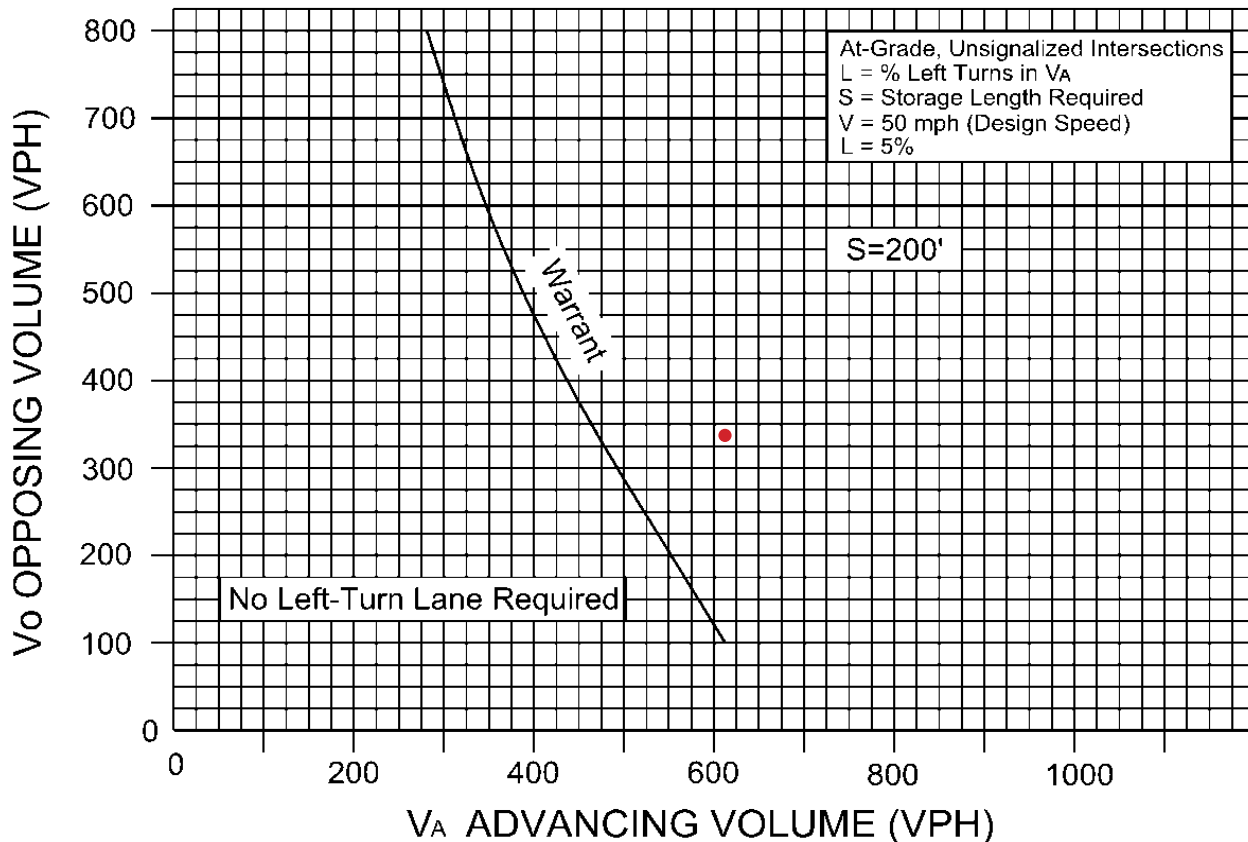
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/Old Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 6 vph
Advancing Volume (V_A): 609 vph
Opposing Volume (V_O): 333 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 5% (Calculated Value: 1.0%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.275/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

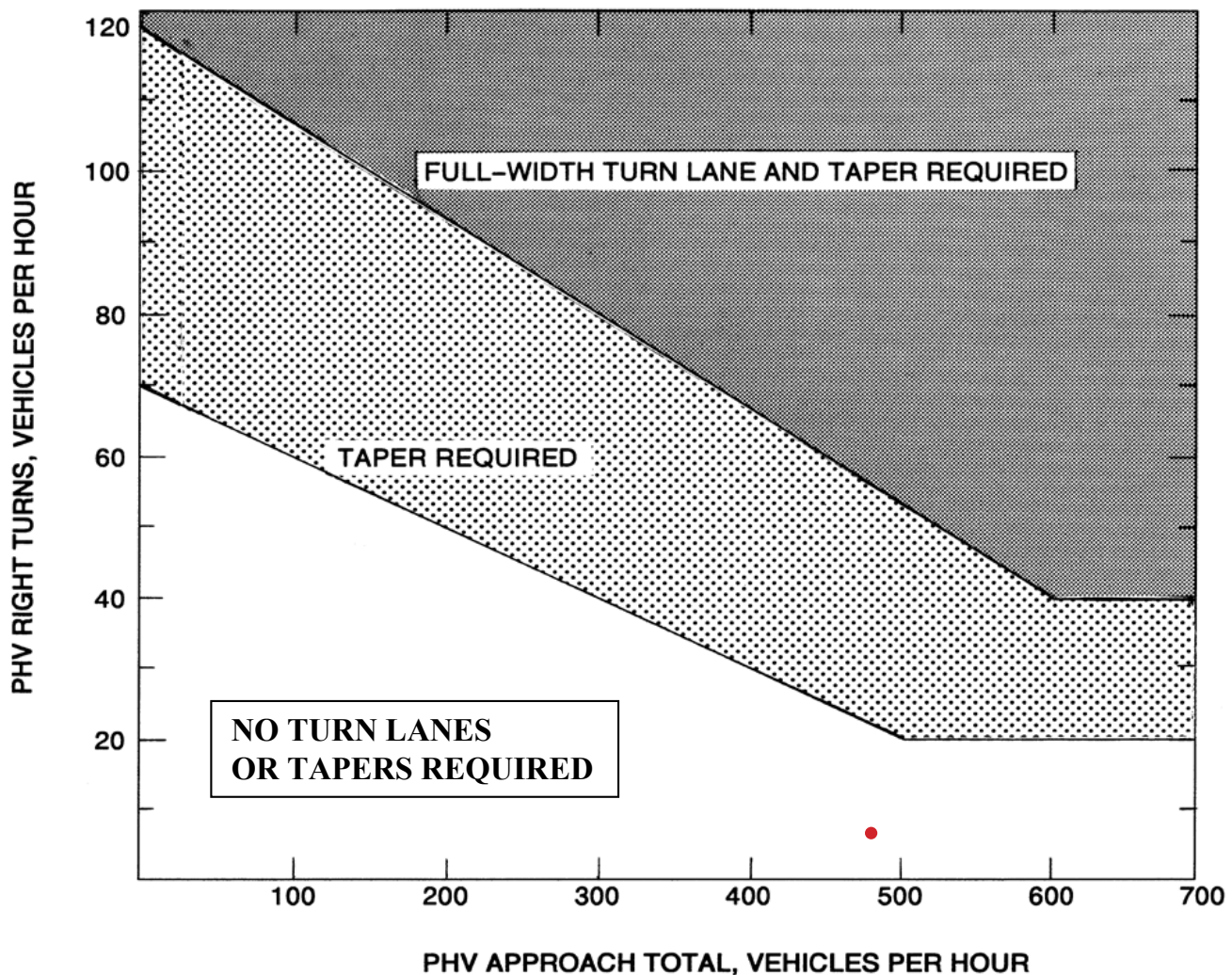
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 8 vph

PHV Approach Total: 487 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.276/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/Old Garden Lane

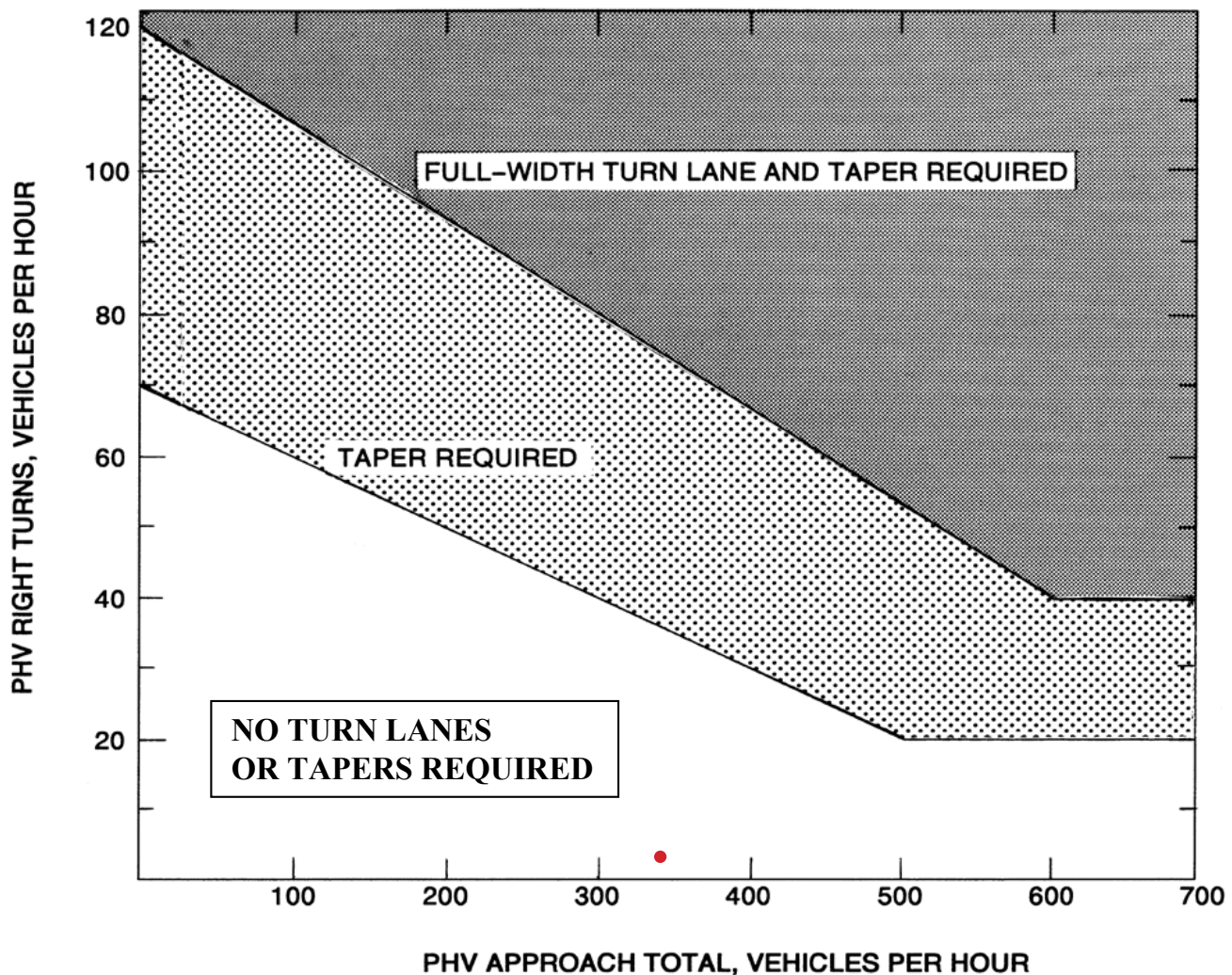
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 3 vph

PHV Approach Total: 333 vph

Conclusion: No Turn Lanes or Taper Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.277/1306

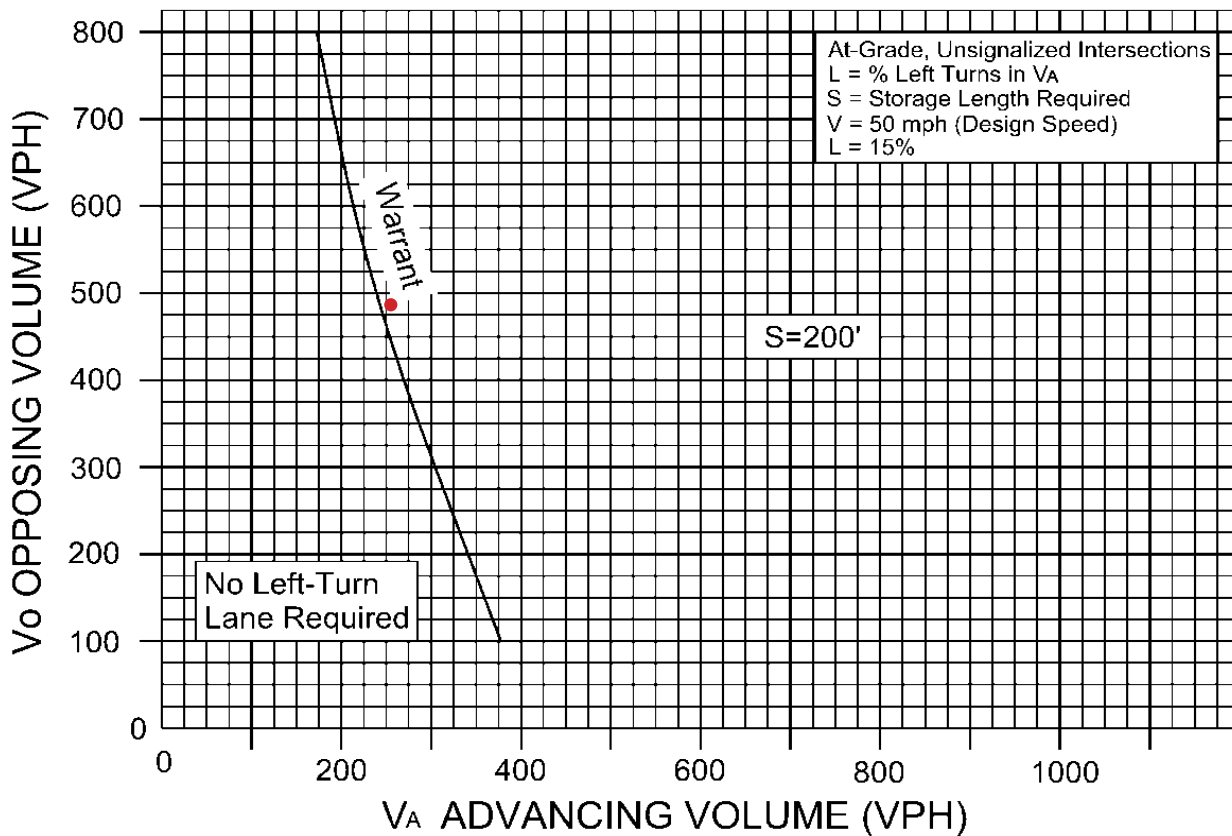
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/New Garden Lane

Approach Direction: Southbound
Peak Hour: AM

Peak Hour Left Turns (V_L): 32 vph
Advancing Volume (V_A): 255 vph
Opposing Volume (V_O): 488 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 15% (Calculated Value: 12.5%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Left-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.278/1306

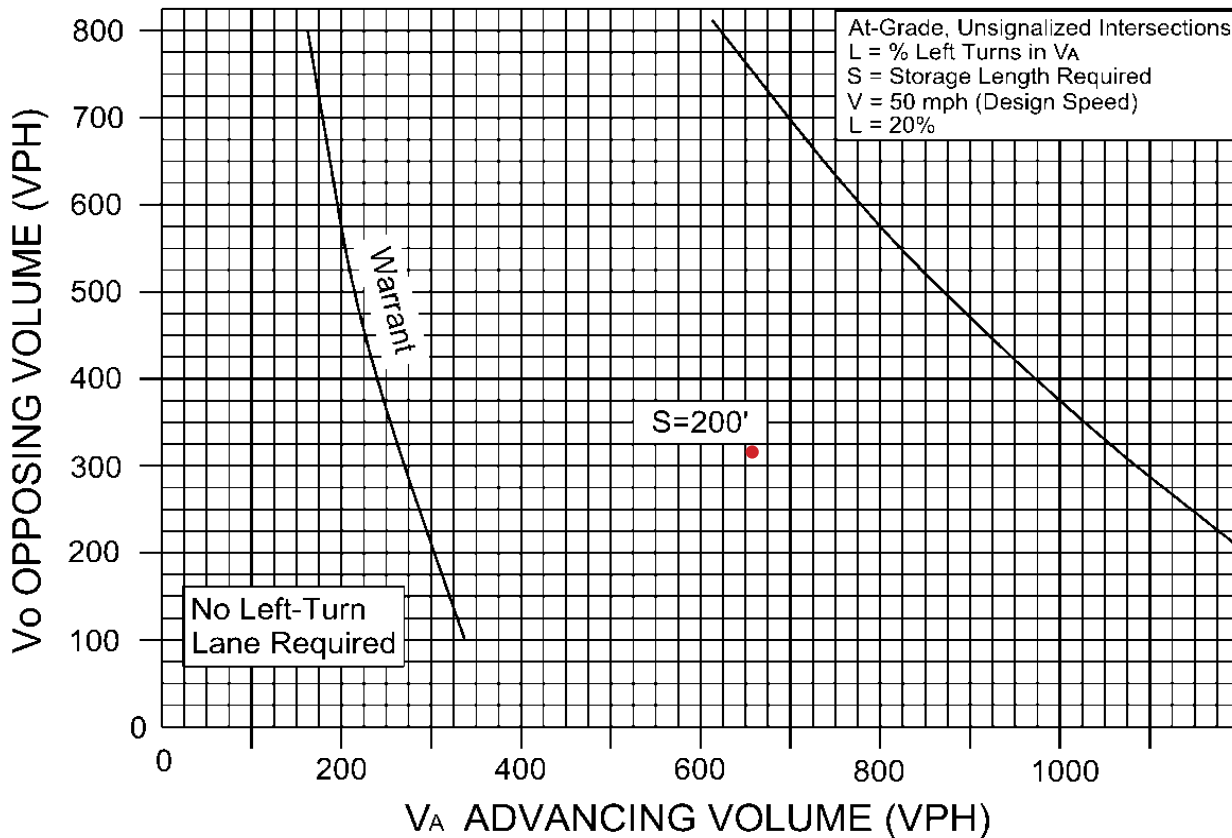
Project: Garden Lane Traffic Analysis (2026 Build Condition)
Intersection: Route 53/New Garden Lane

Approach Direction: Southbound
Peak Hour: PM

Peak Hour Left Turns (V_L): 127 vph
Advancing Volume (V_A): 666 vph
Opposing Volume (V_O): 315 vph
Operating/Design Speed (V): 50 mph

% Left Turns in V_A (L): 20% (Calculated Value: 19.1%)
% Trucks in V_L : 0%

Conclusion: Left Turn Lane Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.279/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

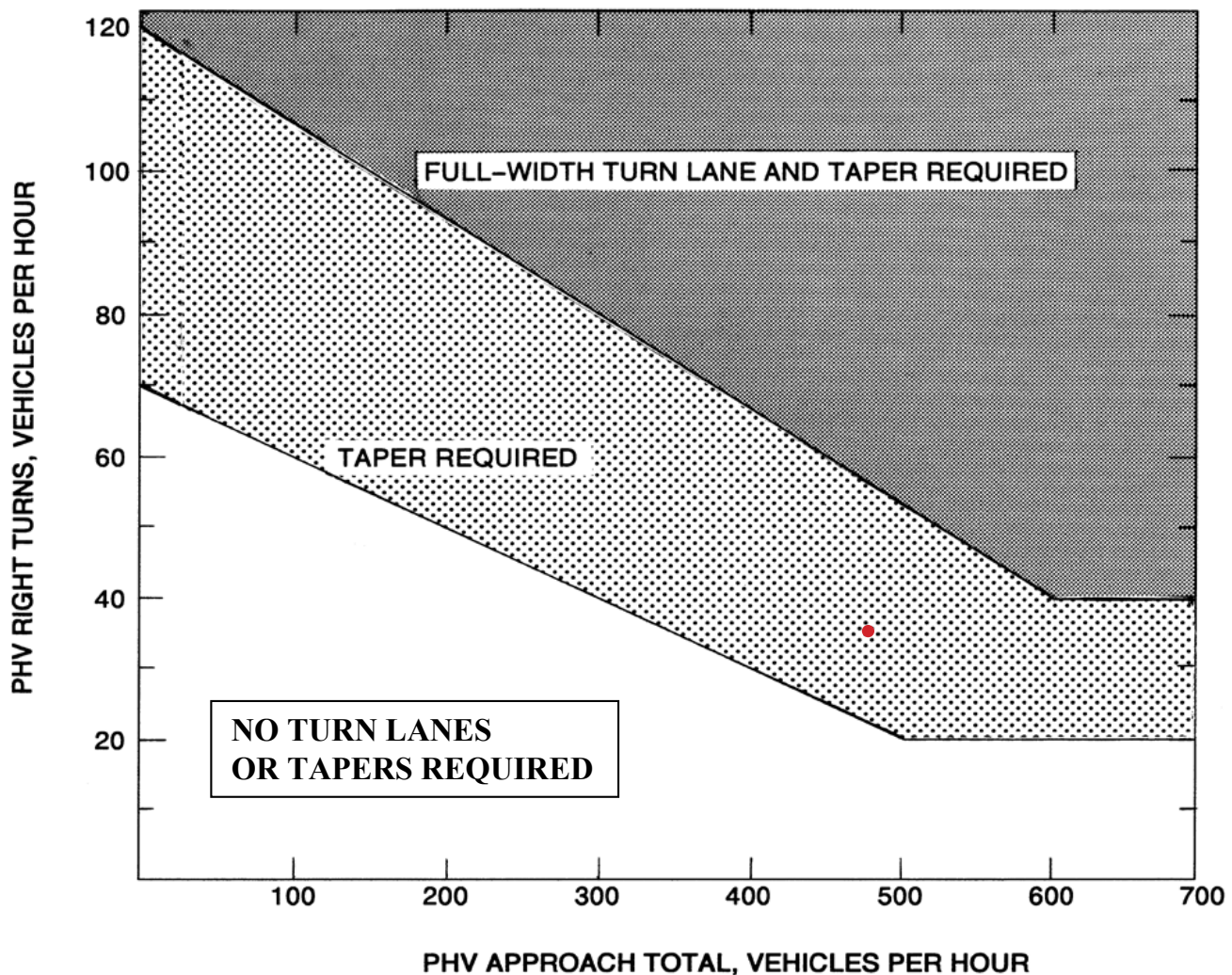
Approach Direction: Northbound

Peak Hour: AM

PHV Right Turns: 36 vph

PHV Approach Total: 488 vph

Conclusion: Taper Required



Warrant for Right-Turn Storage Lanes on 2-Lane Highway

BOS 2022-01-19 p.280/1306

Project: Garden Lane Traffic Analysis (2026 Build Condition)

Intersection: Route 53/New Garden Lane

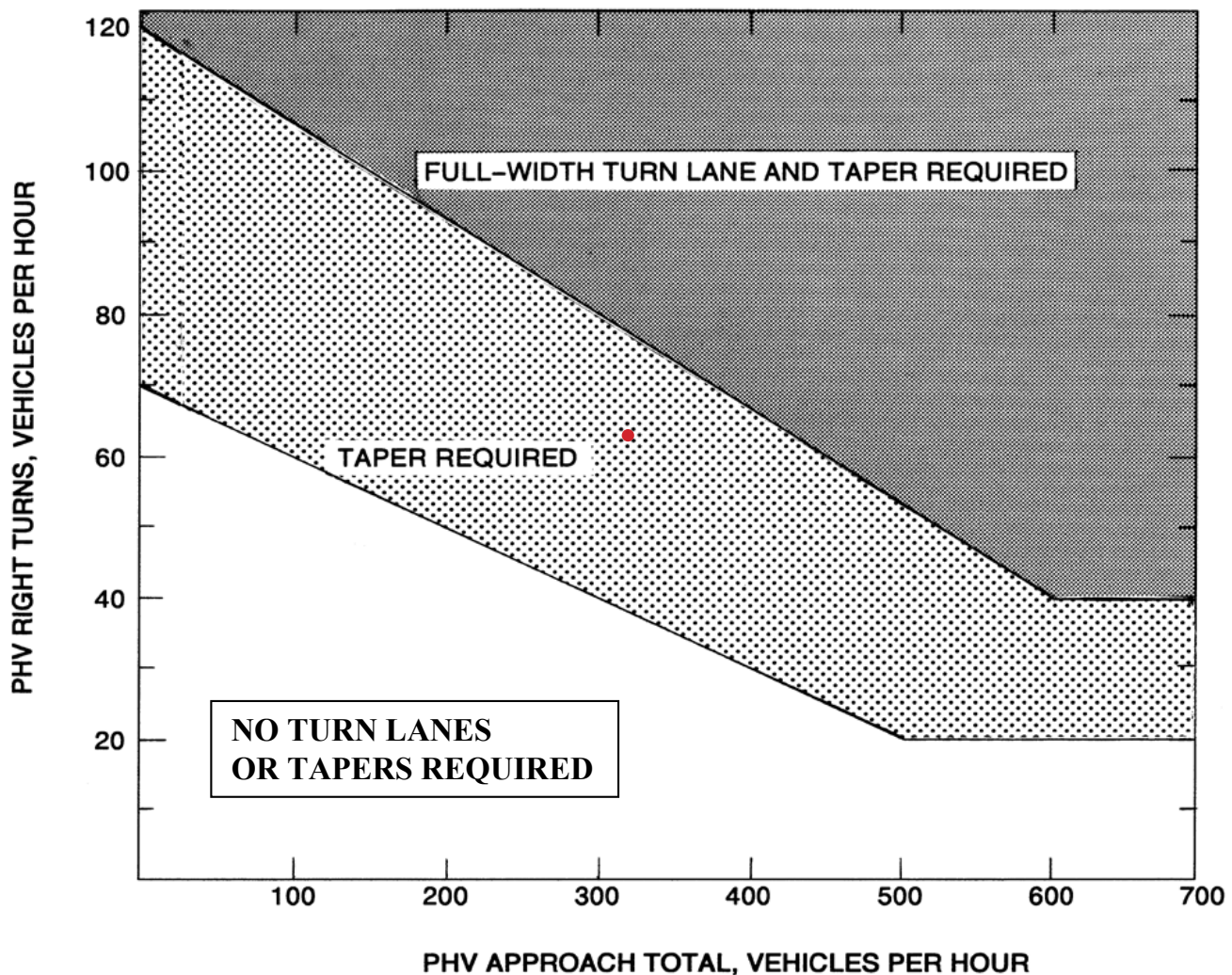
Approach Direction: Northbound

Peak Hour: PM

PHV Right Turns: 63 vph

PHV Approach Total: 315 vph

Conclusion: Taper Required



Appendix C Existing HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	11	5	0	5	2	426	8	7	207	2
Future Vol, veh/h	6	0	11	5	0	5	2	426	8	7	207	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	468	9	8	227	2
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	723	725	228	727	722	473	229	0	0	477	0	0
Stage 1	244	244	-	477	477	-	-	-	-	-	-	-
Stage 2	479	481	-	250	245	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	344	354	764	312	355	595	1351	-	-	1096	-	-
Stage 1	764	708	-	528	559	-	-	-	-	-	-	-
Stage 2	571	557	-	706	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	338	350	764	305	351	595	1351	-	-	1096	-	-
Mov Cap-2 Maneuver	338	350	-	305	351	-	-	-	-	-	-	-
Stage 1	762	702	-	527	558	-	-	-	-	-	-	-
Stage 2	565	556	-	689	701	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	12.1		14.2			0			0.3			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1351	-	-	529	403	1096	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.035	0.027	0.007	-	-				
HCM Control Delay (s)	7.7	0	-	12.1	14.2	8.3	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	30	6	0	4	27	232	3	6	503	12
Future Vol, veh/h	8	0	30	6	0	4	27	232	3	6	503	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	255	3	7	553	13
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	893	892	560	907	897	257	566	0	0	258	0	0
Stage 1	574	574	-	317	317	-	-	-	-	-	-	-
Stage 2	319	318	-	590	580	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	264	283	532	259	281	787	1016	-	-	1318	-	-
Stage 1	507	506	-	698	658	-	-	-	-	-	-	-
Stage 2	697	657	-	497	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	254	271	532	235	269	787	1016	-	-	1318	-	-
Mov Cap-2 Maneuver	254	271	-	235	269	-	-	-	-	-	-	-
Stage 1	490	502	-	674	636	-	-	-	-	-	-	-
Stage 2	670	635	-	462	499	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	14.2		16.4		0.9		0.1					
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1016	-	-	432	327	1318	-	-				
HCM Lane V/C Ratio	0.029	-	-	0.097	0.034	0.005	-	-				
HCM Control Delay (s)	8.7	0	-	14.2	16.4	7.7	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-				

Appendix D Existing SimTraffic Queue Reports

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	59	45	6	18
Average Queue (ft)	14	7	0	1
95th Queue (ft)	43	26	4	7
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	25	53	23
Average Queue (ft)	23	5	7	1
95th Queue (ft)	48	19	30	9
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Appendix E 2026 No Build HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	11	5	0	5	2	441	8	7	214	2
Future Vol, veh/h	6	0	11	5	0	5	2	441	8	7	214	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	485	9	8	235	2
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	748	750	236	752	747	490	237	0	0	494	0	0
Stage 1	252	252	-	494	494	-	-	-	-	-	-	-
Stage 2	496	498	-	258	253	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	331	342	756	300	344	582	1342	-	-	1080	-	-
Stage 1	757	702	-	516	550	-	-	-	-	-	-	-
Stage 2	559	548	-	699	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	325	338	756	293	340	582	1342	-	-	1080	-	-
Mov Cap-2 Maneuver	325	338	-	293	340	-	-	-	-	-	-	-
Stage 1	755	696	-	515	549	-	-	-	-	-	-	-
Stage 2	553	547	-	682	695	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	12.3		14.5		0		0.3					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1342	-	-	515	390	1080	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.036	0.028	0.007	-	-				
HCM Control Delay (s)	7.7	0	-	12.3	14.5	8.4	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane

11/01/2021

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	30	6	0	4	27	240	3	6	521	12
Future Vol, veh/h	8	0	30	6	0	4	27	240	3	6	521	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	264	3	7	573	13
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	922	921	580	936	926	266	586	0	0	267	0	0
Stage 1	594	594	-	326	326	-	-	-	-	-	-	-
Stage 2	328	327	-	610	600	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	253	273	518	247	271	778	999	-	-	1308	-	-
Stage 1	495	496	-	691	652	-	-	-	-	-	-	-
Stage 2	689	651	-	485	493	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	243	261	518	224	259	778	999	-	-	1308	-	-
Mov Cap-2 Maneuver	243	261	-	224	259	-	-	-	-	-	-	-
Stage 1	478	492	-	667	629	-	-	-	-	-	-	-
Stage 2	661	628	-	451	489	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	14.6		16.9			0.9			0.1			
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	999	-	-	418	313	1308	-	-				
HCM Lane V/C Ratio	0.03	-	-	0.1	0.035	0.005	-	-				
HCM Control Delay (s)	8.7	0	-	14.6	16.9	7.8	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-				

Appendix F 2026 No Build SimTraffic Queue Reports

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	58	49	8	18
Average Queue (ft)	16	7	0	1
95th Queue (ft)	47	28	4	8
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	54	29	56	19
Average Queue (ft)	23	5	7	1
95th Queue (ft)	49	21	31	9
Link Distance (ft)	905	802	730	1100
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Appendix G 2026 Build HCM Reports

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane





11/01/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	11	5	0	5	2	477	8	7	301	2
Future Vol, veh/h	6	0	11	5	0	5	2	477	8	7	301	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	22	25	0	0	0	2	14	0	4	50
Mvmt Flow	7	0	12	5	0	5	2	524	9	8	331	2
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	883	885	332	887	882	529	333	0	0	533	0	0
Stage 1	348	348	-	533	533	-	-	-	-	-	-	-
Stage 2	535	537	-	354	349	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	269	286	666	241	287	554	1238	-	-	1045	-	-
Stage 1	672	638	-	491	528	-	-	-	-	-	-	-
Stage 2	533	526	-	618	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	264	283	666	235	284	554	1238	-	-	1045	-	-
Mov Cap-2 Maneuver	264	283	-	235	284	-	-	-	-	-	-	-
Stage 1	671	632	-	490	527	-	-	-	-	-	-	-
Stage 2	527	525	-	601	631	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	13.7		16.3		0		0.2					
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1238	-	-	433	330	1045	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.043	0.033	0.007	-	-				
HCM Control Delay (s)	7.9	0	-	13.7	16.3	8.5	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 6th TWSC

2: Route 53 & New Garden Lane

11/01/2021

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	87	452	36	32	223
Future Vol, veh/h	87	87	452	36	32	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	4
Mvmt Flow	96	96	497	40	35	245
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	832	517	0	0	537	0
Stage 1	517	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	339	558	-	-	1031	-
Stage 1	598	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	327	558	-	-	1031	-
Mov Cap-2 Maneuver	327	-	-	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	21.1	0		1.1		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	412	1031	-	
HCM Lane V/C Ratio	-	-	0.464	0.034	-	
HCM Control Delay (s)	-	-	21.1	8.6	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	2.4	0.1	-	

HCM 6th TWSC

1: Route 53 & Nahor Manor Road/Garden Lane





11/01/2021

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	30	6	0	4	27	303	3	6	591	12
Future Vol, veh/h	8	0	30	6	0	4	27	303	3	6	591	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	33	7	0	4	30	333	3	7	649	13
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1067	1066	656	1081	1071	335	662	0	0	336	0	0
Stage 1	670	670	-	395	395	-	-	-	-	-	-	-
Stage 2	397	396	-	686	676	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	202	224	469	197	223	712	936	-	-	1235	-	-
Stage 1	450	459	-	634	608	-	-	-	-	-	-	-
Stage 2	633	607	-	441	456	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	194	213	469	177	212	712	936	-	-	1235	-	-
Mov Cap-2 Maneuver	194	213	-	177	212	-	-	-	-	-	-	-
Stage 1	432	455	-	609	584	-	-	-	-	-	-	-
Stage 2	605	583	-	406	452	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	16.3		19.9			0.7			0.1			
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	936	-	-	361	253	1235	-	-				
HCM Lane V/C Ratio	0.032	-	-	0.116	0.043	0.005	-	-				
HCM Control Delay (s)	9	0	-	16.3	19.9	7.9	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-				

HCM 6th TWSC

2: Route 53 & New Garden Lane

11/01/2021

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	47	252	63	127	539
Future Vol, veh/h	70	47	252	63	127	539
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	1	2	2	1
Mvmt Flow	77	52	277	69	140	592
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1184	312	0	0	346	0
Stage 1	312	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	209	728	-	-	1213	-
Stage 1	742	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	185	728	-	-	1213	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	30.9	0	1.6			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	264	1213	-	
HCM Lane V/C Ratio	-	-	0.487	0.115	-	
HCM Control Delay (s)	-	-	30.9	8.4	-	
HCM Lane LOS	-	-	D	A	-	
HCM 95th %tile Q(veh)	-	-	2.5	0.4	-	

Appendix H 2026 Build SimTraffic Queue Reports

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	65	46	6	25
Average Queue (ft)	16	7	0	1
95th Queue (ft)	48	28	3	9
Link Distance (ft)	905	802	730	1071
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Route 53 & New Garden Lane

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	125	2	36
Average Queue (ft)	46	0	10
95th Queue (ft)	93	2	32
Link Distance (ft)	765	1071	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			300
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report

11/01/2021

Intersection: 1: Route 53 & Nahor Manor Road/Garden Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	63	24	70	19
Average Queue (ft)	23	6	11	1
95th Queue (ft)	51	21	40	9
Link Distance (ft)	905	802	730	1071
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Route 53 & New Garden Lane

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	105	11	68
Average Queue (ft)	36	0	23
95th Queue (ft)	75	5	53
Link Distance (ft)	765	1071	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			300
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Appendix I Crash Analysis

Crash Data



This feature layer contains point locations and related data for all reportable motor vehicle crashes.

one crash at the intersection: one sideswipe - same direction.
three crashes nearby: one angle and two fixed object - off road.

Crash Data



This feature layer contains point locations and related data for all reportable motor vehicle crashes.

5 crashes nearby: one rear end, one fixed object - off road, and three deer.



COUNTY OF FLUVANNA

"Responsive & Responsible Government"

BOS 2022-01-19 p.311/1306
132 Main Street
P.O. Box 540
Palmyra, VA 22963
(434) 591-1910
Fax (434) 591-1911
www.fluvannacounty.org

PUBLIC HEARING NOTICE

January 10, 2022

RE: ZMP 21:04 Southern Development / Village Gardens Conditional Rezoning Case Request

This is to notify you that the Fluvanna County Board of Supervisors will hold a public hearing on:

Meeting: Board of Supervisors Public Hearing
Date: Wednesday, January 19, 2022 at 7:00 pm

Location: Carysbrook Performing Arts Center
8880 James Madison Highway Fork Union, VA 23055

ZMP 21:04 Southern Development – A request to rezone from A-1, Agricultural, General and R-3, Residential Planned Community to R-3, Residential Planned Community of 122.6 acres of Tax Maps 8 Section A Parcel 18A, 17 Section A Parcel 10 and 17 Section 9 Parcels 1 and 2. The subject properties are located along State Route 53 and along Garden Lane (SR 636) and with additional access via a stub road located south of 415 Jefferson Drive in Lake Monticello and are within the Rivanna Community Planning Area and the Cunningham Election District.

Please be advised that you can attend the meeting in person, join the meeting via Zoom or by a phone call where you will have an opportunity to provide Public comments. Instructions for participation in the Public Hearing will be available on the County's website along with the Meeting Agenda and Staff Report. The applicant has added a paved 20' emergency access road, EPR will be providing a Comprehensive Traffic Report to include all future and background traffic. Southern Development and Stanley Martin Homes will present all of the updated information.

You can also contact the Fluvanna County Planning & Community Development Department, 8:00 am – 5:00 pm, Monday through Friday. If you have any questions regarding the application or the public hearing, please contact me at 434.591.1910 or at dmiles@fluvannacounty.org for any further information.

Sincerely,

Douglas Miles

Douglas Miles, AICP, CZA
Community Development Director

Village Gardens Master Plan 12-13-21

MEMORANDUM

To: ZMP 21:04 Southern Development File

From: Douglas Miles, Community Development Director

Date: January 10, 2022

Subject: **Adjacent Property Owner Letters**

Please be advised that the Community Development Director did mail adjacent property owner letters to the list of adjacent owners as found within the Southern Development file folder for the January 19, 2022 Board of Supervisors Public Hearing.

TAX MAP	NAME
18A 8 162	AEIOU TRUST
18A 12 463	ALMARODE, HEATHER R
18A 12 459	ANTOLIK, JOAN K & CROSS, LINDA S
17 A 2	AQUA VIRGINIA INC
17 A 9A	AWL ENTERPRISES LLC
18A 12 446	BARNETT, HARRIET LEE
18A 12 458	BARNETT, JASON A & ELIZABETH A
18A 12 450	BLACKWELL, JAMES E & BRENDA C
18A 12 449	BOLINGER, KARON SUE
18A 11A C	BRISCO PROPERTIES LLC
18A 8 149	BURTON, MARGARET
18A 8 159	BUSH, JEFFREY A
18A 8 166	CALHOUN, ELENA M
18A 8 152	CAMPBELL, RYAN P & DENISE D
18A 12 523	CANTAGALLO, MATHEW D & AMEE S
17A 1 58	COLVILLE DECLARATION OF TRUST
17 A 8A	CRAWFORD, JAMES L SR & MARGARET S
18A 8 151	DENG, JINGZHEN & LI, HUILAN
18A 8 148	DINORA FAMILY TRUST
18A 8 161	DURRER, TIMOTHY C & KATHERINE V
18A 8 167	FAIN, RICHARD HOWARD ET AL
18A 12 452	FERLAN, PAUL S & EWING, REBECCA
18A 8 164	FISHER, KYLE T & AMANDA W
18A 8 153	FITZGERALD, ANDREW L & NANNETTE
18A 8 154	FORMAN, VIRGINIA M
8 A 18A	FOX, PRISCILLA FORSTBAUER
17 9 2	GALASKA, LOUISE
18A 12 447	GILLIARD, FRANK & SINOBIA
17 A 10A	GLORYSTONE, LLC
18A 12 457	GUARDIA PRUDENCIO, MARIA R &
17 9 1	HADEN, LISA MICHELLE
17 9 3	HAGAN, PATRICK & ELAINE
18A 8 145	HEDLY, HENRY R. & WIFE
18A 12 451	HINKLEY, MELVIN C & JOAN A
18A 8 158	HOAL, RALPH WAYNE
18A 8 165	HORNSBY, GEORGE H & REILLY, CAROL A
18A 8 146	JACOBS, TERESA O
17A 1 E1	LAKE MONTICELLO HOLDINGS LLC
8 A 20	LAKE MONTICELLO OWNERS ASSOC., INC
18A 12 525	LECHAK, ALBERT J ET AL
17 A 8E	LEY, NEAL & CAROLYN A
18A 12 461	LOPEZ, ANTONIO G
18A 12 455	LOWRY, ALBERT D
18A 8 163	MCKINNON, DAVID C & PAMELA P
18A 8 156	MCLAUGHLIN REVOCABLE LIVING TRUST

7 A 11, 17 A 8B, 17 A 8	MORRIS IRREVOCABLE TRUST
18A 12 526	MURDOCH, SCOTT & HELEN
17 A 10, 17A 1 D	NVA PROPERTIES LLC
18A 12 464	POVOL, MICHAEL C & EDYTHE E
18A 12 454	POWELL, DOUGLAS E
18A 8 150	RADER, STEVEN D &
18A 12 448	REARDON, ANGELA K & KIDD, NASH JR
18A 8 155	ROBERSON, STEVEN C
18A 12 527	ROY, DIPAK K
18A 12 524	SMITH, STEPHEN H & MAUREEN F
18A 12 462	SPITZER, KEITH E, VICKIE & AARON K
18A 12 522	STUCKE, ROLF & MATHILDA
18A 8 168	TAYLOR, ROBERT M. & BETTY M.
17 A 13	VLASIS, MICHAEL A ET UX
18A 8 157	WARNER, JOAN R & PICONE, MATTHEW W
17 A 12	WHITE, JOAN G
18A 8 147	WIDECKI, JOHN J SR
18A 8 169	WIGFIELD, CATHERINE V LIVING TRUST
18A 12 456	WYNNE, COLIN P
18A 8 160	YOUNG, CATHERIN R
18A 12 460	CURRENT PROPERTY OWNER
17 22 2	SCLATER FAMILY LIVING TRUST
17 22 1	BROWNING, TODD A
17 A 14	BUTLER, TERESSA
17A 1 49	RADFORD, SANDRA

NAME 2	ADDRESS
	PO BOX 202
	433 JEFFERSON DR
	425 JEFFERSON DR
	2414 GRANITE RIDGE RD
	2299 HUNTERS LODGE RD
	399 JEFFERSON DR W
	423 JEFFERSON DR
	407 JEFFERSON DR
	405 JEFFERSON DR
	17 TALLWOOD TRL
	355 JEFFERSON DR W
	375 JEFFERSON DR
	389 JEFFERSON DR WEST
	361 JEFFERSON DR
	4 SUNSET CT
C/O ALBERT R COLVILLE	315 VILLAGE BLVD
	6668 THOMAS JEFFERSON PKWY
	2957 FRANKLIN OAKS DR
MICHAEL J & DONNA M DINORA	1453 WARRINGTON WAY
	379 JEFFERSON DR
	391 JEFFERSON DR
	411 JEFFERSON DR WEST
	385 JEFFERSON DR
	363 JEFFERSON DR WEST
	365 JEFFERSON DRIVE WEST
1425 GENTRY LANE	1425 GENTRY LN
	4665 LAMBTON CIR
	1785 LACOMBE AVENUE
	6440 THOMAS JEFFERSON PKWY STE B
GARCES ALARCO, ANDRES AUGUSTO	421 JEFFERSON DR
	2195 PENDLETON PL
	503 GARDEN LN
	101 DUER DR.
	409 JEFFERSON DR WEST
	373 JEFFERSON DR WEST
	387 JEFFERSON DRIVE WEST
	349 JEFFERSON DR WEST
	32 GARDEN LN
	41 ASHLAWN BLVD
	5 SUNSET CT
	6650 THOMAS JEFFERSON PKWY
	429 JEFFERSON DR
	417 JEFFERSON DR
	383 JEFFERSON DR
	792 JEFFERSON DR

C/O ROBERT K & SANDRA F MORRIS

ATTN: EVAN BOWMAN

RHONDEL L RADER-MAXWELL

C/O DANIEL SCLATER

6840 THOMAS JEFFERSON PKWY

9431 WATKINS RD

4095 VALLEY PIKE

435 JEFFERSON DR

415 JEFFERSON DR

5249 OAKLAND BLVD

403 JEFFERSON DR

367 JEFFERSON DR

1 SUNSET COURT

6 SUNSET CT

431 JEFFERSON DR

2 SUNSET COURT

393 JEFFERSON DRIVE WEST

11 GARDEN LN

371 JEFFERSON DR

276 NAHOR MANOR RD

351 JEFFERSON DR W

395 JEFFERSON DR

419 JEFFERSON DR

124 HARVEST LN

427 JEFFERSON DR

43 TANGLEWOOD RD

82 NAHOR RD

82 NAHOR RD

121 Mulberry Dr

[illegible]

PALMYRA	VA	22963
GAITHERSBURG	MD	20882
WINCHESTER	VA	22602
PALMYRA	VA	22963
PALMYRA	VA	22963
PORTSMOUTH	OH	45662
PALMYRA	VA	22963
PALMYRA	VA	22963
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PALMYRA	VA	22963
PALMYRA	VA	22963
PALMYRA	VA	22963
STERLING	VA	20164
PALMYRA	VA	22963
PALMYRA	VA	22963
PALMYRA	VA	22963
PALMYRA	VA	22963
PALMYRA	VA	22963



COMMONWEALTH OF VIRGINIA
COUNTY OF FLUVANNA
Application for Rezoning

RECEIVED
BOS 2022-01-19 p.319/1306

JUL 01 2021

Fluvanna County
Planning Dept

Owner of Record: See Attached

Applicant of Record: Southern Development

Address: _____

Address: 142 South Pantops Drive

Phone: _____ Fax: _____

Phone: 434-245-0894 Fax: 434-245-0895

Email: _____

Email: Klanaster@southern-development.com

Representative: Southern Development

Address: 142 South Pantops Drive

Phone: 434-245-0894 Fax: 434-245-0895

Email: Klanaster@southern-development.com

Note: If applicant is anyone other than the owner of record, written authorization by the owner designating the applicant as the authorized agent for all matters concerning the request shall be filed with this application.

If property is in an Agricultural Forestal District, or Conservation Easement, please list information here:

Tax Map and Parcel(s) 17-A-10, 17-9-1, 17-9-2, 8-A-18A

Acreage 122.6 Current Zoning A1

Is parcel in Land Use Valuation Program? ☒ No ☐ Yes

Location of Parcel: Garden Lane

Deed Book and Page: See Attached

If any Deed Restrictions, please attach a copy

Requested Zoning R-3 Proposed Use of Property Commercial and residential

Affidavit to Accompany Petition for Rezoning

By signing this application, the undersigned owner/applicant authorizes entry onto the property by County Employees, the Planning Commission, and the Board of Supervisors during the normal discharge of their duties in regard to this request.

I/We, being duly sworn, depose and say that we are Owner/Contract Owner of the property involved in this application and that we have familiarized ourselves with the rules and regulations of the Zoning Ordinance with respect to preparing and filing this application, and that the foregoing statements and answers herein contained and the information on the attached map to the best of our ability present the argument on behalf of the application herewith requested and that the statements and information above referred to are in all respects true and correct to the best of our knowledge.

Date: 6/29/2021 Signature of Owner/Applicant: [Signature]

Subscribed and sworn to before me this 29th day of June, 2021 Register # 347137

My commission expires: 9/30/2024 Notary Public: [Signature]

Amy H. Hall
Notary Public
Commonwealth of Virginia
Commission No. 347137
My Commission Expires 09/30/2024



All plats must be folded prior to submission to the Planning Department for review. Rolled plats will not be accepted.

Office Use Only

Date Received: 07/01/21 Pre-Application Meeting: _____ PH Sign Deposit Received: 07/01/21 Application #: ZMP 21: 04

\$1,000 fee paid: #2672

Mailing Costs: \$20.00 per Adjacent Property Owner after first 15, Certified. Paid:

Proffer or Master Plan Amendment: \$750.00 plus mailing costs. Paid:

Election District: Cunningham

Planning Area: Rivanna Community

Public Hearings

Planning Commission

Board of Supervisors

Advertisement Dates:

Advertisement Dates:

APO Notification:

APO Notification:

Date of Hearing:

Date of Hearing

Decision:

Decision:

Additional Application for Rezoning information

Current Owners of Record:

- 17-A-10, NVA Properties LLC C/O Evan Bowman, 4095 Valley Pike Winchester VA 22602
- 17-9-1, Haden, Lisa Michelle, 2195 Pendleton PL Suwanee GA 30024
- 17-9-2, Galaska, Louise, 4665 Lambton Circle Suwanee GA 30024
- 8-A-18A, Fox, Priscilla Forstbauer, 1425 Gentry Lane Charlottesville VA 22903 (DB 115-388)

Current Zoning and Acreage:

- 17-A-10, R3 with proffers – 5.8 ac
- 17-9-1, A-1 – 49.78
- 17-9-2, A-1 – 49.78
- 8-A-18A, A-1 – 17.24ac

Layer Opacity

Preset Views

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- ☐ Emergency Facility
- ☐ Churches
- ☐ Schools

☒ Transportation

On Lbl Name

- ☒ ☒ Address Points *
- ☐ Building Footprints
- ☐ Driveways
- ☒ Railroads
- ☒ Roads

☒ Boundaries☒ Utilities☒ Telecommunications☒ Environmental

On Lbl Name

- ☐ AG Forestal Districts
- ☐ Conservation Easements
- ☐ ☐ Contours *
- ☐ Flood Hazard Area
- ☐ Fork Union Sanitary Dist.
- ☐ ☐ Soils
- ☐ Streams
- ☐ Water Bodies

☒ Political☒ Tax Parcels

On Lbl Name

- ☒ ☐ Parcels *
- ☐ Tax Map Grid

☒ Overlays

On Lbl Name

- ☐ ArcGIS World Imagery
- ☐ Orthophotography (VGIN 2018)
- ☐ Orthophotography (VGIN 2013)
- ☐ Orthophotography (VGIN 2009)
- ☐ Orthophotography (VGIN 2002)
- ☐ ☐ 911 Map Index
- ☐ ☐ EMS Districts
- ☐ ☐ Fire Districts
- ☐ Planning Areas
- ☐ ☐ Zip Codes
- ☐ ☐ Zoning

Details [hide](#)☒ Identify Adjoining Parcels[Select Features by Buffer](#)

Parcels

Map PIN: 17 A 10

Map PIN (Formatted): 17-A-10

Owner: NVA PROPERTIES LLC C/O EVAN BOWMAN

Mailing Address:

4095 VALLEY PIKE
WINCHESTER VA 22602

Land Use Code: 4

Occupancy Code: Vacant Land Commercial

Land Value: \$406,600

Total Value: \$406,600

Year Sold: 2011

Sell Price: \$3,818,000

Deed Book: 849 Pg: 416

Legal Description1: DB 849-416

Legal Description2: AC 5.809

Zoning Cases: ZMP 97-003 ZMP 04-004

Attributes at point: N: 3855353, E: 11527099

US Congressional Districts (2010)

District: 5

VA Senate Districts (2010)

District: 22

VA House Districts (2010)

District: 58

Voting Districts

Precinct Name: CUNNINGHAM

Magisterial Districts

District: Cunningham

Results

N: 3855477, E: 11522866

Lat: 37°54' 41.4", Lng: -78°21' 41.5"

Layer Opacity

Preset Views

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Public Buildings

On Lbl Name

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Utilities

Telecommunications

Environmental

On Lbl Name

☐ AG Forestal Districts

☐ Conservation Easements

☐ ☐ Contours *

☐ Flood Hazard Area

☐ Fork Union Sanitary Dist.

☐ ☐ Soils

☐ Streams

☐ Water Bodies

Political

Tax Parcels

On Lbl Name

☒ ☐ Parcels *

☐ ☐ Tax Map Grid

Overlays

Details [hide](#)

Identify Adjoining Parcels

Select Features by Buffer

Parcels

Map PIN: 17 9 1

Map PIN (Formatted): 17-9-1

Owner: HADEN, LISA MICHELLE

Mailing Address:
2195 PENDLETON PL
SUWANEE GA 30024

Physical Address:
GARDEN LN
PALMYRA VA

Land Use Code: 5

Occupancy Code: Vacant Land

Land Value: \$199,100

Total Value: \$199,100

Year Sold: 2008

Deed Book: 827 Pg: 800

Will Book: 53 Pg: 84

Plat Book: 0000

Legal Description1: DB 827-800

Legal Description2: AC 49.78

Zoning Cases: ZMP 97-003

Attributes at point: N: 3856804, E: 11528028

US Congressional Districts (2010)
District: 5

VA Senate Districts (2010)
District: 22

VA House Districts (2010)
District: 58

Voting Districts

Deed Pg.

Query

Results

N: 3855932, E: 11522432
Lat: 37°54' 45.9", Lng: -78°21' 46.9"

<https://www.webgis.net/va/fluvanna/>

1/1

Layer Opacity

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☒ Boundaries☒ Utilities☒ Telecommunications☒ Environmental

On Lbl Name

- ☐ AG Forestal Districts
- ☐ Conservation Easements
- ☐ Contours *
- ☐ Flood Hazard Area
- ☐ Fork Union Sanitary Dist.
- ☐ Soils
- ☐ Streams
- ☐ Water Bodies

☒ Political☒ Tax Parcels

On Lbl Name

- ☒ Parcels *
- ☐ Tax Map Grid

☒ Overlays

On Lbl Name

- ☐ ArcGIS World Imagery
- ☐ Orthophotography (VGIN 2018)
- ☐ Orthophotography (VGIN 2013)
- ☐ Orthophotography (VGIN 2009)
- ☐ Orthophotography (VGIN 2002)
- ☐ 911 Map Index
- ☐ EMS Districts
- ☐ Fire Districts
- ☐ Planning Areas
- ☐ Zip Codes
- ☐ Zoning

Details [hide](#)

Identify Adjoining Parcels

Select Features by Buffer

Parcels

Map PIN: 17 9 2
Map PIN (Formatted): 17-9-2
Owner: GALASKA, LOUISE

Mailing Address:
4665 LAMBTON CIR
SUWANEE GA 30024
Physical Address:
GARDEN LN
PALMYRA VA

Land Use Code: 5
Occupancy Code: Vacant Land
Land Value: \$175,500
Total Value: \$175,500
Plat Book: 0000
Legal Description1: DB 827-803
Legal Description2: AC 49.78

Attributes at point: N: 3857982, E: 11529063

US Congressional Districts (2010)

District: 5

VA Senate Districts (2010)

District: 22

VA House Districts (2010)

District: 58

Voting Districts

Precinct Name: CUNNINGHAM

Magisterial Districts

District: Cunningham

Deed Pg.

Query

Results

N: 3856759, E: 11523260
Lat: 37°54' 54.1", Lng: -78°21' 36.6"

Layer Opacity

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☐ Churches

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Boundaries

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Telecommunications

Environmental

On Lbl Name

☐ AG Forestal Districts

☐ Conservation Easements

☐ Contours *

☐ Flood Hazard Area

☐ Fork Union Sanitary Dist.

☐ Soils

☐ Streams

☐ Water Bodies

Political

Tax Parcels

On Lbl Name

☒ ☐ Parcels *

☐ Tax Map Grid

Overlays

Details [hide](#)[Select Features by Buffer](#)**Parcels**

Map PIN: 8 A 18A

Map PIN (Formatted): 8-A-18A

Owner: FOX, PRISCILLA FORSTBAUER 1425 GENTRY LANE

Mailing Address:

1425 GENTRY LN

CHARLOTTESVILLE VA 22903

Land Use Code: 2

Occupancy Code: Vacant Land

Land Value: \$77,600

Total Value: \$77,600

Deed Book: 115 Pg: 388

Legal Description1: DB 115-388

Legal Description2: AC. 17.246

Attributes at point: N: 3859370, E: 11529074

US Congressional Districts (2010)

District: 5

VA Senate Districts (2010)

District: 22

VA House Districts (2010)

District: 58

Voting Districts

Precinct Name: CUNNINGHAM

Magisterial Districts

District: Cunningham

Fire Districts

District Name: Lake Monticello Fire

Planning Areas

Identify: Rivanna Community Planning Area

Zoning

Zoning Classification: A-1

Results

N: 3859863, E: 11521102

Lat: 37°55' 24.8", Lng: -78°22' 03.5"



Lake Monticello Owners' Association
41 Ashlawn Boulevard
Palmyra, VA 22963
(434) 589-8263
www.LMOA.org

December 1, 2021

Barry Bibb
Chair, Fluvanna County Planning Commission
Fluvanna County
132 Main Street
Palmyra, VA 22963
Email
USPS 1st Class Mail

Dear Mr. Bibb,

In my November 1, 2021, letter, I informed you that the Lake Monticello Owners' Association Board of Directors (LMOA Board), on October 28, 2021, voted unanimously to express complete opposition to ZMP 21:04, Southern Development's requested rezoning of several parcels of land for its Village Gardens development. I also expressed the position of the LMOA Board in public comments at the November 9 meeting of the Planning Commission.

As part of its vote on October 23, the LMOA Board directed me to review all information related to ZMP 21:04 and to make additional statements as appropriate. I find it appropriate to make additional comments since the Planning Commission granted Southern Development another 30 days to revise and complete its application.

Since Southern Development has now been given a total of 90 additional days to address what should have been a completed application when the Planning Commission first addressed ZMP 21:04, I certainly appreciate that the Planning Commission voted to reopen public comments on ZMP 21:04.

In this letter, I am focusing on information regarding ZMP 21:04 that was provided for the November 9 meeting of the Planning Commission. I will address information that Southern Development provides for the December 7 meeting of the Planning Commission at that meeting since I understand that the information will not be available to the public until December 3.

First, I have a general comment. Nothing in Southern Development's revised application suggests that the LMOA Board should change its opposition to ZMP 21:04.

Second, Southern Development has not fully addressed concerns related to traffic. The EPR Traffic Report of November 2, 2021, does not address traffic which will result from the completion of four developments, Village Oaks, Colonial Circle, Sycamore Square, and Island Hill. The recent fatality on Rt. 53 near the proposed entrance to Village Gardens tragically highlights our concerns. Southern Development has proposed a small barrier on Garden Lane which is intended to limit traffic from Village Gardens going through The Villages at Nahor. Before accepting this as a "solution," VDOT needs to determine if this would even be permitted on state roads since VDOT emphasizes connectivity among all state roads. The EPR Traffic Report also did not address whether the sight distances to the proposed entrance on Rt. 53 meet VDOT's requirements. It merely references that they are better than the existing sight distances for Garden Lane which we dispute.



Lake Monticello Owners' Association
41 Ashlawn Boulevard
Palmyra, VA 22963
(434) 589-8263
www.LMOA.org

November 1, 2021

Eric Dahl, County Administrator
For the Board of Supervisors
Fluvanna County
Post Office Box 540 / 132 Main Street
Palmyra, Virginia, USA 2296

Douglas Miles
Director, Community Development
(For the Planning Commission)
Fluvanna County
Post Office Box 540 / 132 Main Street
Palmyra, Virginia, USA 2296

Dear Mr. Dahl:

At its October 28, 2021 meeting, the Lake Monticello Owners' Association Board of Directors unanimously voted to direct me to communicate to you and other officials our Association's complete opposition to the requested rezoning of several parcels related to the "Village Gardens" proposal, ZMP-21:04 in so far as that would enable the Village Gardens proposal to go forward.

We have studied the proposal and reviewed the material from the September 14, 2021 hearing conducted at the Planning Commission's meeting that day. The unavoidable conclusion is the proposed project would certainly cause irreparable and permanent harm in many ways.

We have witnessed the concerns of large numbers of our members and other county residents in several venues including developer-hosted town halls, the Commission's hearing on September 14, 2021 and our internal communications, both to our board and our staff. We are aware, as you are, of the public outcry against the project expressed in many communications to the Commission. In fact, the formation of the group, "Save Rural Fluvanna" also demonstrates widespread dissatisfaction with the proposed project, having many members and full-page ads in the "Fluvanna Review." We are also keenly and personally aware of similar negative views expressed to us by many of our residents who are deeply troubled by what to them looks like the wrong project, in the wrong place.

We share their concerns and opposition to the project.

We also share the deep concerns of our neighbors in the Villages at Nahor and other nearby residents and business owners.

Overall, it is clear to us, the project brings too much additional and inappropriate density to our area. It would, in effect, irreparably damage the goal of preserving open space in the Rivanna Community Planning Area (CPA) and present traffic problems likely to bedevil the area for decades.

Below is a high-level summary of some of our concerns. Naturally, there is more detail behind each of these, but even at this summary level, the problems overwhelmingly point to the appropriateness of the commission recommending denial of the rezoning request.

1. Traffic volume and safety – obvious, unresolved issues with traffic entering and leaving Rt. 53 and traveling through the area. Additionally, the impact on our Villages at Nahor neighbors would be catastrophic – changing, even ruining, the character and livability of their neighborhood. Previous dialog, including at your September 14th hearing, covered the likelihood, even the expectation, backed up traffic leaving the development via Rt 53 would cause drivers to divert through the Villages. But that neighborhood is a 55 and older subdivision with residents with medical needs living in the quiet, relaxed atmosphere they expected when buying. Further, it would be reasonable to expect the classic cut-through problems (vehicle/pedestrian issues, speeding, noise) which plague such traffic conditions. A related concern is the years of logging and then, construction traffic entering/leaving via a single access. That would exacerbate conditions on Rt. 53, creating safety challenges and by slowing traffic, impair the road's throughput.
2. Water & Sewer service to a huge number of new residences when there are already low-pressure problems in the area. Also, the impact on the Rivanna River water source is problematic, worsening the risk to the supply already susceptible to drought stress.
3. This proposal focuses on only one of the CPAs in the Comprehensive Plan, the Rivanna CPA (Lake Monticello and immediate surrounding area.) The other CPAs seem better fits for further residential development while the Rivanna CPA could benefit from commercial development instead of even more residential as has been proposed. Those considerations are critical to preserving the open space element of the CPA concept. In fact, more large-scale projects would make it impossible to meet the Comprehensive Plan's goals for this particular CPA. Recent building in the Rivanna CPA, including large projects underway or approved already are adding significant population. Still, further residential development could fit the plan, but not of the scope of this proposal.
4. Erosion and Sedimentation (E&S) effect on the Lake Monticello Watershed and ecosystem (by rule, not addressed in Planning Commission Process, but later, during building approvals). But it is important to look at the amount of effort taken by the County (and our organization) to gain even basic compliance with E&S requirements. That included Sycamore Square, The Villages at Nahor, and Crofton Plaza. We appreciate the County's efforts in moving on stormwater drainage in these areas, though it has taken years to eliminate the highly negative effects of incomplete or poorly maintained facilities on these nearby properties have had on our residents' property and our common areas including Tufton Pond and ultimately, Lake Monticello - part of the Chesapeake Watershed. We shudder at the thought of the possible damage to private property, our common areas and the Watershed by a project of this scope.
5. There are fire and safety suppression concerns with the limited access points to the proposed dense residential development. There are also related issues with the use of Garden Lane, both for emergencies and for its affect on the existing entrances to Lake Monticello. Also, there would be a predictable over-taxing of existing services, not just police and fire/rescue, but also schools and other civic service reponses.

6. We believe the proposed use violates the restrictive covenants on the Fox property. Though these are matters between the landowners and us, they directly affect the use that may be allowed. Overall, we opposed the project because its scope and impact on the quality of life in this corner of the county would be so negative and permanent. We will closely monitor developments but our position remains as stated: opposition to the requested re-zoning.

Yours truly,

A handwritten signature in black ink, appearing to read "Larry Henson", with a long, sweeping flourish extending to the right.

Larry Henson,
President

CC: Fluvanna County Planning Commission:

Chair, Barry Bibb

Vice-Chair, Gequetta Murray-Key

Patricia Eager

Ed Zimmer

Lewis Johnson

Howard Lagomarsino

Fluvanna County Board of Supervisors

Chair, John M. Sheridan

Vice-Chair, Tony O'Brien

Mozell Booker

Patricia Eager

Donald Weaver



1969

BOS 2022-01-19 p.329/1306

Lake Monticello Owners' Association
41 Ashlawn Boulevard
Palmyra, VA 22963
(434) 589-8263
www.LMOA.org

Southern Development continues to present a plan, including a specific proffer, that alters Garden Lane, a state road. It is my understanding that VDOT will only consider such alterations to a state road upon a request from the Board of Supervisors along with an acknowledgment that the county will assume financial responsibility for the altered portion.

Southern Development has also proposed narrow roads for Village Gardens that match the width of those in Village Oaks. The proposed solution to ensuring emergency vehicles have unfettered access to all of the Village Gardens residences is that on-street parking will not be allowed. Southern Development's proposed plan does not provide any evidence that each residence will have adequate off-street parking for residents and guests. Without ensuring adequate off-street parking, it is likely that emergency vehicles will not be able to navigate Village Garden's streets when residents or guests park on the street because they have no alternatives. As noted in the comments at the November 9 meeting of the Planning Commission, an ambulance was recently unable to navigate a street in Village Oaks because of on-street parking. Although Village Oaks does not allow on-street parking, it does not have any effective means to enforce the prohibition of on-street parking. It is likely that Village Gardens will also lack any effective means to enforce its prohibition of on-street parking.

Third, Southern Development has not presented an adequate response from Aqua Virginia regarding its ability to provide water and sewer for Village Gardens. Southern Development provided one page of an agreement that both it and Aqua Virginia MIGHT sign. It is reasonable to require a written letter of intent to serve signed by Aqua Virginia and Southern Development before any recommendation for approval or approval is given. The Staff Report notes that this is still missing.

Fourth, Aqua Virginia has not provided a written statement of how and when it will resolve the low water pressure issue for 72 houses at Lake Monticello. Nor has Aqua Virginia clarified that the resolution will be at no cost to the affected homeowners. It was surprising that the president of Aqua Virginia did not answer Ms. Murray-Key's questions on this issue. If Aqua Virginia will not answer a question from the Planning Commission or provide a solution to a long known problem, a detailed intent to serve letter signed by Aqua Virginia and Southern Development is essential.

Fifth, Southern Development did not address how it will ensure that erosion and sedimentation related to both construction and the completed development will not affect the Lake Monticello watershed.

Sixth, the staff report notes that Southern Development has generally defined its four phases of construction. While that is a nice statement, that "generally defined" information is not available to the public and it can't be fully evaluated until the complete application is available. Also, the draft agreement with Aqua Virginia states "[t]he residential lots and commercial establishment(s), which will be developed **in a phase . . .**" (emphasis added) The agreement seems to indicate Southern Development is planning on just one phase, not four.

Seventh, Southern Development's plan now includes additional property for commercial development along the northern line of an unnamed road replacing a part of Garden Lane. With required setbacks,



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the public can't even guess as to how many square feet of commercial space could be built on that space.

Eighth, Southern Development inadequately addressed the deed restrictions it faces with regard to two of the properties in its application for rezoning. The first property is the parcel owned by NVA Properties LLC (TMP 17-A-10). The second is the property owned by Priscilla Fox (TMP 18-A-18A).

With regard to the first property, Southern Development provided the August 12, 2005, deed between Daniel Best and Glorystone L.L.C. It did not provide the September 9, 2011, deed for the current owner, NVA Properties LLC. This is the parcel proposed for Village Gardens' access to Route 53 and 9,000 square feet of commercial development.

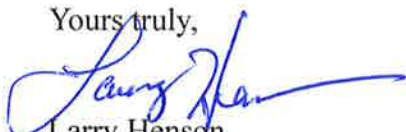
With regard to the second property, Southern Development provided the November 20, 1974, deed between Lake Monticello and Mary Forstbauer. This deed contains restrictions related to TMP 18-A-18A, which subsequently Mary Forstbauer gifted to Priscilla Fox.

Priscilla Fox sued LMOA with regard to the restrictions in her deed. The court did not rule on the meaning or effect of the covenant "not to take any actions or make any use of her land other than normal agricultural use, which will cause or result in pollution of the lake"

I have been led to believe that the county's position is that the restrictions are private issues. If I understand the county's position correctly, the Planning Commission and Board of Supervisors will consider Southern Development's request to rezone property with a clear limitation to agricultural uses and let the parties "work it out" through the court after the property is rezoned (if it is). This approach seems to be short-sighted since it would lead all property owners to believe that the county will ignore valid deed restrictions if it suits the interests of a developer. The county should not consider changing the zoning on a property which will conflict with deed restrictions.

I assure you that the LMOA Board intends to enforce the deed restrictions on the Fox property.

Yours truly,



Larry Henson
President

CC:

Fluvanna County Planning Commission
Vice-Chair, Gequetta Murray-Key
Supervisor, Patricia Eager
Ed Zimmer
Lewis Johnson
Howard Lagomarsino
County Administrator, Eric Dahl
Director of Community Development, Douglas Miles

RECEIVED

Fluvanna County
Planning Dept

9/13/2021

To: Southern Development Homes, 142 South Pantops Drive, Charlottesville VA 22911

From: Mat and Amee Cantagallo, 4 Sunset Ct, Palmyra VA 22963

Dear Southern Development Homes,


Thank you for the opportunity for us to voice our concerns to the proposed new development known as Village Gardens. This new R-3, mixed-use development would be built immediately adjacent to our home at Lake Monticello. Presently the area of land behind our home is undeveloped. Our concerns with this new development primarily lie with the detrimental ecological effects this development could impose on our surrounding lands, lake and neighbors. For starters, the acreage behind our home is situated on an aggressive slope, which during heavy rains, already naturally floods out the tributaries entering into Tufton pond. As part of this new re-zoning effort we would imagine that there would be exponential erosion effects from the excavation and removal of trees, brush, and land. Tufton pond, as part of our Lake Monticello's amenities package, is a highly sheltered habitat that will need to be preserved as part of any new development activities that Fluvanna Board of Supervisors authorizes in this vicinity.

Our second, more dire concern, is the plan for water and sewage associated with this new development. As a lake resident, we know that our Aqua Virginia water and sewage infrastructure is aged and could be unreceptive to any growth without substantial overhaul and upgrade. Proof of this is the waste water processing facility near the main entrance to Lake Monticello – emissions of noxious gasses on a daily occurrence can only be inferred to the growth our community has seen over the last 15 years with no substantial revitalization of our sewage and waste water infrastructure. As a lake resident, we would like to know in

[Phone] 

[Email] 

[Website] 

[Fax] 

transparency who will burden the increased costs of water and sewage waste management as a result of this new development?

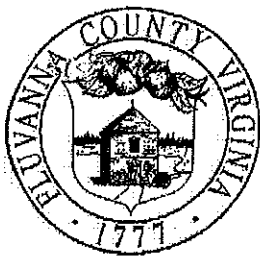
Finally, traffic patterns are a concern. RT 53 is the main egress for Village Gardens. RT 53 is a precarious road for many Fluvanna residents as it is predominantly a two-lane road with unhealthy traffic patterns out Monish gate and in route west towards Charlottesville. With this influx of 335 new mixed use development homes, the preponderance on new Fluvanna residents will be commuting to and from Charlottesville for employment causing more stress and congestion on RT 53. We should include VDOT in the necessary studies to measure increased traffic flow as a result of this new development and budget accordingly for the infrastructure upgrades RT 53 will need as a result.

Thank you for listening to our concerns for this development and we welcome constructive feedback from Fluvanna County and Village Gardens in regards to these concerns.

Best Regards

Mathew Cantagallo

Mat and Amee Cantagallo



COUNTY OF FLUVANNA

"Responsive & Responsible Government"

P.O. Box 540 Palmyra, VA 22963 (434) 591-1910 FAX (434) 591-1911 www.co.fluvanna.va.us

~~Susan Biel~~ p.333/1306

Director of Planning & Community Development
sbiel@co.fluvanna.va.us

April 21, 2005

Acres Development, LLC
Attn: Keith Smith
929 Lake Monticello Road
Palmyra, VA 22963

REF: ZMP 04:04

Dear Mr. Smith:

Please accept this letter as notification of the action taken on April 20, 2005 by the Board of Supervisors in regards to the request referenced above. Your request was **approved** with the following 14 proffers:

1. Acres Development L.L.C. proffers the attached Master Plan for land use, residential density, structure locations and site improvements.
 1. **Acres Development L.L.C. proffers that only a congregate care facility will be built on the parcel as shown on the Master Plan. No other land uses will be allowed.**
 2. The congregate care facility will consist of 60 to 80 dwellings with communal facilities and services, to include but not limited to; social activities, maintenance and housekeeping services, transportation services, dining services and other support services for its residents. The structure itself shall consist of one to three room units with- out kitchens, a communal dinning facility, recreation areas and facility management. If Nahor Village's Master Plan is approved and rezoned an application for a special use permit for the congregate care facility will be applied for within 90 to 120 days after rezoning.
2. "Nahor Village" will be an age restrictive master planned community for residents 50-55 years or older. This restriction shall apply for
3. Acres Developments L.L.C. will provide the right of ways (R.O.W.) for the upgrade and re-alignment of Rt. 636 (Garden Lane) as shown on the attached Master Plan and in accordance with VDOT's requirements and the attached traffic study. All required R.O.W.'s from Acres Development L.L.C. will be dedicated to VDOT as per VDOT's requirements.
4. Acres Developments L.L.C. will pave the existing Rt. 636 from the entrance of Rt. 636 and Rt. 53 to the furthest boundary line of Nahor Village on Rt. 636 in

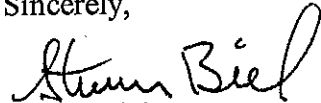
accordance with VDOT's requirements. The intent is to eliminate road dust, increase safety and the current road stone bed will not be altered.

5. Acres Development L.L.C. will improve the portion of Rt. 53 as shown on Master Plan in accordance with VDOT's requirements and the attached traffic study. In addition and if permissible by VDOT we would like to create a pedestrian walkway of a minimum of 5 feet wide from the entrance of Nahor Village to as close to Food Lion as feasible. All required R.O.W.'s from Acres Development L.L.C. will be dedicated to VDOT as per VDOT's requirements.
6. Acres Development L.L.C. will provide a water and sewer tap for CPV's future power plant and/or others as shown on the Master plan. CPV and or /others will be responsible for application for service, application fee, connection fee and any required engineering.
7. Acres Development L.L.C. will provide a water and sewer connection for "Haden Place". "Haden Place" and or /others will be responsible for application for service, application fee, connection fee and any required engineering.
8. Acres Development L.L.C. will provide a water and sewer connection for "Management Recruiters of Piedmont". "Management Recruiters of Piedmont" and or /others will be responsible for application for service, application fee, connection fee and any required engineering.
9. Acres Development L.L.C. will provide a deeded access easement to "Management Recruiters of Piedmont" matching the current road bed of Rt. 636 (Garden Lane) from the new commercial entrance to the end of the adjoining property with "Management Recruiters of Piedmont". Acres Development L.L.C. will build the commercial entrance to VDOT's specifications. "Management Recruiters of Piedmont" and or /others will be responsible for the maintenance of the access easement.
10. Acres Development L.L.C. has agreed with "Management Recruiters of Piedmont" to install screening along its adjoining property line, either in a form of a fence or landscaping. The type, location and style of the screening will be shown on the recorded plat / site plan.
11. Acres Development L.L.C. will provide a water and sewer connection for "Ground Effects". "Ground Effects" and or /others will be responsible for application for service, application fee, connection fee and any required engineering. Acres Development L.L.C. will convey fee simple at "Ground Effects" at no cost its half of the existing road bed.
12. Acres Development L.L.C. will maintain the Undisturbed Buffers, Landscaped Buffers and Open Spaces as per attached "Open Space Plan" of the Master Plan.

13. Acres Development L.L.C. will proffer to VDOT \$50,000.00 at VDOT's request and per. VDOT's requirements for the installation of a future traffic light at the entrance of Turkey-sag Trail and Rt. 53.
14. Acres Development L.L.C. will construct a water pressure booster station for Nahor Village. As per the attached letter from Aqua Virginia, this booster station will also serve the residents at The Acres at Lake Monticello.

If I can be of any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven Biel". The signature is fluid and cursive, with the first name "Steven" and last name "Biel" clearly distinguishable.

Steven Biel
Planning Director

Copy: File

**FLUVANNA COUNTY BOARD OF SUPERVISORS
AGENDA ITEM STAFF REPORT**

TAB B

MEETING DATE:	January 19, 2022				
AGENDA TITLE:	Historic Courthouse – Historic Structures Report				
MOTION(s):	<p>1. I move the Board of Supervisors approve the use of \$8,359 from the Historic Courthouse CIP funds to pay for the services of a qualified architectural firm to provide a Historic Structures Report of the Fluvanna County Historic Courthouse.</p> <p>2. I move the Board of Supervisors approve a supplemental appropriation of \$15,000 from the Fluvanna County Historical Society to the Historic Courthouse CIP Project to assist with funding for a Historic Structures Report.</p>				
STRATEGIC INITIATIVE?	Yes	No	If yes, list initiative(s):		
		X			
AGENDA CATEGORY:	Public Hearing	Action Matter	Presentation	Consent Agenda	Other
		X			
STAFF CONTACT(S):	Cyndi Toler, Purchasing Officer				
PRESENTER(S):	Cyndi Toler, Purchasing Officer				
RECOMMENDATION:	Approval				
TIMING:	Normal				
DISCUSSION:	<ul style="list-style-type: none"> • In March 2021 the Board approved funding to engage a specialized firm to conduct a Historical Structures report for the Historic Courthouse in order to aid in restoration of the structure and leverage grant funds. • \$20,000 was funded by the County and another \$10,000 was donated by the Historic Society for the project. • In June 2021 an RFP was issued for the services. 5 responses were received. With the assistance of Marvin Moss and Kathleen Kilpatrick from the Historic as well as Calvin Hickman, the Director of Public Works, 3 firms were interviewed. • Of those three firms the highest scoring firm is John Milner Associates. After negotiating the scope and fee's, the committee came up with what they believe to be necessary to move the project forward. • The total for the defined scope will be \$53,359, this includes 2 options for a mechanical assessment and for paint and mortar assessments. • As a gesture of how important they feel this project is, the Fluvanna County Historical Society has increased their total contribution from \$10,000 to \$25,000. 				

	<ul style="list-style-type: none"> This still leaves a gap in funding of \$8,359. We are asking the county to also increase the funding amount available by this amount so the project can be completed. The actual contract review has not been completed by the County Attorney's office. This will come to the board for approval at a later date. 				
FISCAL IMPACT:	<ul style="list-style-type: none"> Additional funding by Historical Society of \$15,000 Request additional funding by the County of \$8,359 				
POLICY IMPACT:	N/A				
LEGISLATIVE HISTORY:	N/A				
ENCLOSURES:	<ul style="list-style-type: none"> The Fluvanna Historical Society funding pledge Final cost proposal 				
REVIEWS COMPLETED:	Legal	Finance	Purchasing	HR	Other
		X	x		

December 3, 2021



County of Fluvanna, Virginia
132 Main Street
P.O. Box 540
Palmyra, VA 22963

ATTN: Cyndi Toler, VCO, VCA
Purchasing Agent
Submitted by e-mail: ctoler@fluvannacounty.org

RE: *County of Fluvanna, Request for Proposal #2021-05: Historic Structure Report, Fluvanna County Historic Courthouse*

Dear Ms. Toler:

We are pleased to submit a revised fee proposal for the Historic Structure Report of the Fluvanna County Historic Courthouse in Palmyra, Virginia. Our fixed fee is based on the scope of services as stipulated below.

Our team will prepare a historic structure report (HSR) which will include the information included in the RFP dated June 11, 2021, as revised by Addendum #1 dated July 8, 2021, and further modified by responses to our scope clarification questions received via email in September 2021, via phone on October 19, 2021, and via video call on November 22, 2021. The purpose of the HSR is to prepare a statement of significance, investigate the building, determine the existing conditions that affect the building fabric, develop treatment plan to accomplish any needed repairs, and to develop a report that will assist Fluvanna County in future fundraising and restoration efforts.

Scope of Work

1. Meet with the Fluvanna County project management team to review the project goals and schedule, including proposed dates and extent of field work. At this meeting our team will seek to learn of all known present deficiencies and extent of existing documentation. This meeting will occur immediately prior to the fieldwork kick-off meeting to be scheduled on the same day.
2. Utilizing the three-dimensional building scan completed by Will Roark of the University of Virginia, the team will prepare measured drawings. Measurements of the building scan will be confirmed via measurements taken on-site during an initial site visit. The following measured drawings will be prepared: three floor plans, roof plan, four elevations and two sections.
3. Receive archival documentation on the building provided by Fluvanna County and the Fluvanna County Historical Society. This potentially includes the recent structural evaluation of the roof framing by Craig Swift, PE and the 1973 renovation drawings of the building by Grigg, Wood & Browne.
4. Preparation of a concise and compelling statement of significance. To the extent documented by the records provided by Fluvanna County, the report will also include a record of changes to building over its lifespan and historic images and photographs.

Fluvanna County Historic Courthouse HSR – Fee Proposal

5. Carry out a general condition assessment of the interior and exterior of the building and its architectural and structural systems. The primary purpose of the investigation and assessment is to determine the condition of the areas, materials and the systems where, and on which, repair or restoration work is required to preserve the building. The recommendations will be specific as to the areas that require treatment and will provide clear and concise direction with regard to the appropriate repairs for the various elements and materials. Recommendations will be prioritized and arranged into phases at the direction of Fluvanna County. The team will obtain photographs to accompany the condition assessment, to assist the cost estimator, and to illustrate the report.
 - a. The structural assessment of the building will include a description of the structural system and a determination of the physical condition of the structural members plus any obvious problems. This does not include an analysis of the system's design.
 - b. The roof will be surveyed via drone photography and ladder. If Fluvanna County cannot provide a ladder, then JMAP will provide one.
6. If problematic issues are identified during our survey, we will immediately notify the County and, following consultation with the County, bring in such experts as may be needed for additional investigation and/or recommendations.
7. Determine type and quantity of work required and organize information for use by the cost estimator. A professional cost estimator will prepare a cost estimate based on the condition assessment and treatment plan. The cost estimate is to be an order of magnitude estimate allowing for market fluctuations, unforeseen conditions, and the pre-design stage of the project.
8. Submit a draft of the HSR for review by Fluvanna County and then meet with the County to review draft comments. Following revisions, submit the final report of the HSR to the County.
9. Submit digital versions of draft report for review. Submit twelve (12) hard copies and a digital version of the final report.

Assumptions:

1. Provisions will be made by Fluvanna County for JMA Preservation to access the building on agreed upon days when there will be no visitors present.
2. Fluvanna County will collect existing documentation materials and provide to JMA Preservation at the kick-off meeting. No additional archival research is included in the scope of work.
3. No materials analysis is included in the base proposal. Any materials/items which require additional investigation will be identified and recommendations for testing or ongoing field monitoring will be included in the report.
4. No destructive testing or removals for the purpose of gaining access to hidden conditions is included.
5. No limitations on operation of drone photography in the immediate vicinity of the historic courthouse building.
6. As outlined in the schedule below, we have included (3) meetings total for the project: #1) in-person project kick-off meeting with JMAP and Fluvanna County, #2) in-person fieldwork kick-off meeting with A/E team and Fluvanna County, and #3) remote draft HSR review meeting. Meetings #1) and #2) are budgeted so as to be held on the same day. Additional meetings can be held as additional services.
7. Assessment of the mechanical system is not included within the base proposal. The cost to perform this work is identified as an alternate below. If the mechanical assessment is not performed as a part of this project, such an investigation will be included in the report recommendations.

Fluvanna County Historic Courthouse HSR – Fee Proposal

8. Construction detail drawings and specifications are not required as a part of the treatment recommendations.
9. An accessibility analysis of the existing building is excluded from the scope of work.
10. A hazardous materials report is excluded from the scope of work.

Schedule:

Based on discussions during the interview, JMA Preservation estimates a six-month project schedule from the date of the Notice to Proceed. A project schedule will be confirmed with Fluvanna County upon receipt of the Notice to Proceed.

The project schedule will consist of the following activities:

- Field investigation
 - o Analysis of the existing building and documentation provided by Fluvanna County.
 - o An in-person kick-off meeting will be held with Fluvanna County and JMA Preservation on the same date as the first day of field work to allow for the project team to review the project and schedule. Immediately following this meeting, the Fluvanna County project team and the full A/E team will meet at the building to review pertinent items. All documentation is to be provided to the JMA Preservation team at the kick-off meeting.
 - o The field investigation effort will include photographic survey via drone.
- Draft HSR
 - o Preparation of draft Historic Structure Report.
 - o Submission of digital version of draft HSR to Fluvanna County.
 - o Remote meeting with JMA Preservation and Fluvanna County to review draft HSR.
- Final Submission
 - o Incorporation of comments and edits per Draft Review meeting.
 - o Submission of digital and hard copies of report.

Compensation

We have calculated our total fee for the work outlined in the Scope of Work described above as a lump sum fee of Forty Thousand Seven-Hundred Fifty-Nine Dollars and Zero Cents (\$40,759.00).

In addition to the base proposal noted above, indicated below are additional services as requested by Fluvanna County. If these services are desired, the contract amount will be adjusted to include the fees for the corresponding service.

Additional Services	Fee
Materials Analysis	See Attached
Mechanical Assessment	\$3,400.00

Invoices will be made monthly for work and expenses accrued during the past month. Additional services, if requested and authorized by Fluvanna County will be billed on an hourly basis at JMA Preservation's regular labor schedule.

All invoices will be due and payable within thirty (30) days of receipt and will carry an interest charge of 1.5% per month for any unpaid balance after thirty (30) days. If a dispute over an invoice has not been

Fluvanna County Historic Courthouse HSR – Fee Proposal

identified within thirty (30) days, the invoice shall not be subject to dispute pertaining to authorization, design or delivery of service.

Professional Services:

Services and documents provided are for information and use for the location listed herein only. We retain the copyright ownership of all documents and information produced. Such documents or information shall not be used by any entity other than the client listed herein or for any location other than this without prior written approval.

Limitations of Liability

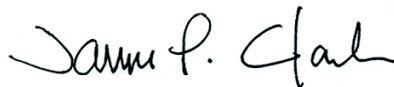
To the fullest extent allowed by law, the total liability related to this project from any cause or causes shall not exceed one third of the total compensation received under this agreement excluding reimbursable expenses.

Jurisdiction

This agreement will be governed by the laws of the Commonwealth of Virginia.

If this proposal is acceptable and reflects accurately our mutual understanding of the project, please sign and return this letter. We appreciate this opportunity to be of service to you and look forward to working with you on this and other projects in the future.

Sincerely,



James P. Clark, FAIA

Principal

MTFA Architecture, PLLC

Accepted,

Name

Title

Date

Attachment (1)

Materials Analysis Additional Services Fee Proposal

Fluvanna County Historic Courthouse HSR

Materials Analysis Additional Services Fee Proposal

Paint Analysis

Paint analysis requires taking representative samples of each painted surface such as pediment trim, fascia, windows, doors, shutter, soffits, columns, capitals etc. to determine the primary paint coating on the substrate. The samples are collected with scalpels and include a full stratigraphy to the substrate. The samples are mounted in resin, polished, and examined under a microscope in cross-section. The analyst will examine the paint layers in visible and UV light to detect all paint layers. Each layer will be color-matched to the Munsell system and compared to reveal a chromochronology of each element. Using experience and color-theory research, the analyst can make recommendation for a period color-scheme for the elements that matches the historic intent. The report will include photomicrographs of each sample, a written chromochronology of each layer, interpretation of the results and paint color recommendations.

Mortar Analysis

JMAP will collect mortar samples that represent the original mortar (some replacement mortars may be present) and use visual observation to select the appropriate mortar for further analysis. One sample will be sent to a qualified lab for Petrographic Analysis in accordance with ASTM C1324 Standard Test Method for Examination and Analysis of Hardened Masonry Mortar. Petrographic analysis is a microscopic evaluation of a thin-section of the mortar in transmitted light. Used by geologists to microscopically examine rocks, this method permits positive identification of the minerals in the sand, and better assessment of grain shape (related to the source of the sand). Petrographic analysis can also provide semi-quantitative data on the volume proportions of the sand, binder and voids through a technique called modal analysis. The results of this testing will provide recommendations for mortar replication mixes including ratios of lime and/or cement and sand. Repointing is often the first line of defense against water infiltration and having the right mortar mix that is compatible with the original mortar will allow the building envelope to function as designed.

OPTION 1

Scope of work:

- Travel to site to collect samples
 - o (60) paint samples collected / (30) to be processed
 - o (3) mortar samples collected / (1) to be processed (\$2,200 laboratory fee)
- Attend kick-off meeting
- Review Archival Materials
- Process collected samples and prepare chromachronology report material
- Travel reimbursables for (1) trip

Total fee for Materials Analysis Option 1: \$14,400.00

OPTION 2

The scope of work for paint analysis can be reduced to include only the paint sampling and chromochronology in a simple report that identifies paint colors using the Munsell color notation. The

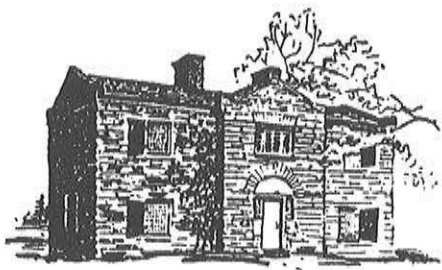
Materials Analysis Additional Services Fee Proposal

analysis will pinpoint the primary layers of paint above the substate, up to 5 layers maximum for each sample. This effort will not include interpretation of the results, the context of the historic decorative trends, or recommendations for paint scheme replications. The reduced effort will simply be a recording of the paint colors found on the samples.

Scope of Work

- Travel to site to collect samples
 - o (60) paint samples collected / (30) to be processed
 - o (3) mortar samples collected / (1) to be processed (\$2,200 laboratory fee)
 - o Attend kick-off meeting
- Process collected samples and prepare basic paint color report
- Travel reimbursables for (1) trip

Total fee for Materials Analysis Option 2: \$9,200.00



Fluvanna County Historical Society

BOS 2022-01-19 p.345/1306

Post Office Box Eight
Palmyra, Virginia 22963-0008
434-589-7910

December 23, 2021

Ms. Cyndi Toler, Purchasing Agent
Fluvanna County
PO Box 540
Palmyra, Virginia 22963

Dear Ms. Toler:

Following up on our recent meetings and discussions of the pending contract for an Historic Structure Report (HSR) for our historic courthouse, I am writing to share with you and the Board of Supervisors the Historical Society's on-going enthusiastic support for and commitment to this critical project. The restoration of the courthouse, a symbol of Fluvanna's identity, pride, and history, is the most important historic preservation undertaking in the modern history of the county. The work is as well a milestone for Virginia and the Nation in light of the courthouse being one of the earliest public buildings in the Greek Revival form in this country. We wish to thank you and Calvin Hickman for assisting us throughout this process as well as Kathleen Kilpatrick, Fluvanna resident and former Director of the Virginia Department of Historic Resources.

In an effort to reduce the cost of the report, the Society has offered to write a key contextual and background part of the HSR in house, thus saving thousands of dollars from the pending contract. This would provide a history of the building, a statement of significance, and, where possible, a chronology of previous changes and rehabilitation efforts. This undertaking would be led by Kathleen Kilpatrick; Tricia Johnson, Executive Director of Society; and the Society's many volunteers. It would clearly outline and document the national architectural and historical importance of the courthouse.

In order to move the courthouse restoration effort forward, the Society has decided to increase its funding commitment to the county as outlined below. In addition, I am personally committed to raising money for the actual restoration of the courthouse once the HSR is completed. The report would include the findings of a careful physical analysis, a listing of priorities to be addressed, treatment plans, including methodology, and estimated costs. Fundraising for the project would be very difficult absent a completed HSR, an essential step to such an important undertaking. The current bid proposal from the selected vendor is for a total project cost of \$53,359, which includes the basic contract as well as two options, both of which we feel are vital for planning and ultimately accomplishing an orderly restoration. The options are \$3,400 for a mechanical assessment and a materials analysis (including paint analysis) for \$9,200. The county has committed \$20,000 for

the HSR, and the Society initially promised to provide \$10,000. With two recent commitments of \$10,000 from grants and interested parties, we now would like to increase our commitment to \$25,000 leaving a balance of \$8,359 to be covered by the county. BHC 2022-01-19 p.346/1306

Please also remember the digital scans of the courthouse done by Will Rourk of UVA and his students; their efforts added greatly to our understanding of the structure and its restoration needs. This work came about through Mr. Rourk's association with our organization and saved the project thousands of dollars.

Completion of the restoration would once again be a prime example of the public/private partnerships the Society and Fluvanna County have mutually completed over the last two decades. We cannot overemphasize the importance of this building to almost every aspect of life in Fluvanna County since it was completed in 1831. The Society has increased its funding in order to move the project to fruition and to ensure that this majestic symbol of our county receives the attention it so badly needs.

With best regards, I am

Sincerely yours,



Marvin F. Moss

President

**FLUVANNA COUNTY BOARD OF SUPERVISORS
AGENDA ITEM STAFF REPORT**

TAB C

MEETING DATE:	January 19, 2022				
AGENDA TITLE:	Three Fire Apparatus Purchases				
MOTION(s):	<p><u>Motion #1</u> I move the Board of Supervisors to approve the contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a 2023 Pierce Enforcer Aerial Tower totaling \$1,623,580, and further authorize the County Administrator to execute the agreement subject to approval as to form by the County Attorney.</p> <p><u>Motion #2</u> I move the Board of Supervisors to approve the contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a Pierce 2000 Gallon Dryside Tanker totaling \$484,771, and further authorize the County Administrator to execute the agreement subject to approval as to form by the County Attorney.</p> <p><u>Motion #3</u> I move the Board of Supervisors to approve the contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a 2023 Pierce Enforcer Triple Combination Pumper totaling \$721,404, and further authorize the County Administrator to execute the agreement subject to approval as to form by the County Attorney.</p>				
STRATEGIC INITIATIVE?	Yes	No	If yes, list initiative(s):		
		x			
AGENDA CATEGORY:	Public Hearing	Action Matter	Presentation	Consent Agenda	Other
		x			
STAFF CONTACT(S):	Cyndi Toler, Purchasing Officer				
PRESENTER(S):	Cyndi Toler, Purchasing Officer				
RECOMMENDATION:	Approval				
TIMING:	Routine				
DISCUSSION:	<ul style="list-style-type: none"> In the FY22 budget, \$2,971,000 was budgeted for Fire and Rescue apparatus. In September 2021 the board increased that amount by \$471,500 due to price increases from Manufacturers. Totaling \$3,442,500 in approved debt funding for the equipment. The vehicles we are purchasing are all contingent on completing the debt service that is in process. There are 3 separate contracts for the 3 pieces of apparatus that are ready to be ordered. There is a sizable discount given to us if we prepay for a large portion of the vehicles. The details of those discounts are listed below: 				

	<ol style="list-style-type: none"> 1. Fork Union Pumper - Total Cost \$721,404; Prepayment amount \$616,906; Discount Amount \$24,333 2. Palmyra Tanker – Total Cost \$484,771; Prepayment amount \$398,410; Discount Amount \$9,268 3. Lake Monticello Tower Truck- Total Cost \$1,623,580; Prepayment amount \$1,375,071; Discount Amount \$57,325 <ul style="list-style-type: none"> ○ <u>3 Contracts Total = \$2,829,755.00</u> <ul style="list-style-type: none"> • The departments are still working on sourcing the remaining items to be purchased with the CIP Funds. 				
FISCAL IMPACT:	Budgeted as debt service				
POLICY IMPACT:	N/A				
LEGISLATIVE HISTORY:	N/A				
ENCLOSURES:	<ul style="list-style-type: none"> • Contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a 2023 Pierce Enforcer Aerial Tower totaling \$1,623,580 • Contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a Pierce 2000 Gallon Dryside Tanker totaling \$484,771 • Contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a 2023 Pierce Enforcer Triple Combination Pumper totaling \$721,404 				
REVIEWS COMPLETED:	Legal	Finance	Purchasing	HR	Other
	X	X	X		

Fire Apparatus Purchase #1:

Contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a 2023 Pierce Enforcer Aerial Tower totaling \$1,623,580.

This **Purchase Agreement No. 1** (together with all attachments and exhibits referenced herein, the “**Agreement**”), dated this ____ day of January, 2022, made and entered into by and between Atlantic Emergency Solutions, Inc., a Virginia corporation (“**Atlantic**”), and Fluvanna County, a political subdivision of the Commonwealth of Virginia (“**Customer**”) is effective as of the date specified in Article 3 hereof.

1. **Definitions.** The words below when used in this Agreement are defined as follows:

- a. “**Cooperative Agreement**” means collectively Exhibits 1, 2, and 3 to this Agreement (as defined in Article 2 below).
- b. “**County’s General Terms**” means Exhibit 9 to this Agreement (as defined in Article 2 below).
- c. “**Atlantic Proposal**” means collectively the *Cooperative Agreement*, *Proposal Letter* (being Exhibit 4 hereto), *Proposal* (being Exhibit 7 hereto), *Worksheet* (being Exhibit 5 hereto), *Proposal Options* (being Exhibit 6 hereto), and *Warranties* (being Exhibit 8 hereto), each exhibit being more specifically defined in Article 2 below.
- d. “**Options**” means all those options and additional features, services, work and items set forth or listed in Exhibit 5 (the “*Worksheet*”), Exhibit 6 (the “*Proposal Options*”) or Exhibit 7 (the “*Proposal*”), to this Agreement.
- e. “**Specifications**” means all of the general and particular *Specifications*, warranties, technical *Specifications*, training, and testing requirements for the Product contained in the *Atlantic Proposal* for the *Products* and services being provided to *Customer* under this Agreement and *Specifications* shall include all provisions and requirements under the *Cooperative Agreement*, *Warranty*, and the *County’s General Terms*.
- f. “**Product**” means the fire apparatus and any associated equipment manufactured or furnished for the *Customer* by *Atlantic* pursuant to the *Atlantic Proposal* and consistent with all requirements of the *Atlantic Proposal* and the *Specifications*, and specifically including all *Options*, as defined below, and delivery of Product to the *Customer* in Fluvanna County, Virginia along with at minimum one (1) day new delivery training and all training as set out in the *Atlantic Proposal* (the “*Training*”) or more training at a time and place convenient for the *Customer* in the *Customer’s* reasonable discretion and three (3) factory trips for four (4) department personnel (the “*Factory Trips*”) as set out in the *Worksheet*. Also included with the Product are those options, items, events, training, factory trips, airfare, meals, lodging and allowances set forth in the *Atlantic Proposal*, *Options* and *Worksheet* (as set out in Exhibit 5). *Options*, *Training*, *Factory Trips* and *Delivery* of Product are material parts of the Product under this Agreement.
- g. “**Delivery**” means the date *Atlantic* is prepared to make physical possession of the Product available to the *Customer* in Fluvanna County, Virginia at the following address: 10 Slice Road, Palmyra, Virginia 22963. **In any event Delivery and Training must occur no later than 18 months’ from the Agreement’s Effective Date, as defined below. Time is of the essence.**
- h. “**Acceptance**” The *Customer* shall have thirty (30) calendar days of *Delivery* or thirty (30) calendar days of completion of *Training*, whichever is later, to inspect the Product for conformance with the *Specifications*; unless the *Customer* sends *Atlantic* a Notice of Defect within thirty (30) calendar days of *Delivery* or the completion of *Training*, whichever is later, the Product will be deemed to be in conformance with the *Specifications* and accepted by the *Customer* excepting latent material defects. Nothing herein is intended to limit any repair, service or equipment covered under a *Warranty* (as defined below).
- i. “**Warranty**” means any and all warranties required under the *Cooperative Agreement*, *Atlantic Proposal*, including specifically the *Warranties* (as defined in Article 2), and the *County’s General Terms* (Exhibit 9).

2. Exhibits: The following exhibits are attached hereto and incorporated herein as material provisions of this Agreement:

- a. Exhibit 1: Fire Service Apparatus (All Types) Contract No FS12-19 between Houston-Galveston Area Council of Governments (“HGAC”) and *Atlantic* Emergency Solutions, Inc., dated October 25, 2019, as amended by that Amendment No. 1 to Contract No. FS12-19 for Fire Service Apparatus (All Types) dated October 4, 2021, which extended the term through May 31, 2022, and as further amended by Exhibit 12.
- b. Exhibit 2: HGAC solicitation for fire service apparatus (all types) FS12-19 issued June 27, 2019, including all suffixes, exhibits, attachments and amendments thereto (the “Solicitation”);
- c. Exhibit 3: *Atlantic* Response to FS12-19, including, but not limited to, prices and options offered and all suffixes, exhibits, attachments and amendments thereto (the “Bid”) (**Atlantic’s pricing in this Exhibit 3 is proprietary and Atlantic requests that the pricing in Exhibit 3 be redacted from published versions of this Agreement**);
- d. Exhibit 4: Proposal Letter from *Atlantic* Emergency Solutions, the *Atlantic* authorized sales and service dealership in Virginia, dated December 10, 2021 (the “Proposal Letter”);
- e. Exhibit 5: Contract Pricing Worksheet dated December 10, 2021 (the “Worksheet”);
- f. Exhibit 6: Proposal Option List dated December 11, 2021 for the Lake Monticello VFD Ascendant Tower (the “*Proposal Options*”);
- g. Exhibit 7: *Atlantic* Emergency Solutions Proposal to Lake Monticello Fire Department (the “Proposal”);
- h. Exhibit 8: Product Warranty Information (the “Warranties”);
- i. Exhibit 9: Fluvanna County’s General Terms, Conditions and Instructions to Bidders and Contractors (the “County’s General Terms”);
- j. Exhibit 10: Vendor Data Sheet, Proof of Authority to Transact Business in Virginia, Certificate of No Collusion, and Offeror Statement (collectively the “Vendor Forms” executed by *Atlantic*);
- k. Exhibit 11: **Performance Bond (to be provided by Atlantic consistent with Exhibit 4, Proposal Letter)**; and
- l. Exhibit 12: Amendment No 1 to Siddons Martin Emergency Group, LLC, (“Siddons”) agreement with HGAC under the Solicitation, Amendment No 1 to Pierce Manufacturing, Inc, (“Pierce”) agreement with HGAC under the Solicitation, those Contract Changes on Contract FS12-19 for the Supply of Fire Service Apparatus (All Types) letters both dated January 6, 2021, that letter from Siddons and Pierce to HGAC dated April 21, 2021, and that letter from HGAC to Siddons related to “Siddons-Martin 2021 HGAC FS12-19 Material Surcharge” dated May 3rd, 2021 (together the “Pricing Amendments”).

3. Purpose. This Agreement sets forth the terms and conditions of *Atlantic*’s sale of the Product to the Customer.

4. Cooperative Procurement. Pursuant to the Virginia Public Procurement Act, this a cooperatively procured contract off of the *Cooperative Agreement* for fire apparatus, incorporated herein by reference and made a material art of this Agreement. The Product must meet or exceed all requirements of the *Cooperative Agreement* and *Atlantic* must meet or exceed all requirements, provisions and terms of the *Cooperative Agreement* relating to the *Products* to be provided hereunder. Notwithstanding any other provisions hereof, *Atlantic* represents and warrants that all pricing in this Agreement for the *Products* is consistent with or lower than the pricing set forth in the *Cooperative Agreement* and all *Products* purchased hereunder are available under the *Cooperative Agreement*. **Atlantic represents and warrants to Customer that: (i) all pricing offered to Customer is consistent with or less than the pricing under the Cooperative Agreement between Atlantic and HGAC, as amended from time to time, under the Solicitation; and (ii) further its Bid was a joint bid with Siddons and Pierce and that**

Atlantic is bound by Pricing Amendments entered into by Siddons and Pierce, and that the pricing in Atlantic's Cooperative Agreement with HGAC has been amended consistent with the Pricing Amendments. Customer is materially relying on such representations and warranties in executing this Agreement as a cooperative procurement pursuant to Virginia law.

5. Term of Agreement. This Agreement will become effective as soon all of the following have occurred: (i) it is signed and approved by both *Customer* and *Atlantic's* authorized representatives (the "**Effective Date**"). This Agreement shall continue in full force and effect until the Completion Date or until sooner terminated consistent with the provisions hereof. Notwithstanding the foregoing, all training, continuing, guarantee and warranty provisions of this Agreement, included the *Warranty* as defined above, shall survive the Competition Date and shall continue for the specific warranty period beginning on the Completion Date until the applicable warranty period expires. Any and all provisions that by their terms are intended or implied to survive the Completion Date shall so survive.
6. Purchase and Payment. The *Customer* agrees to purchase the Product made pursuant to this Agreement, the *Atlantic Proposal* and the *Specifications*, with such Product being delivered and made consistent with all requirements of the *Cooperative Agreement* and the *County's General Terms*, for the total purchase price of **ONE MILLION SIX HUNDRED TWENTY-THREE THOUSAND FIVE HUNDRED EIGHTY AND NO/100 DOLLARS (\$1,623,580.00)** ("**Purchase Price**"). Prices are in U.S. funds. The Purchase Price reflects a prepayment discount which requires the *Customer* to prepay **ONE MILLION THREE HUNDRED SEVENTY-FIVE THOUSAND SEVENTY-ONE AND NO/100 DOLLARS \$1,375,071.00** (the "**Prepayment**") of the Purchase Price to *Atlantic* by the later of (i) within fourteen (14) days of the *Effective Date*; (ii) within five (5) days of the closing of that equipment financing (the "**Financing**") from which the Customer will obtain the funds for making the payments under this Agreement which is anticipated to close February 2, 2022; or (iii) the date the Performance Bond is delivered by *Atlantic* to *Customer*. The remainder of the Purchase Price, being **\$248,509.00**, may be invoiced by *Atlantic* to the County only after the *Completion Date*, as defined below, and the County shall have forty-five (45) days to pay such proper invoice. Final payment shall be made in accordance with Section 47 "**Payment**" of the *County's General Terms*, and in no event shall *Atlantic* be finally paid prior to the *Completion Date*. The date that all *Products* are delivered and are fully operational and all services and work related to the *Products* or necessary for completion of the *Products* in full compliance with this Agreement and all requirements of this Agreement are satisfied, to the sole satisfaction of the County is the "**Completion Date**". ***Atlantic shall deliver to the Customer at Agreement execution a Performance Bond from a in a form acceptable to the Customer from a Virginia surety company for the full Purchase Price. A form of performance bond acceptable to the Customer is attached as Exhibit 11.***
7. Future Changes. Various state or federal regulatory agencies (e.g. NFPA, DOT, EPA) may require changes to the *Specifications* and/or the Product and in any such event any resulting actual cost increases, without mark-up of any kind, incurred to comply therewith will be added to the Purchase Price to be paid by the *Customer*. *Atlantic* will document and itemize any such price increases for the *Customer*. If *Customer* fails to appropriate such additional funds, then the *Customer* may terminate this Agreement for cause and shall have no further liability of any kind hereunder and no cancellation charges of any kind shall apply; and any amounts prepaid to *Atlantic* shall be refunded to the *Customer* within ten (10) days of such termination. If such prepayment is not refunded within ten (10) days, a late fee of \$50.00 per day shall accrue for every day that such payment is delinquent.
8. Agreement Changes. The *Customer* may request that *Atlantic* incorporate a change to the *Products* or the *Specifications* for the *Products* by delivering a change order to *Atlantic*; provided, however, that any

such change order must be in writing and include a description of the proposed change sufficient to permit *Atlantic* to evaluate the feasibility of such change (“Change Order”). Within seven (7) business days of receipt of a Change Order, *Atlantic* will inform the *Customer* in writing of the feasibility of the Change Order, the earliest possible implementation date for the Change Order, of any increase or decrease in the Purchase Price resulting from such Change Order, and of any effect on production scheduling or *Delivery* resulting from such Change Order. *Atlantic* shall not be liable to the *Customer* for any delay in performance or *Delivery* arising from any such Change Order unless the delay is caused by the fault, willful act or negligence of *Atlantic*. A Change Order is only effective when counter-signed by *Atlantic*’s authorized representative; except that *Atlantic* may not unreasonably withhold or delay approval and signature of any Change Order.

9. Cancellation/Termination. In the event this Agreement is cancelled or terminated by Customer without cause and solely for Customer’s convenience before completion, *Atlantic* may charge a cancellation fee. The following cancellation fee charge schedule based on costs incurred may be applied: (a) 10% of the Purchase Price after the Effective Date; (b) 20% of the Purchase Price after completion of approval drawings, and; (c) 30% of the Purchase Price upon substantial material requisition. The cancellation fee will increase accordingly as actual costs are incurred as the order progresses through engineering and into manufacturing. Notwithstanding the foregoing, the cancellation fee may never exceed actual costs incurred by *Atlantic* under the Agreement up to cancellation or termination date and *Atlantic* must use its best efforts to mitigate any such costs through the sale of such Product to another purchaser; however Customer shall remain liable for the difference between the Purchase Price and, if applicable, the sale price obtained by *Atlantic* upon sale of the Product to another purchaser, plus any actual and reasonable costs incurred by *Atlantic* to conduct any such sale.

10. Delivery, Inspection and Acceptance.

(a) Delivery. *Delivery* of the Product is scheduled to be within 18 months’ after the Effective Date. Time being of the essence. Risk of loss shall pass to *Customer* upon *Delivery* of the Product to the *Customer* at Customer location with prior noticed of the *Delivery* Date and time provided to *Customer* in advance.

(b) Inspection and Acceptance. From *Delivery* or the completion of Training, whichever occurs later, *Customer* shall have thirty (30) days within which to inspect the Product for conformance to the *Specifications*, and in the event of non-conformance to the *Specifications* to furnish *Atlantic* with written notice sufficient to permit *Atlantic* to evaluate such non-conformance (“Notice of Defect”). Any Product not in conformance to *Specifications* shall be remedied by *Atlantic* within thirty (30) days from the Notice of Defect. In the event *Atlantic* does not receive a Notice of Defect within thirty (30) days of *Delivery* or the completion of Training, whichever is later, Product will be deemed to be in conformance with *Specifications* and Accepted by *Customer*, excepting latent defects. In the event that *Atlantic* fails to remedy a defect within thirty (30) days as required under this Agreement, *Customer* may choose to: (1) Reject the Product in its entirety and receive a complete reimbursement of any and all payments made to *Atlantic* under this agreement, *Atlantic* shall also be required at its sole cost and expense to remove the non-confirming Product from Kents Store, Virginia, and this Agreement shall be deemed null and void and of no further force and effect; or (2) Accept the non-conforming Product subject to a discount equal to either (i) the value of the missing or defective parts, equipment or portions of the Product including any cost to install or make such part, equipment or portion operable, or (ii) the actual cost of the missing or defective part, equipment or portion of the Product including any installation or service fees necessary to make such part, equipment or portion operable based on invoices and receipts. Nothing in this Article 10 is intended to limit any repairs, services or equipment covered under a *Warranty* provided with the

Product and *Atlantic* agrees to respond to all *Warranty* claims and repairs promptly and with due diligence.

11. Notice. Any required or permitted notices hereunder must be given in writing at the address of each party set forth below, or to such other address as either party may substitute by written notice to the other in the manner contemplated herein, by one of the following methods: hand delivery; registered, express, or certified mail, return receipt requested, postage prepaid; or nationally-recognized private express courier:

Atlantic:

Atlantic Emergency Solutions, Inc.

Director of Order Management
12351 Randolph Ridge Lane
Manassas, Virginia 20109
Phone: (703) 393-9911

Customer:

Fluvanna County

Attn: Ms. Cyndi Toler, Purchasing Officer
132 Main Street
P.O. Box 540
Palmyra, VA 22963
Phone: (434) 591-1937
With a Copy to: Fluvanna Count Attorney
414 East Jefferson Street
Charlottesville, VA 22902

12. Standard Warranty. Any applicable warranties are set forth in the *Atlantic Proposal* and *Warranty* definition in Article 1 *supra* and are incorporated herein as if set out in the text of this Agreement. Additional warranties contained in any exhibits hereto are expressly approved by *Atlantic* and incorporated into this Agreement and made a material part hereof as if set out in the text of this Agreement. Any other warranties must be expressly approved in writing by *Atlantic's* authorized representative.

a. Disclaimer. OTHER THAN AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER *ATLANTIC EMERGENCY SOLUTIONS*, AFFILIATES, SUBSIDIARIES, LICENSORS OR SUPPLIERS, THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, SHAREHOLDERS, AGENTS OR REPRESENTATIVES, MAKE ANY EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE *PRODUCTS* PROVIDED HEREUNDER OR OTHERWISE REGARDING THIS AGREEMENT, WHETHER ORAL OR WRITTEN, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, THE IMPLIED WARRANTY AGAINST INFRINGEMENT, AND THE IMPLIED WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED AND DISCLAIMED. STATEMENTS MADE BY SALES REPRESENTATIVES OR IN PROMOTIONAL MATERIALS DO NOT CONSTITUTE WARRANTIES.

b. Exclusions of Incidental and Consequential Damages. Other than as expressly set forth in this Agreement, in no event shall *Atlantic* be liable for consequential, incidental or punitive damages incurred by *Customer* or any third party in connection with any matter arising out of or relating to this Agreement, or the breach thereof, regardless of whether such damages arise out of breach of warranty, tort, contract, strict liability, statutory liability, indemnity, whether resulting from non-delivery or from *Atlantic's* own negligence, or otherwise. Notwithstanding the

foregoing, in the event that a dispute arises between the parties that results in litigation any reasonable attorneys' fees and costs of the substantially prevailing party in such litigation shall be paid by the other party.

13. Insurance. *Atlantic* Emergency Solutions maintains the following limits of insurance with a carrier(s) rated A- or better by A.M. Best:

Commercial General Liability Insurance:

<i>Products/Completed Operations</i>	Aggregate:
\$1,000,000	Each Occurrence:
	\$1,000,000

Umbrella/Excess Liability Insurance:

Aggregate:	\$25,000,000
Each Occurrence:	\$25,000,000

Atlantic will provide to the *Customer* a copy of a current Certificate of Insurance with the coverage listed above or the coverage required under the *County's General Terms*, the higher coverage requirement shall control. Where appropriate *Atlantic* will add *Customer* an additional insured for Commercial General Liability (subject to the terms and conditions of the applicable *Atlantic* insurance policy); and all policies will provide a 30-day notice of cancellation to the named insured.

14. Other Terms. The *County's General Terms* are attached hereto as Exhibit 9 and incorporated herein by reference as a material part of this Agreement.
15. Force Majeure. *Atlantic* shall not be responsible nor deemed to be in default on account of delays in performance due to causes which are beyond *Atlantic's* control which make *Atlantic's* performance impracticable, including but not limited to civil wars, insurrections, strikes, riots, fires, storms, floods, other acts of nature, explosions, earthquakes, accidents, any act of government, allocation regulations or other governmental orders affecting materials, equipment, facilities or completed *Products*, failure to obtain any required license or certificates not being the fault of *Atlantic*, acts of God or the public enemy or terrorism, failure of transportation, epidemics, quarantine restrictions, failure of vendors (due to causes similar to those within the scope of this clause) to perform their contracts or labor troubles causing cessation, slowdown, or interruption of work. **All parties acknowledge that Customer's Financing requires the Products be delivered and paid for no later than August 1, 2023.**
16. Default. The occurrence of one or more of the following shall constitute a default under this Agreement: (a) the *Customer* fails to pay when due any amounts under this Agreement or to perform any of its obligations under this Agreement; (b) *Atlantic* fails to perform any of its obligations under this Agreement with time being of the essence; (c) either party becomes insolvent or become subject to a bankruptcy or insolvency proceedings; (d) any representation made by either party to induce the other to enter into this Agreement is false in any material respect; (e) the *Customer* dissolves, merges, consolidates or transfers a substantial portion of its property to another entity; or (f) the *Customer* is in default or has breached any other contract or agreement with *Atlantic*. Upon the occurrence of an event of default by *Atlantic*, the *Customer* in its sole discretion may choose to immediately cancel and terminate this Agreement for cause with no further amounts due and payable hereunder to *Atlantic*. If *Customer* so chooses to cancel and terminate, then any amount already paid to *Atlantic* including any prepayments of any kind shall be immediately refunded to *Customer* with interest rate of (1%). This shall be in addition to any other remedies *Customer* may have in law or in equity owing to *Atlantic's* default.

17. Manufacturer's Statement of Origin. It is agreed that the manufacturer's statement of origin ("MSO") for the Product covered by this Agreement shall remain in the possession of *Atlantic* until the entire Purchase Price has been paid or the Product has been delivered to *Customer*, whichever is sooner. If more than one Product is covered by this Agreement, then the MSO for each individual Product shall remain in the possession of *Atlantic* until the Purchase Price for that Product has been paid in full or the Product has been delivered to *Customer*, whichever is sooner. In case of any default in payment, *Atlantic* may take full possession of the Product, and any payments that have been made shall be applied as payment for the use of the Product up to the date of taking possession.
18. Independent Contractors. The relationship of the parties established under this Agreement is that of independent contractors and neither party is a partner, employee, agent, or joint venture of or with the other.
19. Assignment. Neither party may assign its rights and obligations under this Agreement unless it has obtained the prior written approval of the other party.
20. Governing Law; Jurisdiction. Without regard to any conflict of laws provisions, this Agreement is to be governed by and under the laws of the state of Virginia.
21. Facsimile Signatures. The delivery of signatures to this Agreement by facsimile transmission shall be binding as original signatures.
22. Entire Agreement. This Agreement shall be the exclusive agreement between the parties for the Product. Additional or different terms proposed by the *Customer* shall not be applicable, unless accepted in writing by *Atlantic's* authorized representative. No change in, modification of, or revision of this Agreement shall be valid unless in writing and signed by *Atlantic's* authorized representative.
23. Conflict. Whenever possible the Agreement and exhibits shall be read together and the requirements of all of the same shall be met. In the event of a direct conflict between this Agreement and any exhibit hereto, the following shall be the order of precedence: (i) this Agreement; (ii) the Proposal Letter; (iii) the Proposal; (iv) the *Worksheet*; (v) the *Proposal Options*; (vi) Warranties; (vii) the *Cooperative Agreement*; and (viii) the County' General Terms. For clarification, (i) would control over (ii) though (viii); (ii) would control over (iii) through (viii); and so forth.

[Signature page to follow.]

In witness hereof the undersigned duly authorized representatives have executed this Contract on the dates set forth beside their respective signatures:

Atlantic:
Atlantic Emergency Solutions, Inc.

Customer:
County of Fluvanna, a political subdivision of the Commonwealth of Virginia

By: _____	Date: _____	By: _____	Date: _____
Name: _____		Name: _____	
Title: _____		Title: _____	

APPROVED AS TO FORM:

Fluvanna County Attorney, by Kristina M. Hofmann, Deputy Fluvanna County Attorney

H-GAC

Houston-Galveston Area Council
P.O. Box 22777 · 3555 Timmons · Houston, Texas 77227-2777

Cooperative Agreement - Atlantic Emergency Solutions, Inc. - Public Services - -

GENERAL PROVISIONS

This Agreement is made and entered into, by and between the Houston-Galveston Area Council hereinafter referred to as H-GAC having its principal place of business at 3555 Timmons Lane, Suite 120, Houston, Texas 77027 and Atlantic Emergency Solutions, Inc., hereinafter referred to as the Contractor, having its principal place of business at 12351 Randolph Ridge Lane, Manassas, VA 20109.

WITNESSETH:

WHEREAS, H-GAC hereby engages the Contractor to perform certain services in accordance with the specifications of the Agreement; and

WHEREAS, the Contractor has agreed to perform such services in accordance with the specifications of the Agreement;

NOW, THEREFORE, H-GAC and the Contractor do hereby agree as follows:

ARTICLE 1: LEGAL AUTHORITY

The Contractor warrants and assures H-GAC that it possesses adequate legal authority to enter into this Agreement. The Contractor's governing body, where applicable, has authorized the signatory official(s) to enter into this Agreement and bind the Contractor to the terms of this Agreement and any subsequent amendments hereto.

ARTICLE 2: APPLICABLE LAWS

The Contractor agrees to conduct all activities under this Agreement in accordance with all applicable rules, regulations, directives, standards, ordinances, and laws, in effect or promulgated during the term of this Agreement, including without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Contractor shall furnish H-GAC with satisfactory proof of its compliance therewith.

ARTICLE 3: INDEPENDENT CONTRACTOR

The execution of this Agreement and the rendering of services prescribed by this Agreement do not change the independent status of H-GAC or the Contractor. No provision of this Agreement or act of H-GAC in performance of the Agreement shall be construed as making the Contractor the agent, servant or employee of H-GAC, the State of Texas or the United States Government. Employees of the Contractor are subject to the exclusive control and supervision of the Contractor. The Contractor is solely responsible for employee related disputes and discrepancies, including employee payrolls and any claims arising therefrom.

ARTICLE 4: WHOLE AGREEMENT

The General Provisions, Special Provisions, and Attachments, as provided herein, constitute the complete Agreement ("Agreement") between the parties hereto, and supersede any and all oral and written agreements between the parties relating to matters herein. Except as otherwise provided herein, this Agreement cannot be modified without written consent of the parties.

ARTICLE 5: SCOPE OF SERVICES

The services to be performed by the Contractor are outlined in an Attachment to this Agreement.

ARTICLE 6: PERFORMANCE PERIOD

This Agreement shall be performed during the period which begins Dec 01 2019 and ends Nov 30 2021. All services under this Agreement must be rendered within this performance period, unless directly specified under a written change or extension provisioned under Article 14, which shall be fully executed by both parties to this Agreement.

ARTICLE 7: PAYMENT OR FUNDING

Payment provisions under this Agreement are outlined in the Special Provisions.

ARTICLE 8: REPORTING REQUIREMENTS

If the Contractor fails to submit to H-GAC in a timely and satisfactory manner any report required by this Agreement, or otherwise fails to satisfactorily render performances hereunder, H-GAC may terminate this agreement with notice as identified in Article 15 of these General Provisions. H-GAC has final determination of the adequacy of performance and reporting by Contractor. Termination of this agreement for failure to perform may affect Contractor's ability to participate in future opportunities with H-GAC. The Contractor's failure to timely submit any report may also be considered cause for termination of this Agreement.

Any additional reporting requirements shall be set forth in the Special Provisions of this Agreement.

ARTICLE 9: INSURANCE

Contractor shall maintain insurance coverage for work performed or services rendered under this Agreement as outlined and defined in the attached Special Provisions.

ARTICLE 10: SUBCONTRACTS and ASSIGNMENTS

Except as may be set forth in the Special Provisions, the Contractor agrees not to subcontract, assign, transfer, convey, sublet or otherwise dispose of this Agreement or any right, title, obligation or interest it may have therein to any third party without prior written approval of H-GAC. The Contractor acknowledges that H-GAC is not liable to any subcontractor or assignee of the Contractor. The Contractor shall ensure that the performance rendered under all subcontracts shall result in compliance with all the terms and provisions of this Agreement as if the performance rendered was rendered by the Contractor. Contractor shall give all required notices, and comply with all laws and regulations applicable to furnishing and performance of the work. Except where otherwise expressly required by applicable law or regulation, H-GAC shall not be responsible for monitoring Contractor's compliance, or that of Contractor's subcontractors, with any laws or regulations.

ARTICLE 11: AUDIT

Notwithstanding any other audit requirement, H-GAC reserves the right to conduct or cause to be conducted an independent audit of any transaction under this Agreement, such audit may be performed by the H-GAC local government audit staff, a certified public accountant firm, or other auditors designated by H-GAC and will be conducted in accordance with applicable professional standards and practices. The Contractor understands and agrees that the Contractor shall be liable to the H-GAC for any findings that result in monetary obligations to H-GAC.

ARTICLE 12: EXAMINATION OF RECORDS

The Contractor shall maintain during the course of the work complete and accurate records of all of the Contractor's costs and documentation of items which are chargeable to H-GAC under this Agreement. H-GAC, through its staff or designated public accounting firm, the State of Texas, and United States Government, shall have the right at any reasonable time to inspect, copy and audit those records on or

off the premises by authorized representatives of its own or any public accounting firm selected by H-GAC. The right of access to records is not limited to the required retention period, but shall last as long as the records are retained. Failure to provide access to records may be cause for termination of the Agreement. The records to be thus maintained and retained by the Contractor shall include (without limitation): (1) personnel and payroll records, including social security numbers and labor classifications, accounting for total time distribution of the Contractor's employees working full or part time on the work, as well as cancelled payroll checks, signed receipts for payroll payments in cash, or other evidence of disbursement of payroll payments; (2) invoices for purchases, receiving and issuing documents, and all other unit inventory records for the Contractor's stocks or capital items; and (3) paid invoices and cancelled checks for materials purchased and for subcontractors' and any other third parties' charges.

The Contractor further agrees that the examination of records outlined in this article shall be included in all subcontractor or third-party agreements.

ARTICLE 13: RETENTION OF RECORDS

The Contractor and its subcontractors shall maintain all records pertinent to this Agreement, and all other financial, statistical, property, participant records, and supporting documentation for a period of no less than seven (7) years from the later of the date of acceptance of the final payment or until all audit findings have been resolved. If any litigation, claim, negotiation, audit or other action involving the records has been started before the expiration of the retention period, the records shall be retained until completion of the action and resolution of all issues which arise from it, or until the end of the seven (7) years, whichever is later, and until any outstanding litigation, audit, or claim has been fully resolved.

ARTICLE 14: CHANGES AND AMENDMENTS

- A. Any alterations, additions, or deletions to the terms of this Agreement, which are required by changes in federal or state law or by regulations, are automatically incorporated without written amendment hereto, and shall become effective on the date designated by such law or by regulation.
- B. To ensure the legal and effective performance of this Agreement, both parties agree that any amendment that affects the performance under this Agreement must be mutually agreed upon and that all such amendments must be in writing. After a period of no less than 30 days subsequent to written notice, unless sooner implementation is required by law, such amendments shall have the effect of qualifying the terms of this Agreement and shall be binding upon the parties as if written herein.

ARTICLE 15: TERMINATION PROCEDURES

The Contractor acknowledges that this Agreement may be terminated for Convenience or Default.

- A. *Convenience*
H-GAC may terminate this Agreement at any time, in whole or in part, with or without cause, whenever H-GAC determines that for any reason such termination is in the best interest of H-GAC, by providing written notice by certified mail to the Contractor. Upon receipt of notice of termination, all services hereunder of the Contractor and its employees and subcontractors shall cease to the extent specified in the notice of termination.

The Contractor may cancel or terminate this Agreement upon submission of thirty (30) days written notice, presented to H-GAC via certified mail. The Contractor may not give notice of cancellation after it has received notice of default from H-GAC.

- B. *Default*

H-GAC may, by written notice of default to the Contractor, terminate the whole or any part of the Agreement, in any one of the following circumstances:

- (1) If the Contractor fails to perform the services herein specified within the time specified herein or any extension thereof; or
- (2) If the Contractor fails to perform any of the other provisions of this Agreement for any reason whatsoever, or so fails to make progress or otherwise violates the Agreements that completion of services herein specified within the Agreement term is significantly endangered, and in either of these two instances does not cure such failure within a period often (10) days (or such longer period of time as may be authorized by H-GAC in writing) after receiving written notice by certified mail of default from H-GAC.

ARTICLE 16: SEVERABILITY

H-GAC and Contractor agree that should any provision of this Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Agreement, which shall continue in full force and effect.

ARTICLE 17: FORCE MAJEURE

To the extent that either party to this Agreement shall be wholly or partially prevented from the performance of any obligation or duty placed on such party by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident, order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of force majeure shall rest solely with H-GAC.

ARTICLE 18: CONFLICT OF INTEREST

No officer, member or employee of the Contractor or subcontractor, no member of the governing body of the Contractor, and no other public officials of the Contractor who exercise any functions or responsibilities in the review or Contractor approval of this Agreement, shall participate in any decision relating to this Agreement which affects his or her personal interest, or shall have any personal or pecuniary interest, direct or indirect, in this Agreement.

ARTICLE 19: FEDERAL COMPLIANCE

Contractor agrees to comply with all federal statutes relating to nondiscrimination, labor standards, and environmental compliance. Additionally, for work to be performed under the Agreement or subcontract thereof, including procurement of materials or leases of equipment, Contractor shall notify each potential subcontractor or supplier of the Contractor's federal compliance obligations. These may include, but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) the Fair Labor Standards Act of 1938 (29 USC 676 et. seq.), (d) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of handicaps and the Americans with Disabilities Act of 1990; (e) the Age Discrimination in Employment Act of 1967 (29 USC 621 et. seq.) and the Age Discrimination Act of 1974, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (f) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (g) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to the nondiscrimination on the basis of alcohol abuse or alcoholism; (h) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (i) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (j) any other nondiscrimination provisions in any specific statute(s)

applicable to any Federal funding for this Agreement; (k) the requirements of any other nondiscrimination statute(s) which may apply to this Agreement; (l) applicable provisions of the Clean Air Act (42 U.S.C. §7401 et seq.), the Federal Water Pollution Control Act, as amended (33 U.S.C. §1251 et seq.), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and the Environmental Protection Agency regulations at 40 CFR Part 15; (m) applicable provisions of the Davis- Bacon Act (40 U.S.C. 276a - 276a-7), the Copeland Act (40 U.S.C. 276c), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-332), as set forth in Department of Labor Regulations at 20 CFR 5.5a; (n) the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

ARTICLE 20: CRIMINAL PROVISIONS AND SANCTIONS

The Contractor agrees to perform the Agreement in conformance with safeguards against fraud and abuse as set forth by the H-GAC, the State of Texas, and the acts and regulations of any related state or federal agency. The Contractor agrees to promptly notify H-GAC of any actual or suspected fraud, abuse, or other criminal activity through the filing of a written report within twenty-four (24) hours of knowledge thereof. Contractor shall notify H-GAC of any accident or incident requiring medical attention arising from its activities under this Agreement within twenty-four (24) hours of such occurrence. Theft or willful damage to property on loan to the Contractor from H-GAC, if any, shall be reported to local law enforcement agencies and H-GAC within two (2) hours of discovery of any such act.

The Contractor further agrees to cooperate fully with H-GAC, local law enforcement agencies, the State of Texas, the Federal Bureau of Investigation and any other duly authorized investigative unit, in carrying out a full investigation of all such incidents.

The Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against the Contractor pertaining to this Agreement or which would adversely affect the Contractor's ability to perform services under this Agreement.

ARTICLE 21: INDEMNIFICATION AND RECOVERY

H-GAC's liability under this Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to its order processing charge. In no event will H-GAC be liable for any loss of use, loss of time, inconvenience, commercial loss, lost profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor agrees, to the extent permitted by law, to defend and hold harmless H-GAC, its board members, officers, agents, officials, employees and indemnities from any and all claims, costs, expenses (including reasonable attorney fees), actions, causes of action, judgments, and liens arising as a result of Contractor's negligent act or omission under this Agreement. Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against Contractor relating to this Agreement.

ARTICLE 22: LIMITATION OF CONTRACTOR'S LIABILITY

Except as specified in any separate writing between the Contractor and an END USER, Contractor's total liability under this Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, but excluding its obligation to indemnify H-GAC, is limited to the price of the particular products/services sold hereunder, and Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. In no event will Contractor be liable for any loss of use, loss of time, inconvenience, commercial loss, loss of profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor understands and agrees that it shall be liable to repay and shall repay upon demand to

END USER any amounts determined by H-GAC, its independent auditors, or any agency of State or Federal government to have been paid in violation of the terms of this Agreement.

ARTICLE 23: TITLES NOT RESTRICTIVE

The titles assigned to the various Articles of this Agreement are for convenience only. Titles shall not be considered restrictive of the subject matter of any Article, or part of this Agreement.

ARTICLE 24: JOINT WORK PRODUCT

This Agreement is the joint work product of H-GAC and the Contractor. This Agreement has been negotiated by H-GAC and the Contractor and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against any party.

ARTICLE 25: DISPUTES

All disputes concerning questions of fact or of law arising under this Agreement, which are not addressed within the Whole Agreement as defined pursuant to Article 4 hereof, shall be decided by the Executive Director of H-GAC or his designee, who shall reduce his decision to writing and provide notice thereof to the Contractor. The decision of the Executive Director or his designee shall be final and conclusive unless, within thirty (30) days from the date of receipt of such notice, the Contractor requests a rehearing from the Executive Director of H-GAC. In connection with any rehearing under this Article, the Contractor shall be afforded an opportunity to be heard and offer evidence in support of its position. The decision of the Executive Director after any such rehearing shall be final and conclusive. The Contractor may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a court of competent jurisdiction. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Agreement and in accordance with H-GAC's final decision.

ARTICLE 26: CHOICE OF LAW: VENUE

This Agreement shall be governed by the laws of the State of Texas. Venue and jurisdiction of any suit or cause of action arising under or in connection with the Agreement shall lie exclusively in Harris County, Texas. Disputes between END USER and Contractor are to be resolved in accordance with the law and venue rules of the state of purchase. Contractor shall immediately notify H-GAC of such disputes.

ARTICLE 27: ORDER OF PRIORITY

In the case of any conflict between or within this Agreement, the following order of priority shall be utilized: 1) General Provisions, 2) Special Provisions, 3) Scope of Work, and, 4) Other Attachments.

SIGNATURES:

H-GAC and the Contractor have read, agreed, and executed the whole Agreement as of the date first written above, as accepted by:

Atlantic Emergency Solutions, Inc.

Signature



A4871434B7EC4DC...

Name

Joseph Pack

Title

President & CEO

Date

10/25/2019

H-GAC

Signature

DocuSigned by:



B2EC270D5D61423...

Name

Chuck Wemple

Title

Executive Director

Date

10/25/2019

H-GAC

Houston-Galveston Area Council
P.O. Box 22777 · 3555 Timmons · Houston, Texas 77227-2777

Cooperative Agreement - Atlantic Emergency Solutions, Inc. - Public Services -

SPECIAL PROVISIONS

Incorporated by attachment, as part of the whole agreement, H-GAC and the Contractor do, hereby agree to the Special Provisions as follows:

ARTICLE 1: BIDS/PROPOSALS INCORPORATED

In addition to the whole Agreement, the following documents listed in order of priority are incorporated into the Agreement by reference: Bid/Proposal Specifications and Contractor's Response to the Bid/Proposal.

ARTICLE 2: END USER AGREEMENTS ("EUA")

H-GAC acknowledges that the **END USER** may choose to enter into an End User Agreement ("EUA") with the **Contractor** through this Agreement, and that the term of the EUA may exceed the term of the current **H-GAC** Agreement. **H-GAC's** acknowledgement is not an endorsement or approval of the End User Agreement's terms and conditions. **Contractor** agrees not to offer, agree to or accept from the **END USER**, any terms or conditions that conflict with those in **Contractor's** Agreement with **H-GAC**. **Contractor** affirms that termination of its Agreement with H-GAC for any reason shall not result in the termination of any underlying EUA, which shall in each instance, continue pursuant to the EUA's stated terms and duration. Pursuant to the terms of this Agreement, termination of this Agreement will disallow the **Contractor** from entering into any new EUA with **END USERS**. Applicable **H-GAC** order processing charges will be due and payable to **H-GAC** on any EUAs, surviving termination of this Agreement between **H-GAC** and **Contractor**.

ARTICLE 3: MOST FAVORED CUSTOMER CLAUSE

Contractor shall provide its most favorable pricing and terms to H-GAC. If at any time during this Agreement, **Contractor** develops a regularly followed standard procedure of entering into agreements with other governmental customers within the State of Texas, and offers the same or substantially the same products/services offered to **H-GAC** on a basis that provides prices, warranties, benefits, and or terms more favorable than those provided to **H-GAC**, **Contractor** shall notify **H-GAC** within ten (10) business days thereafter, and this Agreement shall be deemed to be automatically retroactively amended, to the effective date of **Contractor's** most favorable past agreement with another entity. **Contractor** shall provide the same prices, warranties, benefits, or terms to **H-GAC** and its **END USER** as provided in its most favorable past agreement. **H-GAC** shall have the right and option at any time to decline to accept any such change, in which case the amendment shall be deemed null and void. If **Contractor** claims that a more favorable price, warranty, benefit, or term that was charged or offered to another entity during the term of this Agreement, does not constitute more favorable treatment, than **Contractor** shall, within ten (10) business days, notify **H-GAC** in writing, setting forth the detailed reasons **Contractor** believes the aforesaid offer is not in fact most favored treatment. **H-GAC**, after due consideration of **Contractor's** written explanation, may decline to accept such explanation and thereupon this Agreement between **H-GAC** and **Contractor** shall be automatically amended, effective retroactively, to the effective date of the most favored agreement, to provide the same prices, warranties,

benefits, or terms to H-GAC and the END USER.

***EXCEPTION:** This clause shall not be applicable to prices and price adjustments offered by a bidder, Proposer or contractor, which are not within bidder's/proposer's control [example; a manufacturer's bid concession], or to any prices offered to the Federal Government and its agencies.*

ARTICLE 4: PARTY LIABILITY

Contractor's total liability under this Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to the price of the particular products/services sold hereunder. Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. Contractor accepts liability to repay, and shall repay upon demand to END USER, any amounts determined by H-GAC, its independent auditors, or any state or federal agency, to have been paid in violation of the terms of this Agreement.

ARTICLE 5: GOVERNING LAW & VENUE

Contractor and H-GAC agree that Contractor will make every reasonable effort to resolve disputes with the **END USER** in accord with the law and venue rules of the state of purchase. **Contractor** shall immediately notify **H-GAC** of such disputes.

ARTICLE 6: SALES AND ORDER PROCESSING CHARGE

Contractor shall sell its products to **END USERS** based on the pricing and terms of this Agreement. **H-GAC** will invoice **Contractor** for the applicable order processing charge when H-GAC receives notification of an END USER order. **Contractor shall remit to H-GAC** the full amount of the applicable order processing charge, after delivery of any product or service and subsequent END USER acceptance. Payment of the Order Processing Charge shall be remitted from Contractor to H-GAC, within thirty (30) calendar days or ten (10) business days after receipt of an END USER's payment, whichever comes first, notwithstanding Contractor's receipt of invoice. For sales made by **Contractor** based on this Agreement, including sales to entities without Interlocal Agreements, **Contractor** shall pay the applicable order processing charges to **H-GAC**. Further, **Contractor** agrees to encourage entities who are not members of H-GAC's Cooperative Purchasing Program to execute an **H-GAC** Interlocal Agreement. **H-GAC** reserves the right to take appropriate actions including, but not limited to, Agreement termination if **Contractor** fails to promptly remit the appropriate order processing charge to H-GAC. In no event shall **H-GAC** have any liability to **Contractor** for any goods or services an **END USER** procures from **Contractor**. At all times, **Contractor** shall remain liable to pay to **H-GAC** any order processing charges on any portion of the Agreement actually performed, and for which compensation was received by **Contractor**.

ARTICLE 7: LIQUIDATED DAMAGES

Contractor and H-GAC agree that Contractor shall cooperate with the END USER at the time an END USER purchase order is placed, to determine terms for any liquidated damages.

ARTICLE 8: INSURANCE

Unless otherwise stipulated in Section B of the Bid/Proposal Specifications, **Contractor** must have the following insurance and coverage minimums:

- a. **General liability** insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General

Aggregate limit of at least two times the Single Occurrence limit.

Product liability insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit for all Products except Automotive Fire Apparatus. For Automotive Fire Apparatus, see Section B of the Bid/Proposal Specifications.

Property Damage or Destruction insurance is required for coverage of **End User** owned equipment while in **Contractor's** possession, custody or control. The minimum Single Occurrence limit is \$500,000.00 and the General Aggregate limit must be at least two times the Single Occurrence limit. This insurance may be carried in several ways, e.g. under an Inland Marine policy, as part of Automobile coverage, or under a Garage Keepers policy. In any event, this coverage must be specifically and clearly listed on insurance certificate(s) submitted to **H-GAC**.

- b. Insurance coverage shall be in effect for the length of any contract made pursuant to the Bid/Proposal, and for any extensions thereof, plus the number of days/months required to *deliver* any outstanding order after the close of the contract period.
- c. Original Insurance Certificates must be furnished to **H-GAC** on request, showing **Contractor** as the insured and showing coverage and limits for the insurances listed above.
- d. If any Product(s) or Service(s) will be provided by parties other than **Contractor**, all such parties are required to carry the minimum insurance coverages specified herein, and if requested by **H-GAC**, a separate insurance certificate must be submitted for each such party.
- e. **H-GAC** reserves the right to contact insurance underwriters to confirm policy and certificate issuance and document accuracy.

ARTICLE 9: PERFORMANCE AND PAYMENT BONDS FOR INDIVIDUAL ORDERS

H-GAC's contractual requirements DO NOT include a Performance & Payment Bond (PPB); therefore, Contractor shall offer pricing that reflects this cost savings. **Contractor** shall remain prepared to offer a PPB to cover any order if so requested by the **END USER**. **Contractor** shall quote a price to **END USER** for provision of any requested PPB, and agrees to furnish the PPB within ten business (10) days of receipt of **END USER's** purchase order.

ARTICLE 10: CHANGE OF STATUS

Contractor shall immediately notify **H-GAC**, in writing, of **ANY** change in ownership, control, dealership/franchisee status, Motor Vehicle license status, or name. Contractor shall offer written guidance to advise H-GAC if this Agreement shall be affected in any way by such change. **H-GAC** shall have the right to determine whether or not such change is acceptable, and to determine what action shall be warranted, up to and including cancellation of Agreement.

ARTICLE 11: TEXAS MOTOR VEHICLE BOARD LICENSING

All that deal in motor vehicles shall maintain current licenses that are required by the Texas Motor Vehicle Commission Code. If at any time during this Agreement term, any required **Contractor** license is denied, revoked, or not renewed, **Contractor** shall be in default of this Agreement, unless the Texas Motor Vehicle

Board issues a stay or waiver. Contractor shall promptly provide copies of all current applicable Texas Motor Vehicle Board documentation to **H-GAC** upon request.

	Attachment A	
	Atlantic Emergency Solutions, Inc.	
	Fire Service Apparatus (All Types)	
	Contract No. FS12-19	
V. Pierce		
These units can only be sold outside Texas		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19VA01	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$841,899.00
FS19VA02	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$875,497.00
FS19VA03	Pierce Enforcer Chassis 4-Door 75' Aluminum Rear Mounted Telescoping Ladder, Formed Aluminum Body	\$827,652.00
FS19VA04	Pierce Arrow Chassis 4-Door 100' Aluminum Rear Mount Aerial, Aluminum Body, Tandem Axle	\$1,126,674.00
FS19VA05	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Rear-Mounted Telescoping Ladder	\$936,103.00
FS19VA06	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 107' Rear-Mounted Telescoping Ladder	\$981,819.00
FS19VA07	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 110' Rear-Mounted Telescoping Platform	\$1,031,013.00
FS19VA08	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 105' Rear-Mounted Telescoping Ladder (500#)	\$982,626.00
FS19VA09	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	\$1,322,460.00
FS19VA10	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Rear-Mounted Telescoping Ladder with Platform (750#)	\$1,254,844.00
FS19VA11	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Tractor Drawn - Mid-Mounted Telescoping Ladder (#500)	\$1,266,367.00
B. Wildland Fire Apparatus		
FS19VB01	Pierce Brush Fire Apparatus, Ford F450, Formed Aluminum Utility Body	\$138,870.00
FS19VB02	Pierce Brush Fire Apparatus, Ford F-550 Mini Pumper 500 gpm, 300 tank	\$215,358.00
FS19VB03	Freightliner 4-Door 4 x 4 Wildland, 500 water, 1000 gpm Pump	\$364,240.00
C. Pumper Fire Apparatus		
FS19VC01	M2 Freightliner, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$264,379.00
FS19VC02	IHC, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$273,152.00
FS19VC03	KW, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$267,171.00
FS19VC04	Peterbilt, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$275,936.00
FS19VC06	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$456,160.00
FS19VC07	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$492,768.00

FS19VC08	Pierce Velocity, 4- Door Full Tilt Cab, Aluminum Long Body, 1250 gpm mid-mounted Pump	\$578,586.00
FS19VC09	Pierce Dash CF, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, PUC Body Pumper	\$643,725.00
D. Special Service Apparatus (Walk-In Bodies) Multi-use: Rescue, RE-Hab, Hazmat, Mobile Command Center		
FS19VD01	Ford F-550 4- Door, 12 'Non-Walk-in Formed Aluminum Body	\$154,273.00
FS19VD02	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$208,337.00
FS19VD03	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$210,190.00
FS19VD04	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$204,051.00
FS19VD05	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$214,955.00
FS19VD06	Pierce Saber FR, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Encore Body 18.5'	\$396,673.00
FS19VD07	Pierce Enforcer 4-Door, Aluminum Cab, Single Axle, Formed Aluminum Body, Non Walk-in HDR Body	\$497,432.00
FS19VD08	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Non-Walk-in HDR Body	\$609,953.00
FS19VD09	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$300,407.00
FS19VD10	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$302,928.00
FS19VD11	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$298,047.00
FS19VD12	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$305,177.00
FS19VD13	Pierce Enforcer 4-Door, Full Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-in HDR Body	\$598,680.00
FS19VD14	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in HDR Body	\$704,579.00
FS19VD15	Pierce Velocity 2-Door, Aluminum Cab, Tandem Axle, Combination Formed Aluminum Body	\$747,407.00
FS19VD16	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in Communications Body	\$776,914.00
E. Pumper/Tankers & Tankers		
FS19VE01	Freightliner 2 Door, Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$276,292.00
FS19VE02	IHC 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$279,029.00
FS19VE03	Kenworth 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$276,490.00
FS19VE04	Peterbilt 2dr Single Axle Tanker, Aluminum w/2000 water & 500 pump	\$303,543.00
FS19VE05	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted	\$508,722.00
FS19VE06	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted	\$584,155.00
FS19VE07	Freightliner 2dr, Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$304,897.00
FS19VE08	IHC 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$317,114.00
FS19VE09	Kenworth 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$294,582.00
FS19VE10	Peterbilt 2dr Tandem Axle Tanker, Aluminum w/3000 water & 500 pump	\$305,758.00
FS19VE11	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$507,029.00
FS19VE12	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$602,900.00

FS19VE13	Pierce Velocity, 4-Door Aluminum Cab, Tandem Axle, Aluminum Pumper/Tanker 2000 Gallon Body, 1500 GPM Pump	\$630,280.00
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AMENDMENT No. 1 to CONTRACT No. FS12-19**For**

Fire Service Apparatus (All Types)

Between**HOUSTON-GALVESTON AREA COUNCIL****And****Atlantic Emergency Solutions, Inc.**


THIS AMENDMENT modifies the above referenced Contract as follows:

This contract is extended through May 31, 2022 Midnight CT.

Unless otherwise noted, this amendment goes into effect on the date signed by **H-GAC**. All other terms and conditions of this Contract shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized representatives.


Signed for **Houston-Galveston Area Council**,
Houston, Texas

DocuSigned by:

82EC270D5D61423

Chuck Wemple, Executive Director
Date: 10/4/2021

Signed for: **Atlantic Emergency Solutions, Inc.**

Printed Name & Title:

DocuSigned by:

AAA0EAC3E560410...

Jack Jackson Secretary
Date: 10/4/2021



COOPERATIVE PURCHASING PROGRAM
 Houston-Galveston Area Council of Governments
 3555 Timmons, Suite 120, Houston, TX 77027
 Phone: 800-926-0234 Fax: 713-993-4548
www.hgacbuy.org

INVITATION TO SUBMIT COMPETITIVE:

☒ BIDS

☐ PRE-PROPOSAL

INVITATION No.: **FS12-19**

ISSUE DATE: **June 27, 2019**

CATEGORY: **Fire Service Apparatus (All Types)**

PURPOSE OF THIS INVITATION

The Cooperative Purchasing Program (**HGACBuy**) of the Houston-Galveston Area Council of Governments is soliciting offerings for the furnishing of products/services as described herein. These products/services may be purchased by any of more than 7000 member local governments, districts, agencies in 49 states across the nation.

Responses must be submitted in an original and one (1) copy, and shall be subject to the terms, conditions, requirements and specifications detailed in the documents comprising this Invitation. Responses are scheduled to be opened publicly at **H-GAC** offices on the date indicated. For Bid Invitations, responses will be available for public review until 4:00 p.m. CT that day, and on subsequent days by appointment only. Any Responses submitted later than 1:00 p.m. on the due date will be returned unopened to the bidder/proposer.

PROCUREMENT SCHEDULE & DETAILS

DRAFT SPECIFICATION / INVITATION:	May 1, 2019
PRE-BID/PROPOSAL CONFERENCE:	June 5, 2019 @ 9:00 a.m. CT; H-GAC Offices
FINAL SPECIFICATION / INVITATION:	June 27, 2019
BID/PROPOSAL RESPONSES DUE:	July 24, 2019 @ 1:00 p.m. CT; H-GAC Clock
PUBLIC RESPONSE OPENING:	July 24, 2019 @ 2:00 p.m. CT; H-GAC Clock
RECOMMENDATIONS TO BOARD:	October 15, 2019
CONTRACT START DATE & TERM:	December 01, 2019 through November 30, 2021
The documents comprising this Invitation are available via web download at: https://www.hgacbuy.org/bids/	
For assistance regarding this Invitation, please contact:	
Name: Jackie Palmer	Phone: 713-993-2466 E-mail: jpalmer@h-gac.com

CONTENTS OF THIS INVITATION

SECTION A - General Terms & Conditions

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This procurement conforms to government requirements for Competitive Procurement.

LABELING OF SEALED RESPONSE PACKAGE**IMPORTANT:**

You must affix an identifying label to the outside of your Sealed Response Package to ensure proper identification and log-in at **HGACBuy** offices on receipt. **HGACBuy** is not responsible for any response that might be lost or misdirected due to improper or unclear labeling. Your label should look as follows and should be affixed conspicuously to the package.



Responses by E-mail or FAX will not be acceptable. Hard copies, as described herein, plus appropriate electronic media are required.



SECTION A

GENERAL TERMS & CONDITIONS FOR BIDS AND PROPOSALS

INVITATION No. FS12-19
DESCRIPTION: Fire Service Apparatus (All Types)

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1. INTRODUCTION

The Houston-Galveston Area Council (**H-GAC**) is a "Government-to-Government" procurement service for States, State Agencies, Local Governments, Districts, Authorities, and qualifying Not-for-Profit Corporations (**End Users**). End Users become **Members** of the **H-GAC** Cooperative Purchasing Program (**HGACBuy**) by executing an Interlocal Contract, which is free of cost and evergreen unless cancelled. **HGACBuy**, acting on behalf of **Members**, is soliciting competitive offerings for the furnishing of products and/or services, as described elsewhere, which MAY be purchased by **Members** during the contract term. **Members** using the Program issue purchase orders directly to **HGACBuy** contractors.

2. DEFINITIONS, ABBREVIATIONS & ACRONYMS

The following definitions, abbreviations and acronyms may be found in these specifications, and shall be interpreted herein as specified below.

Definitions and Abbreviations:

Acceptance. Acceptance takes place when the **End User** agrees with the **Contractor** that the terms and conditions of the contract have been met and verified. Acceptance is not the same as Receipt, and can only occur after intact shipping, inspection by **End User**, and any onsite testing that has been stipulated as part of the order

Aggregate/Single Occurrence. The term "*aggregate*" in insurance terms is the sum of all claims against a specific policy for a specific loss incident. The term "*single occurrence*" differentiates between multiple claims and single claims against a specific policy. The inherent value of a policy's aggregate value is less important to an **End User** than is the value of a single claim as stated under "*single occurrence*."

Approved. Acceptable to the "authority having jurisdiction."

ARO. "After Receipt of Order". Used in conjunction with a defined time period (usually days or weeks) to establish the delivery or lead time pursuant to any individual purchase transaction. In the case of orders for bodies which will be mounted on a customer furnished cab/chassis, the term ARO shall be construed to mean "After Receipt Of Cab/Chassis".

Authority Having Jurisdiction. The authority shall be either **H-GAC** or the relevant **End User** based on the requirements as stated in each specification item. Unless specifically stated, the authority shall be **H-GAC**.

Bidder. Any entity that submits a competitive bid to this Invitation. (See also "**Offeror**")

Change Order. Request by an **End User** for a change in the composition of an already submitted purchase order, for example to change quantity ordered, add or delete items, etc.

Contract. Specifically, a contract between **H-GAC** and a successful **Offeror** which is executed based on an award made pursuant this Invitation.

Contract Pricing Worksheet. The standard **H-GAC** form to be used by **Contractor** in preparing a quotation to an End User, upon which End User's purchase order will be based. **Contractor** may use another quotation form provided it contains required information, and only if approved by **H-GAC**.

Contractor. The contracted business entity responsible for fulfilling a contract executed pursuant to this Invitation.

Dealer/Distributor. A duly authorized and/or franchised business entity which sells and services a manufacturer's product in a specified marketing area.

Defect. A discontinuity in a part or a failure to function that interferes with the service or reliability for which the part was intended.

Electronic Media. As used herein, means computer based media such as 100mb Zip Disk, CDRom, e-mail, e-mail attachment, file downloaded from the web, etc.

End User. (See "**Participant**" and "**Member**")

Listed. Equipment or materials included in a list published by an organization, acceptable to the "Authority Having Jurisdiction" and concerned with product evaluation, that conducts periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or materials meet appropriate standards or has been tested and found suitable for use in a specified manner. NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

Manufacturer. The person or persons, company firm, corporation, partnership, or other organization responsible for taking raw materials or components and making a finished product.

May. A term indicating a permissive use or an acceptable alternative to a specified requirement.

Member. An authorized Participant in the Program. (See "**Participant**" and "**End User**")

Motor Vehicle. The meaning of this term shall be based on the legal definition ascribed to it by the laws and/or regulations of the state in which any specific sale made pursuant to a Contract takes place.

Must. A term indicating a mandatory requirement.

Offer or Offering. Any product or service offered in reply to this Invitation.

Offeror. Any entity that submits a competitive bid or proposal in response to this Invitation. Bidder or Proposer.

Participant. Generally, any qualifying governmental or non-profit entity which has executed an Interlocal Contract for cooperative purchasing services with **H-GAC**.

Product Liability Insurance. Failure of Components and/or assembled equipment resulting in personal injury, disability or death and/or property damage is covered under the product liability insurance provisions.

Product or Product Item. Any of the specific goods, materials, equipment or service(s) specified in this Invitation. This term encompasses the base line item itself, and any and all accessories, options, modifications, ancillary services, assembly, testing, etc. that may be included in the delivered Product.

Proposer. Any entity that submits a competitive proposal in response to this Invitation. (See also "**Offeror**")

Purchaser. The **End User** having responsibility for the specification, requisition, ordering and acceptance of the Product or Service. (See also "**End User**")

Purchasing Authority. The agency that has sole responsibility and authority for negotiating, placing and, if necessary, modifying any solicitation, purchase order, or other award issued by a governing body [**H-GAC**].

Quotation. See "Contract Pricing Worksheet".

Receipt. Receipt takes place when a Product or Service is delivered to an **End User** and a document is executed that establishes that the Product is now in the possession of the **End User** or that the Service has been completed. Receipt DOES NOT connote or imply Acceptance.

Response. All or part of any offering submitted in response to this Invitation.

Shall. A term indicating a mandatory requirement or action.

Should. A term indicating a recommended or advised response to a specified requirement.

Vendor. A manufacturer's representative or dealer authorized to make sales and supply parts and service.

Acronyms:

ANSI = American National Standards Institute

ASTM = American Society for Testing and Materials

ASME = American Society of Mechanical Engineers

CFR = U.S. Code of Federal Regulations

DOJ = U.S. **D**epartment **O**f **J**ustice
DOT = U.S. **D**epartment **O**f **T**ransportation
EPA = U.S. **E**nvironmental **P**rotection **A**gency
FAA = **F**ederal **A**viation **A**dmistration
FMVSS = U.S. **F**ederal **M**otor **V**ehicle **S**afety **S**tandards
H-GAC = **H**ouston-**G**alveston **A**rea **C**ouncil of Governments
IEEE = **I**nstitute of **E**lectrical and **E**lectronics **E**ngineers
MVD = **M**otor **V**ehicle **D**ivision of Texas Department of Transportation
NFPA = **N**ational **F**ire **P**rotection **A**ssociation
NHTSA = **N**ational **H**ighway **T**raffic **S**afety **A**dministration
NIOSH = **N**ational **I**nstitute **F**or **O**ccupational **S**afety **A**nd **H**ealth
NIST = **N**ational **I**nstitute of **S**tandards and **T**echnology
NTEA = **N**ational **T**ruck **E**quipment **A**ssociation
OSHA = U.S. **O**ccupational **S**afety and **H**ealth **A**dministration
RRC = **R**ailroad **C**ommission of Texas
SAE = **S**ociety of **A**utomotive **E**ngineers
TBPC = **T**exas **B**uilding and **P**rocurement **C**ommission (formerly GSC)
TxDOT = **T**exas **D**epartment **O**f **T**ransportation
UL = **U**nderwriter's **L**aboratories Inc.
VTCS = **V**ernon's **T**exas **C**ivil **S**tatutes

3. NON-BINDING ORAL COMMENTS

No oral comment, utterance or response made by any employee, member, or agent of **H-GAC** or any Member of the Cooperative Purchasing Program shall be considered factual or binding with regard to this Invitation, or any contract awarded as a result of this Invitation. Valid and binding terms, conditions, provisions, changes or clarifications, or requests thereof, shall ONLY be communicated written form.

4. STRUCTURE OF RESPONSE

Depending on the Product or Service, market structures and sales practices can differ substantially. For example, dealers may sell into any market or may be restricted to certain territories, manufacturers may sell direct or may be limited by law to selling thru independent dealerships, etc. **H-GAC's** objective is to ensure that **End Users**, no matter where located, can buy contracted products/services and receive quality and timely service and support, while at the same time allowing for the most appropriate and effective response to this Invitation. Therefore, responses to this Invitation will be accepted in conformance with the following scenarios and requirements:

A. Single Respondent Acting Alone Or As "Lead" For A Group:

Offeror shall complete and sign a **Form A** and, if contracted, shall be solely responsible for all contractual requirements including administration, processing of purchase orders and handling of payments for transactions which may involve other dealers who actually deliver the products or services.

B. Multiple Respondents Acting Jointly:

A single Response shall be submitted, and each party to the Response shall complete and sign a separate **Form A** to be included in the single Response. If the Response is successful each party shall sign a separate contract with **H-GAC** and shall be responsible for compliance with all terms and conditions. Only those which have executed a written contract with **H-GAC** may process purchase orders and payments.

In any event, Offeror may be a party to one, and only one, response.

5. BASIC REQUIREMENTS & CONDITIONS

- a. The final requirements and specifications contained herein may be different, perhaps materially, from those in the "Invitation To Attend Pre-Bid / Pre-Proposal Conference", if any. It is **Offeror's** sole responsibility to thoroughly examine and review all documentation associated with this Invitation, including any Addendums, and to insure that any response submitted complies in every respect with all requirements.

- b. Any Addendum to this Invitation which may be required prior to the Response due date will be delivered to those prospective Offerors of record who have previously obtained a copy of this Invitation from **H-GAC**. Prospective Offerors shall be responsible for obtaining all documents relating to submission of a Response.
- c. **Offeror** shall thoroughly examine any drawings, specifications, schedules, instructions and any other documents, supplied as a part of this Invitation, and is solely responsible for understanding and compliance.
- d. **H-GAC** shall not be liable for **Offeror's** incomplete documentation, or for any costs associated with preparation and submission of any Response hereto. Additionally, all components of any Response become the property of **H-GAC**, and shall be considered to be in the public domain.
- e. **Offeror** shall make all investigations necessary to become thoroughly informed regarding any plan and/or infrastructure that may be required to support delivery of any Product or Service covered by this Invitation. No plea of ignorance by **Offeror** stemming from failure to investigate conditions that may now or hereafter exist, shall be accepted as a basis for varying **H-GAC's** requirements, or **Offeror's/Contractor's** obligations or entitlements.
- f. Requests for changes to the requirements or specifications herein must be in writing (e-mail, fax, letter) and must be received by **H-GAC** no later than fifteen (15) calendar days prior to the Response Due Date. **H-GAC** will review such requests, but may or may not make changes at its sole discretion. Changes, if any, will only be made by written Addendum sent to addressees of record. In any event, it is **Offeror's** sole responsibility to insure that any and all Addendums which may have been issued have been received and addressed.
- g. By submission of a response, **Offeror** expressly understands and agrees that all terms and conditions herein will be part of any subsequent contract that is executed pursuant to this Invitation.
- h. **Offeror** is advised that all **H-GAC** contracts are subject to the legal requirements established in any applicable Local, State or Federal statute.
- i. **Offeror/Contractor** must be in compliance with all licensing, permitting, registration and other applicable legal or regulatory requirements imposed by any governmental authority having jurisdiction. It is **Offeror/Contractor's** responsibility to insure that this requirement is met, and to supply to **H-GAC** upon request, copies of any license, permit or other documentation bearing on such compliance.
- j. Unless otherwise established elsewhere in this Invitation, NO minimum purchase quantities or spending levels are provided or guaranteed by **H-GAC** or any **End User**.
- k. This Invitation is not meant to restrict competition, but rather is intended to allow for a wide range of responses.
- l. Responses which are 'qualified' with conditional clauses or alterations of or exceptions to any of the terms and conditions in this Invitation may be deemed non-compliant at **H-GAC's** sole discretion.
- m. The term '**Offeror**', or derivative thereof, shall become synonymous with '**Contractor**' for any successful **Offeror** recommended for a contract pursuant to this Invitation.
- n. **H-GAC** reserves the right to:
 - Reject any and all offers received in response to this Invitation.
 - Reject any part of an offer received in response to this Invitation.
 - Determine the correct price and/or terminology in the event of any discrepancies in any response.
 - Accept a response from, and enter into agreement with, other than the lowest price **Offeror**.
 - Accept responses and award contracts to as many or as few **Offerors** as **H-GAC** may select.
 - Amend, waive, modify, or withdraw (in part or in whole) this Invitation, or any requirements herein.
 - Hold discussions with **Offerors**, although award may be made without discussion.
 - Request an **Offeror** to give a presentation of the Response at a time and place scheduled by **H-GAC**.
 - Exercise any of these rights at any time without liability to any **Offeror**.
- o. **H-GAC** reserves the right to determine that conditions exist which prevent the public opening of responses on the date and at the time advertised, and to reschedule the public opening for a future date and time. Responses received by **H-GAC** by the original deadline will be secured unopened until the rescheduled opening date and time, and those having timely submitted such responses will be notified.

6. OFFEROR'S AUTHORIZED SIGNATORY

The signatory shall be authorized to sign and contractually bind **Offeror**, and shall sign any and all Response documentation requiring a signature.

7. SURETY FOR INSURANCE

Contractor shall be responsible for using a surety company properly licensed by any and all states in which Contractor will do business with Participants. The surety company shall not expose itself to any loss on any one risk in an amount exceeding ten percent (10%) of its surplus to policy holders, provided any risk or portion of any risk shall have been reinsured, and such reinsurance shall be deducted in determining the limitation of risk applicable to **H-GAC's** insurance requirements.

8. CONFIDENTIAL / PROPRIETARY MATERIALS

All documentation submitted as part of **Offeror's** response to this Invitation will be considered to be in the public domain and may be made available to Members and others, after contract award, upon properly submitted request. If **Offeror** submits documents marked “confidential” or “proprietary”, the Response may be deemed non-compliant.

9. REFERENCES

- a. **Offeror** shall list the names of at least five government agencies within the continental United States which have purchased from **Offeror** products or services similar to those covered by this Invitation, within the last two years. **H-GAC** reserves the right to determine if such products or services are appropriately similar.
- b. **Offeror** may provide reference information in whatever format desired, but each should include the following specific information:
 - Agency name
 - Contact person name
 - Address
 - Phone & Fax numbers
 - Description of product(s) or service(s) and date sold
- c. Other information, including criticism however learned, may be used by **H-GAC** in evaluation of responses.

10. INSURANCE

- a. Unless otherwise stipulated in Section B, **Offeror/Contractor** must have the following insurance and coverage minimums:

General liability insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit.

Product liability insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit for all Products except Automotive Fire Apparatus. For Automotive Fire Apparatus, see Section B – Product Specific of this Invitation.

Property Damage or Destruction insurance is required for coverage of **End User** owned equipment while in **Contractor's** possession, custody or control. The minimum Single Occurrence limit is \$500,000.00 and the General Aggregate limit must be at least two times the Single Occurrence limit. This insurance may be carried in several ways, e.g. under an Inland Marine policy, as part of Automobile coverage, or under a Garage Keepers policy. In any event, this coverage must be specifically and clearly listed on insurance certificate(s) submitted to **H-GAC**.
- b. Insurance coverage shall be in effect for the length of any contract made pursuant to this Invitation, and for any extensions thereof, plus the number of days/months required to *deliver* any outstanding order after the close of the contract period.
- c. Original Insurance Certificates must be furnished to **H-GAC** on request, showing **Offeror/Contractor** as the insured and showing coverage and limits for the insurances listed above.
- d. If any Product(s) or Service(s) will be provided by parties other than **Offeror/Contractor**, all such parties are required to carry the minimum insurance coverages specified herein, and if requested by **H-GAC**, a separate insurance certificate must be submitted for each such party.
- e. **H-GAC** reserves the right to contact insurance underwriters to confirm policy and certificate issuance and document accuracy.

11. OFFEROR CERTIFICATIONS

Offeror, by submission of a Response hereto, makes the following certifications under penalty of perjury and possible contract termination if any of these certifications are found to be false.

Non-Collusive Response

- a. The prices in the Response have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other **Offeror** or potential competitor.
- b. The prices which have been quoted in the Response (unless otherwise required by law), have not been knowingly disclosed by **Offeror** and will not be knowingly disclosed by **Offeror** prior to the public response opening, either directly or indirectly, to any other **Offeror** or competitor.
- c. No attempt has been made or will be made by **Offeror** to induce any other person, partnership or corporation to submit or not to submit a response for the purpose of restricting competition.

Non-Biased Specifications

This Invitation contains no requirements considered to be unduly biased in favor of **Offeror** or any other **Offerors** that may be competing for this procurement.

No Financial Interest or Other Conflict

- a. No **H-GAC** officer, employee, Board of Directors member or member of any **H-GAC** board or commission, nor family member of any such person, has a financial interest, direct or indirect, in **Offeror** or in any contract **Offeror** might enter into with **H-GAC**.
- b. No economic or employment opportunity, gift, loan, gratuity, special discount, trip, favor or service has been, or will be, offered or given to any officer, employee, Board of Directors member, or member of any **H-GAC** board or commission, nor to any family member of any such person.

Debarment and Suspension Status

- a. **Offeror** is not currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any government agency, nor is **Offeror** an agent of any person or entity that is currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transaction by any government agency.
- b. **Offeror** has not within a three year period preceding this Invitation been convicted of or had a civil suit judgement rendered against **Offeror** for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, or receiving stolen property.
- c. **Offeror** is not presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses enumerated above.
- d. **Offeror** has not, within a three year period preceding this Invitation, had any government (federal, state, or local) transactions terminated for cause or default.

Insurance Coverages

Offeror has and will maintain insurance coverage in accordance with the requirements of this Invitation.

Licensing & Permits

Offeror(s) has (have) all licenses and/or permits, required by any and all governmental entities having jurisdiction, to legally sell the products/services offered.

12. HISTORICALLY UNDERUTILIZED BUSINESS (HUB) PARTICIPATION

- a. To satisfy Texas' statutory requirements [Government Code, Chapter 2161, Subchapter D], **H-GAC** requires all **Offerors** to supply information in any bid/proposal response listing (1) the total number of subcontracts and (2) the total number of HUB contracts applicable to the Products or Services offered in the response. Local governments often require this information for their own reporting requirements prior to placing orders through the **H-GAC** Cooperative Purchasing Program.
- b. **Offeror** must complete **Form B** and include subcontracts with HUB's that provide any materials or services related to sales that may be made thru **H-GAC's** Cooperative Purchasing Program.

13. NON-RESIDENT RECIPROCAL SALES ACT

As required by Texas Civil Statutes in the award of contracts, an offeror which is not a Texas resident business must determine if its state of residence prohibits award of government contracts to Texas resident offerors without penalty. If **Offeror's** resident state DOES penalize Texas offerors, **Offeror** must provide this information along with a copy of its applicable resident state's statute in the Response.

14. TEXAS MOTOR VEHICLE COMMISSION CODE & LICENSING

Sales of motor vehicles in the State of Texas are subject to the Texas Motor Vehicle Commission Code. If this Invitation includes any motor vehicle to be sold in the State of Texas, **Offeror** certifies by submission of a response hereto that all required Texas Motor Vehicle Commission licenses are in place and current, and that copies of all such licenses **have been submitted with the Response**. Further, it shall be **Contractor's** responsibility to keep current all required Texas Motor Vehicle Commission licensing during the term of the contract, and to furnish license copies at any time on request by **H-GAC**. If **Contractor** does not maintain current licensing, **H-GAC** reserves the right to immediately terminate the contract.

NOTE: In accordance with the Texas Motor Vehicle Commission Code, contracts for motor vehicles to be sold within the state of Texas may be made **ONLY** with properly licensed Texas Motor Vehicle Dealers. Therefore, to be considered for a contract covering Texas End Users, the Response must include a **Form A** from a licensed Texas Motor Vehicle Dealer

15. INTENT AND SCOPE OF SPECIFICATIONS

- a. The intent of the specifications herein is to provide **Offeror** with sufficient information concerning the Products/Services to be contracted such that **Offeror** can prepare and submit an acceptable Response.
- b. The specifications may be detailed or general in nature with regard to any particular Product/Service. Where not otherwise specified, details of construction, materials, or the way in which services will be provided, are left to the discretion of the **Offeror**, provided only that any offering shall conform, as a minimum, to best Industry standards and practices and to what is currently being sold in the marketplace.
- c. Responses shall be considered only from **Offerors** that have established good reputations in their markets, and who furnish satisfactory evidence of ability to supply the Products/Services specified herein.
- d. **Offeror** shall show proof of ability to provide to **End Users** prompt and competent service, including parts if applicable, for all Products/Services covered by this Invitation, by proper completion of a Service Organization Document as described elsewhere herein.

16. REQUIREMENTS APPLICABLE TO PHYSICAL GOODS

In the case of physical goods (e.g. equipment, material, supplies, as opposed to services), all Products offered must, unless otherwise stipulated in Section B:

- a. Be new, unused, and not refurbished.
- b. Not be a prototype insofar as the general design, operation and performance. This requirement is NOT meant to preclude **Offeror** from offering new models or configurations which incorporate improvements in a current design or add functionality, but which in such new model or configuration may be new to the marketplace.
- c. Include any and all accessories which may or may not be specifically mentioned herein, but which are normally furnished or which are necessary to make a delivered Product ready for its intended use. Such accessories shall be assembled, installed and adjusted such that the Product is ready for continuous operation at time of delivery.
- d. Have assemblies, sub-assemblies and component parts that are standard and interchangeable throughout the entire quantity of a particular Product as may be purchased simultaneously by any individual **End User**.
- a. Be designed and constructed using current industry accepted engineering and safety practices, and materials.
- b. Be available for inspection at any time prior to or after procurement.

17. PRODUCT CODES

Unless otherwise addressed in Section B of this Invitation, the following requirements shall apply:

- a. Each Product/Service offered shall be uniquely identified using an **H-GAC** Product Code, which shall be determined as described in Section B of this Invitation. **Offeror** shall offer ONLY ONE Product for any particular Product Code. For example, **Offeror** may wish to submit a bid for Product Code ABC and may have another offering that also meets the requirements for ABC. **Offeror** MAY NOT submit two offerings for ABC. The alternate offering that also meets the requirements for ABC must be offered as an option "upgrade/downgrade" to ABC on **Form E**.
- b. Pricing for optional upgrades or downgrades to base bid items should be quoted as an "adder" or "deduct" amount as appropriate, to be applied to the offered price of the base Product Item listed on **Form D**.
- c. Base bid items and their associated HGACBuy Product Codes are included in the Section B and/or on **Form D**.
- d. Selection of Product Codes for which to submit an offer is at **Offeror's** sole discretion.

18. SPECIFIC DESCRIPTIVE REFERENCES

Except for Base Product Items listed on **Form D**, any reference to a specific catalog, data sheet, form, brochure, model name or number, etc. used herein to describe an item such as an option or accessory is only descriptive and is not to be considered restrictive unless otherwise noted. Such references are normally used only to indicate a type, general description, level of quality and/or required performance standards.

19. MANUALS

Unless otherwise specified or superceded herein, each Product delivered under an **H-GAC** contract, and if applicable any options thereto, shall be supplied with at least one (1) copy of a safety and operating manual. The cost of any such manuals must be included in the base price for any Product Item offered hereunder. If more detailed and technically orientated parts and maintenance manuals are available for a Product or option, at a cost, they shall be offered as options on the *FORM* designated herein for such options, or elsewhere in the Response as may be directed herein.

20. STANDARD FEATURES & OPTIONS

The following requirements are applicable primarily to physical goods.

Standard Features

- a. The stated minimum requirements for all Products listed herein include what **H-GAC** considers to be "standard" features. Even though such features might normally be offered as options rather than as standard, they are nonetheless considered to be standard in this Invitation, and must be included in the base price for any Product offered. Such features **SHOULD NOT** be offered as options except as deducts for their omission from the base Product.
- b. If it is unclear in the Response that an **H-GAC** standard feature is included in the base price, it will be assumed that such is the case. If awarded a contract **Offeror** will be expected to sell the Product with all **H-GAC** specified standard features included in the base price.
- c. Any feature or accessory normally offered by manufacturer as "standard" shall be considered a standard feature and shall be included in the base price of any offering, even though not specifically listed as a requirement in **H-GAC's** specifications. Such features **SHOULD NOT** be offered as options except as deducts for their omission from the base Product.

Options - General

- a. Options are considered to be any features or accessories, other than **H-GAC's** and Manufacturer's "standard" features or accessories.
- b. Options should be offered on the *FORMS* designated for quoting options. Each option should be listed and described on a separate line, and should include any Manufacturer's/Dealer's code number. If no Manufacturer's/Dealer's code number exists, **Offeror** should create one.
- c. Prices for all offered options shall be assumed to include any installation or mounting required to make it a fully functional component of the Product, unless otherwise stated in **Offeror's** response.

Required Options

- a. Product specifications in this Invitation may include **H-GAC** "Required Options". If so, **Offeror** must quote a price for ALL such options, and, if there is an **H-GAC** Option Code provided in this Invitation for such options, it MUST be used as part of the description.
- b. For any specific "Required Option", **Offeror** may quote an equivalent so long as its design and performance are as good as, or better than, the specified option item. Responses which do not include pricing for Required Options may be considered non-compliant.

Other Options

- a. "Suggested" or "Other" options may be listed for any particular Product in this Invitation, and **Offeror** is encouraged to quote pricing for such options. The extent of offered options in any response may be taken into consideration as part of the award criteria, at **H-GAC's** sole discretion.
- b. **Offeror** is encouraged to include options for non-equipment items that may be applicable to a sale, such as: Extended Warranties, Maintenance Agreements, Buy-back or Trade-In Agreements, Out-of-state Delivery Charges, Quantity or Special Discounts, Extended Training Classes, etc.

Published & Unpublished Options

- a. H-GAC Cooperative Purchasing Program (Program) contracts are awarded through a public competitive bid or proposal (RFP) process. Further to that process, Program policy considers an 'option' listed and priced in a bid or RFP Response: (1) To be a "**Published Option**"; (2) To be part of any awarded contract; and (3) To be available for purchase by Program members separately and independently from associated base line items. However, since Published Options may have not been subjected to the same scrutiny as the associated base line items, it cannot be concluded they were directly competed. Therefore, pursuant to Local Government Code 252.021(a), purchase of a published option costing more than \$50,000 shall not be allowed. Furthermore, **H-GAC** reserves the right at its sole discretion to disallow purchase of any Published Option through the Program if deemed contrary to the intent of the law.
- b. Any option that has not been listed and priced in the Response is considered to be an "**Unpublished Option**". Unpublished Options may be sold, but only in connection with the sale of a base Product Item, and only insofar as the total cost of all Unpublished Options remains below twenty five percent (25%) of the total summed cost of the base Product(s) plus any Published Options.
- c. No Published or Unpublished Option may be sold which essentially converts a Product such that it competes with a Product Item awarded to another contractor.

21. WARRANTIES, SALES & SERVICE

Unless otherwise addressed in Section B, the following requirements shall apply:

- a. Offeror must be a properly franchised dealer authorized to sell and service, including warranty service, all products offered and sold in response to the bid invitation or under any **H-GAC** contract.
- b. **Offeror** shall provide detailed Parts and Labor Warranty information with the Response. If **Offeror** submits a warranty with the Response which does not meet the minimum requirements herein, **Offeror** agrees by submission of a Response that such warranty shall be considered to be amended to meet those minimums.
- c. Warranties shall be manufacturer's standard and shall be inclusive of any other warranty requirements which may be stipulated elsewhere herein.
- d. Any warranties offered by a dealer shall be in addition to the manufacturer's standard warranty, and shall not be a substitute for such. **Offeror's** base price for any Product shall be inclusive of the standard warranty.
- e. Complete warranty information will be supplied to **End User** with each Product sold.
- a. Warranties need not apply to normal maintenance service or adjustments, or to any product reasonably shown to have been repaired or altered in any way so as to affect its stability, or to any product which has been subject to misuse, negligence, or accident.
- f. **Offeror/Contractor** is encouraged to offer extended warranties as an option.
- g. Neither **H-GAC** nor **End User** assume any warranty or liability on **Contractor's** behalf unless made or assumed in writing, initiated by **Contractor**, and agreed to in writing by **H-GAC** or the **End User** respectively.
- h. **Contractor** shall be responsible for the execution and effectiveness of all product warranty, and shall be the sole source for solution to problems arising from warranty claims. **Contractor** agrees to respond directly to correct warranty claims and to ensure reconciliation of warranty claims that have been assigned to a third party.

22. H-GAC ORDER PROCESSING CHARGE

H-GAC will levy an Order Processing Charge on **Contractor** for each sale done thru the **H-GAC** contract, with the exception of orders for motor vehicles. Any bid pricing submitted will be considered to include the Charge. The amount of the applicable charge shall be per the most current **H-GAC** schedule. For motor vehicle orders, the Processing Charge shall be levied on and paid by the **End User**.

23. PRE-PAYMENTS AND DISCOUNTS

- a. Progress, pre-payment and special discounts of any kind may be offered and detailed in the Response. Such discounts shall be clearly explained, but shall not be a determining factor in awarding contracts except in the case of tie offerings.
 - b. Quantity discounts applicable to similar Products sold to one or more **End User** Departments may be offered. Determination as to product similarity shall rest solely with **Contractor**.
 - c. For specific purchases, any proposed quantity, pre-payment or special discounts shall be clearly shown on the Contract Pricing Worksheet.
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24. INSPECTION / TESTING

All Products sold pursuant to this Invitation shall be subject to inspection/testing by or at the direction of **H-GAC** and/or the ordering **End User**, either at the delivery destination or the place of manufacture. In the event a Product fails to meet or exceed all requirements of this Invitation, and unless otherwise agreed in advance, the cost of any inspection and/or testing, shall be borne by the **Contractor**.

25. PRODUCT DELIVERY

Unless otherwise addressed in Section B, the following requirements shall apply:

- a. Title to goods, and responsibility and liability for loss and/or damage in shipping pass to **End User** at the delivery destination after receipt and acceptance have taken place. Cost of shipping/delivery shall be paid by **End User** unless otherwise agreed to by **Contractor**. If **Contractor** will be paying for shipping/delivery, shipping terms must be "F.O.B. Destination, Freight Prepaid". If **End User** will be paying for shipping/delivery, shipping terms must be "F.O.B. Destination – Freight Collect".
 - b. The details for the application and calculation of shipping and delivery charges must be stated in the Response on **Form E**. Any freight, shipping or delivery charged to **End User** will be prepaid and added to the invoice, and will be clearly shown on any Contract Pricing Worksheet or other quote presented to the **End User**.
 - c. The estimated delivery time after receipt of order (ARO), inclusive of Saturdays, Sundays and holidays, for all Products offered must be stated in the Response. Actual delivery for any particular order must be confirmed with **End User** at time of order placement, and must be stated clearly on the Contract Pricing Worksheet.
 - d. **Contractor** shall be responsible for delivery and Acceptance according to the requirements of the Contract and the Purchase Order.
 - e. Contractor shall advise **End User** prior to making any shipment/delivery, and shall make such shipment/delivery in accordance with **End User's** requirements, providing only that such arrangements do not contravene any requirement of the **H-GAC** contract unless agreed to by **Contractor**.
 - f. The execution of all required tests, certifications and/or licensing, and costs thereof, shall be the responsibility of **Contractor**. Upon request by **End User** or **H-GAC**, **Contractor** shall provide any documentation or certification related to such tests, certifications or licensing.
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26. OFFERED PRODUCT ITEM VARIANCES

Any variance in the specifications or performance of Products offered pursuant to this Invitation shall be acceptable to **H-GAC** only insofar as it MEETS or EXCEEDS the specifications and requirements of this Invitation.

27. REQUIREMENTS FOR SUBMISSION OF A RESPONSE

Unless otherwise addressed in Section B, the following requirements shall apply:

- a. Responses shall be submitted in two complete printed sets including an Original and one (1) Copy in separate "hard side" three-ring binders. The outer spine of each binder shall be labeled showing this Invitation No., **Offeror** Name, and either "Original" or "Copy", as applicable. The Original printed response will be

considered to be the binding Response in case of any conflicts between printed copies and electronic copies. Except for required forms, **H-GAC** Invitation documents should not be included in the Response.

- b. The Original and the Copy shall be submitted complete, except that the Electronic Media should be submitted only with the Copy.
- c. All required **H-GAC FORMS** and documents shall be properly completed, without exception or Offeror's Response may be deemed non-compliant. **Offeror** may not modify the format of any **H-GAC FORM** in any way. **Offeror** may photocopy or print blank **FORMS** as needed. Information submitted on the printed copies of the **FORMS** may not be handwritten except for signatures and initials. It is **Offeror's** responsibility to insure that printed **FORMS** are clear and legible. Handwritten and illegible entries may be rejected. **Offeror's** printed, stamped or typed name shall appear on every **FORM** submitted in the Response.
- d. **The entire response submission** shall also be submitted on electronic media, including all required **H-GAC FORMS**. **Offeror** is strongly advised to make and work with copies of the original electronic **FORMS**. The originals can then be used to make additional electronic or printed copies of the blank **FORMS**. Signatures are not required on the electronic **FORMS**.
- e. The Response shall include ample written evidence, in the form of technical specifications, cut/tear sheets, brochures, pictures, drawings, etc., to demonstrate that all specifications herein have been met and/or exceeded.
- f. The Response shall include, in any format desired, an overview of the **Service Organization** which will support Products sold under any **H-GAC** contract. The overview must include facility locations, phone numbers and Service Manager names, as well as the following:
 - The procedure to be used by an **End User** requiring repairs.
 - Typical turn-around time on repairs.
 - Service Department days and hours of operation.
 - Number of qualified / factory trained service personnel normally on hand.
 - Description of the parts inventory on hand.
 - Training services, facilities and personnel available.
- g. Responses shall be enclosed in a sealed package(s) addressed to the Houston-Galveston Area Council, Cooperative Purchasing. The following information shall be stated on the exterior of the package(s):
 - Name and address of **Offeror**.
 - Date and hour of public response opening.
 - Bid/Proposal Invitation number.
 - The statement: "**SEALED BID/PROPOSAL, DO NOT OPEN IN MAIL ROOM**".

H-GAC shall not be responsible for any Response not properly labeled.
- h. Submission of a COMPLETE Response by telegraphic or electronic transmission is not acceptable. However, Responses may be modified by telegraphic or electronic notice if such notice is received prior to the deadline for submission.
- i. Samples, when required, shall be submitted within the time specified and at no expense to **H-GAC**. If not destroyed or consumed during testing, samples will be returned upon request at **Offeror's** expense.
- j. **Offeror** shall provide firm contract pricing for all Products and Options being offered.
- k. If applicable, responses shall include copies of all current licensing which may be required by the Texas Motor Vehicle Division for execution of sales pursuant to any contract with **H-GAC**.
- l. Due to the complexity of responses and to aid in evaluation, the Response should contain **ALL** required information in tabbed sections as detailed below. Omission of any required **FORM** or information will be sufficient grounds for **H-GAC** to consider your response to be non-compliant.
- m. **First Section:**
 - **Form(s) A – Offeror Identification & Signatory:** Identifies the offering party(ies), and should be completed by each party to the Response. If awarded, a contract will be executed with each.
 - **Form B – Historically Underutilized Business Enterprises:** Used to collect information about disadvantaged and minority suppliers and subcontractors, and to commit **Offeror** to working with Participants toward their program goals.
 - **Form C – Response Checklist:** Certification, and also an aid, to insure that all required information has been included in your Response.

- **Form W-9 – Request for Taxpayer Identification Number and Certification:** Should be completed by each party to the response.
- **Form CIQ – Conflict Of Interest Questionnaire:** Chapter 176 of the Texas Local Government Code requires vendors and consultants contracting or seeking to contract with **H-GAC** to file a Conflict of Interest Questionnaire (CIQ) if they have an employment or other business relationship with an **H-GAC** officer or an officer's close family member. The required questionnaire is located at the Texas Ethics Commission website: http://www.ethics.state.tx.us/whatsnew/conflict_forms.htm. It is Bidder's responsibility to download the form and furnish a completed copy with the Response.
- **Form 1295 – Certificate of Interested Parties** – Must be filled out electronically with the Texas Ethics Commission's online filing application, printed out, signed and provided from each entity that has submitted a Form A for this submission.
- **House Bill HB 89 Verification Form** – completed and signed and provided from each entity that has submitted a Form A for this submission.
- **References**, formatted as described elsewhere herein.
- **Service Organization Document**, formatted as described elsewhere herein.

Second Section:

- **Form D – Offered Items Pricing:** For Bids, contains the list of the Product Items covered by this Invitation. Select the items offered and fill in the price for each. (For RFPs, follow the instructions in Section B as this **Form** may or may not be used.)
- **Form E – Published Options:** Used to list and price all offered options. List, each on a separate line, all upgrades, downgrades, optional equipment, features, accessories and services which you desire to sell thru the **H-GAC** contract, if awarded. Published catalogs/price sheets may be listed, along with the discount structure that will apply. (For RFPs, follow the instructions in Section B as this **Form** may or may not be used.)

Third Section:

- Technical Specifications, Product Brochures, Tear Sheets, Cut Sheets, Strippers, etc. which clearly list and show all the standard features and capabilities of each Product Item offered on Form D.
- Warranty Documentation, as described elsewhere herein, for all items offered.

Fourth Section:

- Copies of any applicable Texas MVD Licenses.
 - Electronic Media, containing the complete response including all required *FORMS*, stored in a pouch or an envelope such that it will not fall out of the binder. (Required in 'Copy' only, not in 'Original'.)
- n. By submittal of Response, **Offeror** certifies to the best of its knowledge that all information is true and correct.

28. CLARIFICATION TO SPECIFICATIONS & REQUIREMENTS

- If **Offeror** is in doubt as to the meaning of any item in this Invitation, a written request for clarification may be submitted to **H-GAC** up to fifteen (15) calendar days prior to the deadline for response submission. **H-GAC** shall not be responsible for late delivery. Requests may be transmitted by FAX or e-mail to the assigned Specification Specialist, and should clearly reference this Invitation number and the specific page and paragraph in question. If there are multiple questions, they should be stated separately and numbered.
- Any interpretation of Invitation documents, if made, will be by written Addendum duly issued. A copy of such Addendum will be mailed or delivered to each person officially on record as having been sent a copy of this Invitation. **H-GAC** will not be responsible for any other explanation or interpretation of the Invitation documents made or given prior to the award of the contract.
- Any objections to the Invitation documents must be filed in writing with **H-GAC** on or before fifteen (15) calendar days prior to the deadline for submission of responses.
- Prospective offerors are advised that, after a draft specification has been issued, the Pre-Bid/Proposal Conference is the primary forum through which comments and suggestions may be offered for consideration by **H-GAC** prior to issuance of the final invitation and specifications.

- e. All best efforts have been made to insure that the product/service descriptions and associated specification information in Sections B & C are correct, and adequate time has been given to prospective Offerors to point out mistakes. However, if an error remains and is caught by Offeror before the scheduled bid/proposal opening, Offeror shall make note of the required correction in the Response, and shall also notify **H-GAC** prior to the opening of responses.

29. INCONSISTENT INFORMATION

H-GAC review of responses supplied on **H-GAC FORMS** is a significant part of the evaluation process. **Offeror** shall state clearly all information required on the **FORMS**. **Offeror's** information supplied on the **FORMS** shall take precedence in the event any standard “boilerplate” type language included in **Offeror's** response is inconsistent with the information supplied by **Offeror** on the **H-GAC FORMS**. In all cases, information on **H-GAC's** printed **FORMS** supplied as part of **Offeror's** response shall take precedence over information supplied on electronic media.

30. REJECTION OF RESPONSES

- a. **H-GAC** may reject a response if:
 - **Offeror** misstates or conceals any material fact in the Response, or if,
 - **Offeror** does not strictly conform to law or the requirements of this Invitation.
- b. **H-GAC** may reject any and all responses, and may reject any part of a response.
- c. **H-GAC, at its sole discretion**, may also waive any formalities or irregularities in any response, or ask for corrected information except for pricing.
- d. **The following occurrences require disqualification of the bid/proposals:**
 - Unsigned or unauthorized signatures on bids/proposals;
 - Bids received after the date and time for opening
 - Bids where prices are conditional on award of another bid or are subject to unlimited escalation
- e. **H-GAC** may refuse to award a contract to or enter into a transaction with an apparent low bidder if that bidder is indebted to **H-GAC**.

31. WITHDRAWAL OR MODIFICATION OF RESPONSES

Once received by **H-GAC**, responses may be modified or withdrawn prior to the submission deadline only if the request to do so is in writing submitted by **Offeror's** authorized representative. Responses and requests for modification received after the submission deadline will not be accepted. Requests for response withdrawal received after the submission deadline will be accepted if the request to do so is in writing submitted by **Offeror's** authorized representative.

32. RESPONSE EVALUATION

For Bid Responses:

- a. Section B will state whether the contract will be awarded to the lowest responsible bidder or to the bidder who provides goods or services at the best value for **H-GAC** and its participants.
- b. If the contract will be awarded based on best value, Section B will state any relevant criteria which **H-GAC** will consider.
- c. For each offered Product Item, **H-GAC** may use the offered price, prices for Required Options, and the prices of selected common Published Options to determine the lowest responsible offer.
- d. Failure of **Offeror** to submit pricing for frequently purchased options and any **H-GAC** required options may cause response to be considered non-compliant at **H-GAC's** sole discretion.

For Proposal Responses:

- e. **H-GAC** will evaluate proposals as detailed in Section B.
- f. By submission of a Response Offeror indicates acceptance of the evaluation technique, and recognizes and accepts that **H-GAC** may at its sole discretion make subjective judgments during the evaluation process.

33. ORDER OF PRECEDENCE PRIOR TO CONTRACT AWARD

In the event of conflict between this document and any references or documents cited herein, this document shall take precedence prior to contract award.

34. AWARD OF CONTRACT

- a. **H-GAC** reserves the right to accept or reject any Product Item or option offered. Additionally, all options included in Offeror's response and accepted by **H-GAC** are understood to be included in any contract.
- b. **H-GAC** shall award contract(s) for line items or groups of line items, at its sole discretion.
- c. With authority granted by the **H-GAC** Board of Directors, a written contract shall be presented to the successful **Offeror(s)** and shall be subject to acceptance by the successful **Offeror(s)** within forty-five (45) calendar days after presentation by **H-GAC**. If a contract is not executed within forty-five (45) calendar days, **H-GAC** may rescind the contract offer and award a contract to the next **Offeror** in order of rank as determined by **H-GAC**.
- d. Delivery time and prompt payment discounts, including time allowed for payment, may be considered in tie-breaking of offers which are judged by **H-GAC** to be equal in all other criteria.
- e. The contract shall include the following documents in the stated order of precedence:
 - 1st** The contract document signed by **H-GAC** and **Offeror**.
 - 2nd** This Invitation and all specifications referenced herein.
 - 3rd** **Offeror's** response to this Invitation.

35. PRO-FORMA CONTRACT

This Invitation includes a Pro-Forma (sample) Contract which successful offerors will be expected to sign. The actual final contract will be the same or nearly the same as the Pro-Forma. NOTE: Successful Offerors MAY NOT process any purchase orders until the contract documents have been executed and returned to **H-GAC**.

36. CONTRACT TERM

The contract shall be in effect throughout the period stated elsewhere in the contract documents, and thereafter until such time as any outstanding orders against the contract have been fulfilled. The contract may be extended if deemed by **H-GAC** to be in the best interests of the Program, and subject to mutual agreement of the parties.

37. PERFORMANCE & PAYMENT BOND

H-GAC's contractual requirements DO NOT include a Performance & Payment Bond (PPB), and offered pricing should reflect this cost saving. However, **Contractor** must be prepared to offer a PPB to cover any specific order if so requested by **End User**. **Contractor** shall quote a price to **End User** for provision of any requested PPB, and agrees to furnish the PPB within ten business (10) days of receipt of **End User's** purchase order.

38. CHANGE ORDERS

End Users shall have the right to make additions by addenda for the purpose of clarification or inclusion of additional specifications, qualifications, conditions, etc. Any such addenda shall be made in writing and agreed upon by **Contractor** and the **End User** agency prior to issuance of any Change Order. A copy of any such Change Order shall be furnished by **Contractor** to **H-GAC**.

39. DUPLICATION OF TERMS OR STATEMENTS

Where statements or terms are duplicated or are extremely similar, **H-GAC** and the **End User** reserve the right to use the statement or term most favorable to **H-GAC** and/or the **End User**.

40. PUBLICITY

H-GAC encourages contractors to "market" the Program, and can provide some information and artwork to be used in published promotional materials. However, any publicity or published material released by **Contractor** referencing the contract, whether in the form of a press release, brochure, photographic coverage, or verbal announcement, shall be issued only with prior review and approval by **H-GAC**.

41. TAXES

HGAC and **End User** participants are either units of government or qualified non-profit agencies, and are generally exempt from Federal and State sales, excise or use taxes. **Offeror** shall not include any such taxes in the Response. Further, it shall be the responsibility of **Contractor** to determine the applicability of any taxes to a particular order and act accordingly. Exemption certificates will be provided upon request.

42. DRUG FREE WORKPLACE

Contractor shall provide notice to its employees and sub-contractors, as required under the Drug-Free Workplace Act of 1988. A copy of **Contractor's** Drug-Free Workplace policy shall, on request, be furnished to any **End User**.

43. PRODUCT NOTICES & MAILINGS

H-GAC is NOT the owner of Products sold pursuant to this Invitation, but acts only in the capacity of purchasing agent. In that regard, **Contractor** accepts sole responsibility for insuring that notices and mailings, such as Safety Alerts, Safety Recall Notices and Customer Surveys, are sent directly to the **End User** of record.

44. HANDLING OF ORDERS & PAYMENTS

In general, orders and payments will be handled as described below. More specific instructions and information regarding handling of purchase orders and the Order Processing Charge may be provided after contract award. Established procedures may be changed at any time by **H-GAC** as may be dictated by efficient business practice. The particulars of any sale, e.g. specific products, pricing, delivery, warranty, etc., will be in strict accordance with the terms and conditions of this Invitation and the specific contract awarded to **Contractor**. Beyond that:

- a. For any particular procurement to be made under the provisions of an **H-GAC** contract, **End User** and **Contractor** will discuss requirements and agree as to what will be provided.
- b. **Contractor** will prepare a Contract Pricing Worksheet and provide it to **End User**. The Worksheet will list everything being purchased including the base bid item(s), all published and unpublished options and the delivery date. All pricing shall be per the current contract.
- c. **End User** will send a purchase document to **Contractor**, which **Contractor** will send **H-GAC** together with the Contract Pricing Worksheet. **NOTE: Contractor** agrees not to offer, agree to or accept from **End User** any terms or conditions that conflict with or contravene those in **Contractor's** **H-GAC** contract, except for pricing discounts.
- d. **H-GAC** will prepare an "Order Confirmation" and send it to **End User** and to **Contractor**. The Order Confirmation verifies that **Contractor** has a valid **H-GAC** contract and that the order is in compliance with the requirements of the **H-GAC** Cooperative Purchasing Program. **Contractor** will not ship any goods before receipt of both **End User's** purchase document and **H-GAC's** Order Confirmation.
- e. On notification that **Contractor** has received an order, **H-GAC** will invoice **Contractor** for the applicable Order Processing Charge. **NOTE: The Order Processing Charge is charged to Contractor, EXCEPT in the case of motor vehicles.** For all sales of motor vehicles the Order Processing Charge is levied on the **End User**, collected by **Contractor**, and remitted to **H-GAC** by **Contractor**.
- f. **Contractor** will deliver products/services ordered, and will invoice **End User** for products/services accepted by **End User**. (See other Sub-Section herein dealing with Product Delivery.) **Contractor** will not invoice before shipment has been made.
- g. **End User** will pay **Contractor** for those products and/or services ordered which have been received and accepted. Under no circumstances shall any check be made payable to a representative or agent. Should a representative or agent submit an invoice to **End User** for any cost related to a purchase order issued to **Contractor** for products/services covered by an **H-GAC** contract, such invoice shall be forwarded to **Contractor** and **Contractor** will take action to correct the error.
- h. Upon delivery of any product/service by **Contractor** and acceptance by **End User**, **Contractor** shall remit to **H-GAC** the full amount of the applicable Order Processing Charge in accordance with the payment terms established in the **H-GAC** contract. Note, the Order Processing Charge is due whether or not **Contractor** has ever received an invoice from **H-GAC**. Sales executed based on the particulars of **Contractor's** **H-GAC** contract, without payment of the Order Processing Charge, may constitute fraud.

45. PRICE CHANGES

- a. Any permanent increase or decrease in offered pricing for a base contract item or published option is considered to be a price change. Temporary increases in pricing by whatever name (e.g. 'surcharge', 'adjustment', 'equalization charge', 'compliance charge', 'recovery charge', etc.), are also considered to be price changes.
- b. Except in the case of contracted published catalogs and price sheets, prices for Base Bid Items and Published Options are expected to be held firm for a minimum of 90 days from the date an awarded Offeror signs the H-GAC contract. Thereafter, changes will be considered if accompanied by justifying documentation satisfactory to H-GAC. For published catalogs and price sheets which are on an H-GAC contract, requests to amend the contract to reflect any new published catalog or price sheet may be submitted whenever the manufacturer publishes the new document. Any such request must include the new catalog or price sheet.
- c. If **Contractor** routinely offers discounted contract pricing, **H-GAC** may request **Contractor** to accept amended contract pricing equivalent to the routinely discounted pricing.
- d. No price change will be allowed unless it has been reviewed and approved by **H-GAC** in writing. **Contractor** must have received **H-GAC's** written approval of any change prior to charging the new price or using it in any quotation prepared for an End User.
- e. Price change requests must be submitted to **H-GAC** in writing and must be received by **H-GAC** at least thirty (30) calendar days prior to the requested effective date of the change, and must state the time period for which the requested pricing will remain firm.
- f. Price change requests shall include **H-GAC Forms D and E**, or whatever documentation was used to submit pricing in the original Response hereto, showing all affected items with current contract price, requested price, and percentage change shown clearly for each. This documentation should be submitted in MSExcel format to facilitate analysis and updating of the website.
- g. Price change requests **MUST** be supported with substantive documentation (e.g. manufacturer's price increase notices, copies of invoices from suppliers, etc.) showing that **Contractor's actual costs** have increased. The Producer Price Index (PPI) may be used as partial justification, subject to approval by **H-GAC**, but no price increase based solely on an increase in the PPI will be allowed.
- h. All Products shall, at time of sale, be equipped as may be required under any then current applicable local, state, and federal government requirements. If, during the course of any contract, changes are made to such government requirements which cause a manufacturer's costs of production to increase, **Contractor** may increase Product pricing to the extent of **Contractor's** actual cost increase. The increase must be substantiated with support documentation acceptable to **H-GAC** prior to taking effect. Modifications to a Product required to comply with such requirements which become effective after the date of any sale shall be the responsibility of the **End-User**.
- i. In cases involving contract extensions exceeding sixty-one (61) days beyond the stated expiration date of the contract, **Contractor** may request a price change based on the same conditions as stated above. However the thirty (30) day prior notice is waived and **H-GAC** will consider the request immediately on receipt.
- j. H-GAC reserves the right to accept or reject any price change request. Acceptance, if granted, will be in writing and the approved changes will become part of the contract.

46. CONTRACT ITEM CHANGES

- a. If a manufacturer discontinues a contracted item, that item will automatically be considered to be deleted from the contract with no penalty to Contractor. However, **H-GAC** may at its sole discretion elect to make a contract award to the next low offeror for the item, or take any other action deemed by **H-GAC** to be in the best interests of **End Users**, at its sole discretion.
- b. If a manufacturer makes any change in a contracted item which does not affect the contract price, Contractor shall advise **H-GAC** of the details. If the 'new' item is equal to or better than the originally contracted item, the 'new' item shall be approved as a replacement. Otherwise **H-GAC** may allow or reject the change, or take any other action deemed by **H-GAC** to be in the best interests of **End Users**, at its sole discretion. If the change is rejected there will be no penalty to Contractor.
- c. If a manufacturer makes any kind of change in a contracted item which affects the contract price, Contractor shall advise **H-GAC** of the details. **H-GAC** may allow or reject the change at its sole discretion. If the change is rejected there will be no penalty to Contractor. However, **H-GAC** may elect to make a contract award to the next low offeror for the item, or take any other action deemed by **H-GAC** to be in the best interests of **End Users**, at its sole discretion.

- d. In the case of specifically identified catalogs or price sheets which have been contracted as base bid items or as published options, routine published changes to products and pricing shall be automatically incorporated into the contract. However, **Contractor** must still provide thirty (30) calendar days written notice and an explanation of the changes to products and pricing. **H-GAC** will respond with written approval.

47. FORCE MAJEURE

If either party shall be wholly or partially prevented from the performance of any contractual obligation or duty by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident., order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of Force Majeure shall rest solely with **H-GAC**.

48. PERFORMANCE UNDER CONTRACT

H-GAC is committed to insuring that **Contractor** provides effective and efficient service to all Participants in the Cooperative Purchasing Program, and expects that certain Performance Conditions must be met. Failure to meet these conditions may result in contract termination. In that regard, **Contractor shall:**

- a. Appoint a dedicated representative to be the contact person and focal point for all matters relating to End User quotations and orders. The representative shall have: A toll free phone number with voice mail; A fax number; A working e-mail address; and A postal address.
- b. Insure that the representative timely monitors all communication modes listed above, and promptly responds to communications from **End Users** and **H-GAC** in any of these modes. Phone calls will be promptly returned, in any event not later than the next business day. Acceptable failure will be due only to Force Majeure.
- c. Maintain sufficient qualified staff to promptly process all communications from **H-GAC** or **End Users**, and to efficiently, effectively and accurately service all requirements of the contract.
- d. As may be requested by **H-GAC**, replace any staff members who are not providing the service and expertise deemed necessary by **H-GAC** for acceptable support of **End Users**.
- e. Properly prepare and provide to **End User** a Contract Pricing Worksheet, or a quotation in other format as approved by **H-GAC**, for each and every order that is to be executed.
- f. Furnish, on request of **H-GAC**, reasonable data, forms and graphic material to be used in brochures or other print media, or on **H-GAC's** website.
- g. Allow access to **H-GAC** authorized personnel for inspection of operating facilities, and auditing of purchase orders during the contract period, and for a period extending thru the completion of any outstanding orders. Site inspection may be arranged not less than ten (10) calendar days prior, shall include the names of all participants, and shall be at no expense to **Contractor**.
- h. **Reporting Requirements:**
 - **Contractor** agrees to submit written quarterly reports to **H-GAC** detailing all transactions during the previous three month period. Such reports shall include, but are not limited to the following:
 - **End User** name
 - Product/Service purchased, including Product Code if applicable
 - End User Purchase Order Number
 - Purchase Order Date
 - Product/Service dollar amount
 - **HGACBuy** Order Processing Charge amount
 - Reports must be provided to **H-GAC** in MSExcel or other acceptable electronic format, and are due by the 30th day of the month following the applicable quarter being reported.
- i. Should **Contractor** default in providing Products or Services as required by this Invitation and the contract, recourse may be exercised thru cancellation of the contract and other legal remedies as may be appropriate.

49. CONTRACTOR ORIENTATION/TRAINING

H-GAC believes that **Contractor's** familiarity with the operational policies and requirements of the Cooperative Purchasing Program is a key factor in achieving **End User** satisfaction. In that regard, the Contact Person listed on **Form A**, or an alternate, shall be required to participate in an **H-GAC** vendor orientation/training as soon as

possible after contract award. In addition, any other of Contractor's staff who will be involved in any way with the HGACBuy Program should participate in orientation. The orientation may be presented as a teleconference or webinar, or may be held in **H-GAC**'s offices as may be determined by **H-GAC** and Contractor to be the most efficient and effective form of delivery.

50. LEGAL & CONTRACTUAL REMEDIES

RESOLUTION OF PROTESTED SOLICITATIONS AND AWARDS

Procedure

Any actual or prospective **Offeror** or **Contractor** who is aggrieved in connection with a purchase transaction may file a grievance. The grievance may be filed at any phase of the procurement. In order for an above mentioned party to enter the grievance process, a written complaint must be sent to the Chief Operations Officer (COO) of **H-GAC** by certified mail which identifies the following:

1. Name, mailing address and business phone number of the complainant.
2. Appropriate identification of the procurement being questioned.
3. A precise statement of reasons for the protest.
4. Supporting exhibits evidence or documents to substantiate any claims.

The grievance must be based on an alleged violation of **H-GAC**'s Procurement Procedures, a violation of State or Federal law (if applicable), or a violation of applicable grant or contract agreements to which **H-GAC** is a party. Failure to receive a procurement award from **H-GAC** in and of itself does not constitute valid grievance. Upon receipt of grievance, the Chief Operations Officer will initiate the informal resolution process.

Expedited Resolution

The Procurement Officer or Departmental Director responsible for the solicitation shall contact the complainant and all interested parties and attempt to resolve the allegations informally within ten (10) working days from date of complaint. If the allegations are successfully resolved by mutual agreement, documentation will be forwarded to the Chief Operations Officer of the resolution with specifics on each point addressed in the original complaint.

If the Procurement Officer or Departmental Director is not successful in resolving the allegations, the complaint along with the comments will be forwarded to the Chief Operations Officer immediately. The Chief Operations Officer will review all documentation. All interested parties will be given written notice of the date, time, and place of the hearing and an opportunity to present evidence. A written decision will be issued within five (5) working days after the hearing along with notice of appeal rights.

Appeals

The complainant may appeal the Chief Operations Officer's decision by submitting a written appeal, within five (5) working days, to the Executive Director of **H-GAC**. The Executive Director, upon receipt of a written notice of appeal, shall contact the complainant and schedule a hearing within ten (10) working days. The Executive Director of **H-GAC** has the option of appointing a Hearing Officer to preside over the hearing. If appointed, the Hearing Officer shall conduct a hearing and forward a summary and recommended resolution to the Executive Director.

The decision reached by the Executive Director or his designee shall be final and conclusive. This decision will be forwarded to the complainant in writing within thirty (30) working days.

The **Contractor** may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a Court of competent jurisdiction.

RESOLUTION OF CONTRACT DISPUTES

Upon breach or default, **H-GAC** shall give the **Contractor** written notice of default. If the default is not remedied, within a reasonable specified time from date of notification, to the satisfaction and approval of **H-GAC**, default will be declared.

Upon breach of contract or default, **H-GAC** may exercise any and all of its rights afforded by law, including but not limited to those referenced in the General Contract Provisions.

SOLICITATIONS OR AWARDS IN VIOLATION OF THE LAW

Contracts awarded in violation of the competitive process or otherwise in violation of the law are voidable by **H-GAC**.

51. NATIONWIDE SALES OPPORTUNITIES

HGACBuy provides purchasing services to local governments qualifying non-profits throughout the nation, and desires to make established contracts available to them wherever and whenever practicable. Therefore, once a contract is awarded, **Contractor** is expected to expand the scope of its marketing effort to include sales to **End Users** in all areas of the United States, and/or to assign any **H-GAC** contract to another contractor(s) as deemed appropriate by **H-GAC** in the interest of its End Users.

- **Contractor** may sell through **HGACBuy** anywhere subject to compliance with applicable laws and regulations. If the market structure in which **Contractor** operates requires a contract assignment for any particular sale, **H-GAC** will expect **Contractor** to assign the contract to a Manufacturer or to another Dealer(s). Such assignment must be approved by **H-GAC**.
- **Contractor's** differential costs (e.g. transportation & delivery charges) and allowances (e.g. manufacturer's sales incentives) related to any sale may be charged to buyer.

End of Section A General Terms And Conditions
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SECTION B - PRODUCT SPECIFIC REQUIREMENTS
For
FIRE SERVICE APPARATUS (ALL TYPES)

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1. INTRODUCTION

It is the intent of this bid solicitation to acquire pricing that will be used to establish purchase order contracts for various types of fire apparatus. These specifications describe various categories and specific types of Fire Apparatus, including minimum design and construction characteristics considered necessary to perform desired functions. Any products bid hereunder must meet or exceed all requirements listed or referenced in this Invitation. The basic Product categories covered by this Invitation are:

- A. Aerial Fire Apparatus (Boom/Platform, Ladder, Ladder/Platform)**
- B. Wildland Fire Apparatus (Brush Fire)**
- C. Pumper Fire Apparatus**
- D. Special Service Apparatus (Rescue, Re-Hab, Hazmat, Mobile Command Center, etc.)**
- E. Pumper-Tanker / Elliptical-Tanker Fire Apparatus**
- F. Aircraft Rescue & Fire-Fighting Vehicles**

Specific Product items have been pre-listed on **Form D** to be bid. If options (see below) other than the Base Product Items on **Form D** are being offered, they should be listed on **Form E** as upgrades, downgrades, or modifications to the base Product Item on **Form D** and should be priced using a differential amount based on the bid price for the base Product Item.

Note: All products listed on **Form D** shall be considered as base **models/units**. Bidders shall provide pricing on all options **where applicable** as they pertain but not limited to the following:

- Chassis/Cab Builder (manufacturer)
- Cab Designs (2/4 Door/Tilt Cab etc.)
- Cab/Body Sheet Metals (Galvanneal, Formed/Extruded Aluminum, Stainless Steel)
- Rear Axle Configuration (Single/Tandem/Tandem Front Steering/Triple Rear)
- Fire Pump Capacities & Mounting Locations (1250/1500/2500 GPM Pump/rear and mid-mounted)

- Body Configurations (Walk-In/Non-Walk-In Body)
- Aerial Categories (Construction/Turntable Positions/Aerial Device Functions)

Note: Customer Quotations – If Requested by an End User, the contractor shall be prepared to provide itemized pricing of the base specification (product code) allowing End User verification of credits/deducts due as a result of upgrades/downgrades to features included in the base specification.

2. STRUCTURE OF RESPONSE AND REQUIRED INFORMATION

The following core areas must be addressed specifically in any response to this bid:

- ❖ Proposals **(1-original and 1-copy)**, marked accordingly and in hard-sided 3-ring binders, shall be organized in tabbed sections, each containing ALL required information and/or FORMS as described below.
- ❖ In addition, complete responses shall also be provided in an electronic format such as; CD, thumb-drive, flash-drive, etc., such that the entire response can be uploaded to H-GAC's data system and be made available to End Users as may be requested. A single electronic copy of the solicitation will suffice and should be put with/in the copy binder.
- ❖ **Forms D & E** must be provided in an Excel format. **NOTE:** Keep in mind, the 3-ringed binder marked ORIGINAL is locked away and the entire evaluation process is done from the COPY as well as the electronic copy. Therefore, the 3-ringed binder marked copy must be an exact duplicate of the original including all the signatures and other markings.

Bidder shall provide the information described below, **labeled and tabbed to correspond with the designated Segment (Tab) Headings (A thru G) being bid.** The items in these Tabs (A-G) must be addressed completely.

**** For example, Tab D will be tabbed and have three (3) items to be addressed (1, 2, 3) for this segment. It is this information that will be evaluated and determine the proposers final score.**

Note: It is extremely important to set-up the binders as instructed. Responses not organized in the prescribed manner may be eliminated from consideration.

Bid Format

TAB - A. Proposer Identification / HUB Status / Checklist.

Forms A, B, C, G, H, W9, CIQ, 1295, HB89 & CCI. A 1295, W9, CIQ, HB89 & CCI form must be provided from each entity that has submitted a **Form A** for this submission.

Tab B: Licensing & Electronic Media

Copies of all applicable Texas MVD Licenses. **Electronic Media** containing the complete response including all required FORMS, stored in a pouch or an envelope such as not to fall out of the binder. (Required in "Copy" only, not "Original")

Tab C: Products & Pricing**Bidder shall provide:**

1. **Form D** (Offered Items Pricing) and **Form E** (Published Options). **Forms D & E** must be in an excel format.
 - Bidder must provide an electronic copy of the complete submission. Electronic copy to be put in the “Copy” binder.
2. Technical Specifications, Product Brochures, Tear Sheets, Cut Sheets, Strippers, etc. which clearly show all the standard features and capabilities of each Product Code bid on **Form D**.
3. Product information covering basic/standard warranty on equipment/products being offered.

Tab D: References

Further to the requirements for references as detailed in Section A, General Terms & Conditions, Bidder must provide references from **at least five (5) local government entities** which have purchased offered Products within the past two years. Information provided shall include, as a minimum:

1. Entity name
2. Contact person's name, address & phone number
3. Description and value of product(s) purchased

Bidder is encouraged to include any letters of endorsement which may be available from the supplied references. In any event, **H-GAC** reserves the right to consider historic information and other facts in its proposal evaluations, whether gained from this proposal, references, or any other source.

Tab E: Geographic Areas Served

1. **HGACBuy** is a nationwide program. Describe you Geographic Coverage so H-GAC may evaluate your ability to meet the needs of End Users throughout the United States.
2. Explain how you will market the **HGACBuy** program. Contractors are allowed to use the **HGACBuy** logo on brochures and other printed literature as well as websites and trade shows; subject to prior review and approval by H-GAC.
3. Detail your dealer network (nationwide) and describe how it will be used to promote this program and provide products/services to **H-GAC** members nationwide.

Tab F: Service Facilities & Personnel

1. Sales office locations.
2. Factory and Service Center Locations.
3. Technical and maintenance services provided after a sale, and on what basis
4. Warranties, policies and procedures for handling problems
5. Customer training provided, and on what basis?

Tab G: Customer Contract/Agreement Documents

Bidder shall provide copies of all documentation that a customer would be required to sign in the event a purchase is made. **H-GAC** shall review documentation relative to consistency with industry/Bidders' norms, and restrictiveness relative to the best interests of **H-GAC** members.

3. GENERAL

- **Third Party Specification(s) By Reference**

This specification is based on the latest editions of NFPA 1901 Standard for Automotive Fire Apparatus, NFPA 1906 Standard for Wildland Fire Apparatus and NFPA 414 Standard for Aircraft Rescue and Fire-Fighting Vehicles.

- **Form A's**

*An originally signed **Form A** from the all entities who are party to this submission and who should be offered a contract if this submission is successful. These entities should include the **Apparatus Manufacturer, Franchised Texas Dealer** and those dealers outside Texas who have current or past sales through the program (Note: All other sales outside Texas should be coordinated through the manufacturer when possible). In those cases where sales must go through a dealer due to franchise agreements, **Form A's** will be accepted from those dealers. For those only bidding conversions (i.e. brush trucks, light rescues), **Form A's** from in-state commercial chassis dealers for the underlying chassis make being quoted should be provided.*

- **Product Liability Insurance.**

The requirements for Product Liability Insurance in **Section A** are superceded as follows:

For Brush Fire Apparatus, Mini-Pumpers, Class A Pumpers, Heavy Duty Rescues, and HazMat & Mobile Command Centers, Bidder must have in place Product Liability Insurance with a Single Occurrence limit of at least \$1,000,000 per seating position. For Aerial Apparatus, the requirement is \$5,000,000 plus an additional \$1,000,000 for each seating position. [e.g. An aerial ladder truck with six (6) seating position would require Product Liability Insurance with a Single Occurrence limit of \$11,000,000.] For Slip-In Pump/Tank Units, the requirement is a Single Occurrence limit of \$1,000,000 total. The General Aggregate limit for all Apparatus categories must be at least two times the Single Occurrence limit.

Note: Product liability listed above shall be the responsibility of the manufacturer.

- **Fire Apparatus Options, Accessories & Loose Equipment Offered.**

H-GAC bid specifications for fire apparatus include **FORM E "Priced Options."** Equipment not offered in the bid response as Priced Options shall be classified as "Unpriced/unpublished" and may not be sold except as subject to the 25% restriction imposed by Texas statutes.

Note: All priced options (Form E) may be offered for separate purchase to End Users. Individual purchase orders for these options cannot exceed \$50,000.00 (H-GACBuy Fee – 1.5%)

- **Product Code**

Each base Product item covered by this Invitation has been pre-listed on **Form D**, and is identified by a unique **H-GAC** alphanumeric Product Code. Bidder shall decide which line items to bid and shall fill in a bid price in the appropriate cell on **Form D**.

- **Training** - On the initial delivery of the fire apparatus, the contractor shall supply a qualified representative to demonstrate the apparatus and provide initial instruction to representatives of the purchaser regarding the operation, care, and maintenance of the apparatus and equipment supplied (NFPA 1901. 4.4.3).

Note: Contractor shall quote as an option on **Form E** any optional instruction/training regarding service/maintenance that may be available for the delivered apparatus.

- **Manuals** – The contractor shall supply at the time of delivery, at least **two (2) sets** of complete operations and service documentation covering the completed apparatus as delivered and accepted (NFPA Sec. 4.19.2.1)

- **COMMITMENT**

Offeror is required to make some basic commitments to insure the overall success of this program. By submission of a response, offeror commits to the following:

- **Corporate/Sales Commitment** – A commitment that **HGACBuy** has the support of senior management and that **HGACBuy** will be the primary government contracting vehicle when offering services/products awarded from this solicitation to eligible end users nationwide. A further commitment to aggressively market the program, both independently as well in partnership with **HGACBuy**.

- **HUB Participation** – It is **H-GAC's** goal to have Historically Underutilized Business Enterprise (HUB) participation in providing services under a contract. IF **Offeror(s)** intends to employ subcontractors in providing services/products related to this solicitation, **Offeror(s)** shall make and demonstrate a good faith effort to include HUB participation under a contract. **Offeror(s)** good faith effort shall include, but is not limited to the following affirmative steps (ref. 2CFR 200.321):

- 1) Placing qualified small and minority businesses and women's business enterprises on solicitation list;
- 2) Assuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- 3) Dividing total requirements, when economically feasible, into smaller task or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- 4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- 5) Using the services and assistance as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce;

NOTE: The term HUB as used in this solicitation is understood to encompass all programs/business enterprises such as Small Disadvantaged Business (SDB), Disadvantage Business Enterprise (DBE), Minority Owned Business Enterprise (MBE), Women Owned Business Enterprise (WBE) and Disabled Veteran Business Enterprise (DVBE).

- **Past Sales** – On Joint Bids, Contractors (excluding manufacturers) outside Texas must have sales on the current contract in order to participate in the upcoming solicitation.

4. DETAILED PRODUCT SPECIFICATIONS

The specifications detailed below for the various categories of apparatus are to be considered the minimum requirements unless there is a conflict with descriptive information detailed on **Form D**. In that event, the requirements of **Form D** shall govern.

Note: Bidder shall supply a spec/quote sheet for each product code bid on **Form D**. These sheets should detail what features are included in the price quoted on **Form D**.

5. LEGAL REQUIREMENTS

a) In addition to NFPA 1901, 1906 and 414 (latest editions), all apparatus offered shall comply with all applicable federal (i.e. FMVSS, SAE, DOT, TREA, EPA, ASTM, AWS, ASNT, UL, & NFPA + etc.) and state {Texas Department of Transportation, Division of Motor Vehicles, Motor Vehicles Division Code [Latest version]} regulations and rules, and have all components incorporated into and/or on the apparatus as required for a Texas State Safety Inspection (i.e. front and rear mud flaps, inspection certificate, etc).

b) Bidders, shall have on file at H-GAC prior to, or included with the bid response, the correct license(s) as required by the State of Texas, Department of Transportation, Division of Motor Vehicles, Motor Vehicle Commission Code [latest edition] which is applicable to the bidder's operations.

c) The prescribed licenses will include the manufacturer/bidder, and any and all dealers and their representatives as may be required by the Motor Vehicle Division.

d) The Houston-Galveston Area Council (H-GAC) Cooperative Purchasing contract requires that you maintain all licensing required by the Texas Motor Vehicle Commission Code as may be applicable to your business. If at any time during the contract period such licensing lapses for any reason, you will be in default of the contract unless the TMVD issues a stay or waiver. It is your sole responsibility as the Contractor to maintain current licensing during the entire contract period. Failure to do so may result in contract termination.

H-GAC will continue to require that copies of all current TMVD licenses as may be applicable be submitted with bid responses. Contracts will not be awarded to any contractor who does not supply the required copies. After initial submission of the bid response, contractors will only need to furnish copies to H-GAC upon request.

Note: All units offered in this solicitation must be available to our Texas members through in-state licensed franchised motor vehicle dealers. Form A's are required with the submission from each dealer (e.g. apparatus, chassis as required) in order to receive a contract. Form A's will not be accepted after the bid has been submitted.

Note: It is the contractor's responsibility to ensure all apparatus sales are in accordance with the motor vehicle laws of the state where the acquisition is made.

I. WILDLAND FIRE APPARATUS (BRUSH FIRE)

A. WILDLAND/BRUSH FIRE APPARATUS -

In addition to the latest edition of NFPA Standard 1906, Products bid hereunder must also comply with all H-GAC specifications and requirements herein. The wildland fire apparatus covered by this Invitation are defined by the Product Codes that have been pre-listed on **FORM D**.

1. Minimum Standard Features Required in Base Product Item Bid:

a) Wildland/Brush Fire Apparatus Bids:

- Aluminum or Steel Flat Bed body style shall have mesh bulk head
- Utility body shall be of steel, aluminum or composite fiberglass laminate
- Composite Utility body shall be constructed of composite fiberglass laminate with closed cell structural PVC foam core. Comprising a laminate of ½" thick.
- Poly Utility body shall be ½" thickness copolymer sheet material.
- 150 gpm single stage, auxiliary engine-driven pump with pump panel (2 stage pumps to be quoted as optional on Form E). The pump operator's panel shall be located on the left side or rear of the apparatus.
- 300 gal polypropylene water tank (250 gal. on slip-on unit). Tank shall be polypropylene with lifetime warranty.
Note: Other sizes shall be offered as Priced Options on FORM E. Provide sizes up through at least 400 gal.
- 1 Transverse preconnect hose bed (minimum)
- 20 cu ft Compartmentation including, but not limited to, left and right sides and rear (12 cu ft for slip-on units)
- Heater/Defroster and Air Conditioning in Cab area
- Base Cab/Chassis GVWR – 13,000 lbs.
- V8 Diesel Engine
- 5 speed manual transmission (automatic transmission to be quoted as optional on Form E)
- Completed apparatus must be NFPA 1906 Compliant

(b) Self-contained, Slip-on Unit Bids:

- 100 gpm @ 100psi single stage, auxiliary engine-driven pump with pump panel
- 250 gal polypropylene water tank
- Hose reel, 150 ft. of 1" hose
- Slip-on Unit to be mounted on pickup supplied by End User OR H-GAC Contractor

2. Apparatus Accessories & Loose Equipment. Bid specification documents include *Priced Option* forms for bidder to list prices for specific optional engines, fire pumps, body changes, accessories, and loose equipment. Equipment not offered in the base bid or as an option shall be classified as "Unpublished Options" and subject to 25% cap permitted under "Non-Published" provisions for competitive bids. [See Terms & Conditions]

3. Options to Base Bid for additional apparatus. A thorough listing of options is recommended. Examples of options to include on **FORM E** are:

(a) Options to Brush Fire Bids only:

- Alternate GVWR Chassis
- Gas engine (as well as other engine sizes)
- 4-wheel drive

(b) Options to Slide-In Unit Bids only:

- Different pump sizes (e.g. 150 gpm @ 100 psi)
- Different tank sizes (+/- increments of 50 gallons.)

These options are in addition to any and all other options listed in this document or H-GAC Forms included.

II. SPECIAL SERVICE FIRE APPARATUS (RESCUE)

In addition to the latest edition of NFPA Standard 1901, Products bid hereunder must also comply with all **H-GAC** specifications and requirements herein. The Products covered by this Invitation are defined by the Product Codes listed on **FORM D**.

1. Standard Features Required in Base Bid for a special service fire apparatus.

(a) Custom Cabs:

- Minimum four (4) SCBA seats in Tilt & Split Tilt cabs
- Minimum three (3) SCBA seats in Stationary cabs
- Note: Additional SCBA seats are to be priced as options on **Form E**
- Minimum 380 bhp diesel engine (optional engines to be priced on **Form E**)
- Allison EVS-3000 Automatic Transmission (optional transmissions to be priced on **Form E**)
- Front axle rating (min.) – 14,600 lbs. (stationary cabs), 16,000 lbs. (tilt cabs), 18,000 lbs. (split-tilt cabs)
- Single Rear axle rating (min.) – 24,000 lbs.
- Full Anti-Lock Braking System
- Power Steering
- ABS Braking System
- Heater/Defroster/Vent/Air Conditioning
- Constructed on standard straight frame rail or drop-pinch chassis.
- Fuel Tank – 50 gallon (minimum).

(b) Commercial Cabs:

- 2 Door Models (4 Door Models may be listed as options)
- 3 to 4 SCBA seats (depending on seating capacity) 4 Door Models only
- 300 to 330 bhp diesel engine (optional engines to be priced on **Form E**)
- Allison EVS-3000 Automatic Transmission (optional transmissions to be priced on **Form E**)
- Front axle rating (min.) – 12,000 lbs. (2-Door Cab)
- Single Rear axle rating (min.) – 21,000 lbs. (2-Door Cab)
- Heater/Defroster/Vent/Air Conditioning
- Constructed on standard straight frame rail chassis.
- Fuel Tank – 40 gallon (minimum).

(c) Commercial Cabs (Light /Medium)

- 2 Door Models (4 Door Models may be listed as options)
- 300 bhp diesel engine (optional engines to be priced on **Form E**)
- Automatic Transmission (optional transmissions to be priced on **Form E**)
- Front axle rating (min.) – 7,000 lbs. (2-Door Cab)

- Single Rear axle rating (min.) – 12,000 lbs. (2-Door Cab)
- Heater/Defroster/Vent/Air Conditioning
- Constructed on standard straight frame rail chassis.
- Fuel Tank – 40 gallon (minimum).
- ABS Braking System.

2. Options to Base Bid for apparatus. Contractors are encouraged to provide a thorough listing of options on Form E. Below are just a few examples of options to include on **FORM E**:

Options to Walk-In Bids:

- (a) Haz-Mat Configuration
- (b) 2 Person Command Center Configuration
- (c) Walk-Through option

3. Special Service Fire Apparatus

Equipment Storage

- (a) Non Walk-in - 640 ft³
- (b) Walk-in bids - 320 ft³

4. To be bid as options on Form E.

- (a) Optical Warning Devices
- (b) Generators
- (c) Breathing Air Systems
- (d) Winches
- (e) Additional Ground Ladders

Note: All optional apparatus models offered in any bid response shall be in compliance with NFPA 1901 (latest edition) for the specific apparatus offered.

III. AERIAL FIRE APPARATUS

In addition to the latest edition of NFPA Standard 1901, Products bid hereunder must also comply with all **H-GAC** specifications and requirements herein. The Aerials (Booms/Platforms, Ladders, Ladder/Platforms) covered by this Invitation are defined by Product Codes that have been pre-listed on **FORM D**.

1. Standard Features. The following features must be included in all items bid pursuant to this Invitation:

- Seating for a minimum of five (5) firefighters.
- A Minimum of three (3) SCBA seats in stationary cabs, four (4) SCBA seats in all others.
- For 75-99 ft., 500 lb. capacity apparatus (For Steel & Aluminum), a minimum 400 bhp diesel engine.
- For all other Products, minimum 450 bhp diesel engine (w/EVS4000 Transmission)
- All engines must meet current EPA standards.
- Allison **EVS-3000** Automatic Transmission
- Engine exhaust auxiliary brake
- Full Anti-Lock Braking System
- Power Steering
- Air Brakes with min. 16 cfm compressor

- 1500 gpm single stage fire pump
- Polypropylene/fiberglass water tank:
- For 75-99 ft. Aerials, Single Axle, with a rated capacity of 500/750 lbs. (steel or aluminum construction), a 300 gallon minimum polypropylene or fiberglass water tank.
- For 75-99 ft. Aerials, Tandem Axle, with a rated capacity of 500/750 lbs. (steel or aluminum construction), a 500 gallon minimum polypropylene or fiberglass water tank.
- For all 100'+ apparatus with platform, a 150 gallon minimum polypropylene or fiberglass water tank.
- Two (2) Transverse preconnect hose beds.
- Ground ladders mounted in totally enclosed compartment(s) with doors, and providing access from the rear of the apparatus.
- Left side pump operator's control panel.
- Heater/Defroster in Cab area.
- Air Conditioning in Cab area.
- For 45-65 ft. Mini-Aerials, Tandem Axle (19,000 lb. GVW), 1250 gpm single stage fire pump, (steel or aluminum construction), 300 gallon minimum polypropylene or fiberglass water tank, aluminum body.

2. Requirements by Apparatus Type.

- (a) Aerials Fire Apparatus with 1,500 gpm single-stage fire pumps shall be compliant with the following NFPA 1901 chapters regarding apparatus requirements:

Chapter 5: Pumper Fire Apparatus

Chapter 8: Aerial Fire Apparatus

- All optional apparatus models offered in any bid response shall be in compliance with NFPA 1901, latest edition for the specific apparatus offered.

Note: Optional deletion of fire pump shall be offered as a priced option on **FORM E**.

IV. PUMPER FIRE APPARATUS

In addition to the latest edition of NFPA Standard 1901, Products bid hereunder must also comply with all **H-GAC** specifications and requirements herein. The Pumper Fire Apparatus covered by this Invitation are defined by the Product Codes that have been pre-listed on **Form D**.

1. Standard Features Required in Base Bid Response.

- **Commercial Cabs:** 2 or 4 door cab with doors on left and right sides of apparatus
- **Custom Cabs:** 4 door cab with doors on left and right sides of apparatus
- Minimum three (3) SCBA seats in stationary cabs, four (4) SCBA seats in all others; there is no requirement for SCBA seating in 2-door Commercial Cabs
- Minimum 300 bhp diesel engine, 2-Door Commercial Cabs.
- Minimum 320 bhp diesel engine, 4-Door Commercial Cabs.
- Minimum 325 bhp diesel engine, Custom Cabs w/1250 gpm pump
- Minimum 380 bhp diesel engine, Custom Cabs w/1500 to 2500 gpm pump
- ***Note: All engines offered shall meet current EPA standards.***
- Allison **EVS-3000** Automatic Transmission for apparatus w 1250 gpm pump
- Allison **EVS-3000** Automatic Transmission for apparatus w/1500 to 2500 gpm pump
- Engine exhaust auxiliary brake shall be provided in all apparatus
- Full Anti-Lock Braking System
- Power Steering
- Air Brakes
- Minimum **750** gallon polypropylene or fiberglass water tank for pumper bodies, **300** gallon (mini-pumper)
- Minimum **1800** gallon polypropylene, fiberglass or **stainless steel** water tank for pumper/tanker bodies **on single rear axle**
- 1250 gpm single stage fire pump, Commercial Cabs.
- 1250, 1500 to 2500 gpm single stage fire pump, Custom Cabs
- Fuel Tank (minimum) – 40 gallon (commercial chassis), 50 gallon (custom chassis)

- **Commercial Cabs (Light/Medium)**

- 2 Door Models (4 Door Models may be listed as options)
- 300 bhp diesel engine (optional engines to be priced on **Form E**)
- Automatic Transmission (optional transmissions to be priced on **Form E**)
- Front axle rating (min.) – 7,000 lbs. (2-Door Cab)
- Single Rear axle rating (min.) – 12,000 lbs. (2-Door Cab)
- Heater/Defroster/Vent/Air Conditioning
- Constructed on standard straight frame rail chassis.
- Fuel Tank – 40 gallon (minimum).
- ABS Braking System.

2. Tanker Apparatus Pumps

Pumps, portable and PTO will be allowed on tankers. Minimum pump capability will be 250 gmp@150 psi, per NFPA 1901, 2009 Mobile Water Supply Apparatus, Chapter 14.

- 250, 350, 450, 500, 750 or 1000 gpm single state PTO or portable fire pump.

Note: Bidder shall list optional pumps as priced options on **Form E**.

3. Water Tanks

(a) Tank Construction.

Water tank capacity (pumpers) shall be a minimum rated **750 gal** (2850 L) as provided in the base bid response. Mini-Pumpers **300** gallon. Other sizes shall be offered as Priced Options on **FORM E**.

4. Mobile Water Supply Apparatus Water.

Water Transfer (Mobile Water Supply). The bidder shall provide pricing for tanker configurations of 1,800 gallons to 4,000 gallons including chassis requirement changes to accommodate the extra weight.

V. AIRCRAFT RESCUE & FIRE FIGHTING VEHICLES

Products bid hereunder must comply with the latest Edition of NFPA Standard 414 (Standard for Aircraft Rescue and Fire-Fighting Vehicles). The Aircraft Rescue & Fire-Fighting Vehicles covered by this Invitation are defined by the Product Codes that have been pre-listed on **Form D**.

6. EVALUATION AND BID AWARDS

Bids will be evaluated by H-GAC Staff in compliance with stated requirements. Contracts will be awarded to the “lowest responsive responsible Bidder(s) providing best value” for each base line item offered. A minimum threshold score of **75 points** will be required before a contract may be offered. Bids will be evaluated in two (2) stages.

The **first stage** will be a general evaluation of the overall compliance with Section B requirements (**Tabs A-G**). Bids deemed to be responsive and scoring a minimum of **70 points** will then be passed to the second stage.

The **second stage, Pricing**. An analysis of Bidder’s submitted bid price will be conducted for each base line item submitted on **Form D**. Bidders with the lowest total price for each line item will receive a **maximum score of 75 points**.

PAST PERFORMANCE – An evaluation will be conducted of the Bidder’s previous contract performance as an HGACBuy contractor based on the performance measured listed below. **Maximum score is 25 points**.

PERFORMANCE MEASURES
Timely response to request for information and/or request for quotes/pricing (Sec A, 48b)
Accurate preparation of Contract Pricing Worksheet(s) (Sec A 48e)
Timely delivery of product or services (as quoted at time of order placement) (Sec A, 25c)
Quality of products/service (Sec A, 25d, 44f)
Timely and accurate submission of Contractor's Activity Report (Sec A, 48h)
Timely payment of order processing charge (Sec A, 44g, 44h)

NOTE: For **Joint Bids**, each Form A submitted in the Bidders response will be scored per the above criteria and an overall average will be taken of all Form A's submitted to determine the Performance score for each submission.

Evaluation Criteria Scoring Table	Maximum Points
PRICE	75
PERFORMANCE MEASURES	25
TOTAL	100

----- End of Section B -----

Specifications prepared by

Houston-Galveston Area Council Cooperative Purchasing Program

For questions about this Invitation, please contact:

Jackie Palmer

Ph: 713-993-2466

Email: jpalmer@h-gac.com

For Use In Responding To Competitive Bid And Proposal Invitations**Invitation No.:** FS12-19**Title:** Fire Service Apparatus (All Types)

This Section contains the following **H-GAC FORMS**.

FORM	DESCRIPTION
Form A:	Offeror Identification and Authorized Signatory
Form B:	Historically Underutilized Business Enterprises
Form C:	Response Checklist
Form D:	Offered Items Pricing
Form E:	Published Options
Form G:	Special Statement of Warranty
Form H:	Marketing Plan
Form W-9	Request for Taxpayer Identification Number and Certification
Form CIQ	Conflict of Interest Questionnaire
Form 1295	Certificate of Interested Parties
HB 89	Prohibition on Contracts with Companies Boycotting Israel
CCI	Contractor Contact Information

These *FORMS* are hereby made available in electronic format. They should be copied to Offeror's computer for completion and/or printout as required. The *FORMS* **may not** be changed or altered in any way, except as may be specified on the *FORM*.

ALL completed *FORMS* must also be submitted electronically on electronic media (DVD, CDROM, flash/thumb drive), excepting of course for signatures. The printed "Original" of the response will be considered as the official copy in case of any discrepancy between the electronic version and the printed Original.

FORM A - OFFEROR IDENTIFICATION & AUTHORIZED SIGNATORY
(DO NOT handwritten this Form. Information must be typed in.)
Invitation No.: FS12-19

Invitation Title: Fire Service Apparatus (All Types)

Offeror Company:

(Legal name of business which will appear on contract, if awarded)

Offeror Status: ☐ **Manufacturer**
☐ **Dealer/Distributor**
☐ **Other**
Response Type(1): ☐ **Single Offeror Acting Alone Or As Lead**
☐ **Multiple Offerors Acting Jointly**
Contract Signatory(2):
Title:
Mailing Address(3):

Street/PO Box

City

State & Zip

Physical Address:

Street

City

State & Zip

Phone:
Fax:
Email Address:
Federal Tax ID No.:
Web Page URL:

(1) If Joint Offering, all parties must submit a signed Form A. A contract will be offered to each.

(2) Person who will sign final contract documents if an award is made.

(3) Address to which final contract documents would be sent for signature.

Member Contact Information
Contact Person(4):
Title:
Mailing Address:

Street/PO Box

City

State & Zip

Physical Address:

Street

City

State & Zip

Toll Free Phone:
Fax:
Email Address:

(4) Person who End Users will contact for product information and to get pricing quotes.

The Signatory below, on behalf of Offeror:

- Acknowledges having thoroughly reviewed the Invitation;
- Attests to having the authority to sign this response and commit Offeror to honor all requirements;
- Makes, under penalty of perjury, all required Offeror Certifications as detailed in General Terms;
- Certifies that all information provided in this Response is true and correct.

Signature:
Title:
Printed Name:
Date:

FORM B - HISTORICALLY UNDERUTILIZED BUSINESS ENTERPRISES**Procurement No.:** FS12-19**Title:** Fire Service Apparatus (All Types)**Offeror:**

Most, if not all, of the Members of HGACBuy are subject to various requirements relative to purchasing goods and services from Historically Underutilized Business Enterprises (HUBs)(See Note 1). These requirements are promulgated by federal and state governmental authorities, and include measureable criteria such as 'percentage of total dollars spent directed to HUBs', 'number of HUB contractors used', 'HUB subcontractors employed by primary contractors', etc. These requirements are generally formalized in goal oriented programs.

HGACBuy is comitted to promoting full and equal business opportunities for HUB contractors, and to assisting Cooperative Purchasing Program (COOP) Members in meeting mandated HUB goals. In that regard, Contractor shall make a good faith effort to use the services of Certified/Listed (See Note 2) HUBs whenever possible.

As part of a good faith effort, Contractor agrees to work with and assist HGACBuy Members in meeting HUB targets and goals, as may be required by any rules, processes or programs they might have in place. Such assistance may include such things as compliance with reporting requirements, provision of documentation, consideration of 'Certified/Listed' subcontractors, provision of documented evidence that an active participatory role for a HUB entity was considered in a procurement transaction, etc.

Note 1: There are many designations other than "HUB" used across the country within various jurisdictions. Examples include terms such as Disadvantaged Business Enterprise (DBE), Minority Owned Business Enterprise (MBE), Woman Owned Business Enterprise (WBE), Small Disadvantaged Business (SDB), Small, Woman or Minority-owned Business (SWAM), etc. Regardless of the formal designation, the overall objective of the relavant programs is basically the same, i.e. to insure that disadvantaged and underutilized members of the business community receive a fair share of public spending. The term HUB as used herein shall be understood to encompass all such programs/business enterprises, no matter what terminology is used by the Member.

Note 2: The terms "Certified" and "Listed" as used in conjunction with HUB programs relate to the process of HUB qualification review. Jurisdictions usually require that companies claiming HUB status be reviewed and confirmed as meeting certain minimum requirements to claim that status, and that the review and confirmation process be carried out by certain designated entities. They are then "Certified" or "Listed" by having their name included on an official listing published by the Certifying or Listing Authority.

Accepted and Agreed By:

Title:

Date:

HUB Status Of Offeror☐ Offeror is a HUB, as detailed below.☐ Offeror is not a HUB.

Designation(s):

☐

HUB

☐

DBE

☐

MBE

☐

WBE

☐

Other

Certifying/Listing Authority(s):

Subcontracts

On a separate sheet, list any subcontractors that would be employed in providing products or services related to this procurement. Include subcontractor name, designation (HUB, DBE, etc.) and certifying/listing authority.

☐

Subcontractor List attached.

☐

No Subcontractors will be used.

FORM C - RESPONSE CHECKLIST		Procurement No.: FS12-19
Title: Fire Service Apparatus (All Types)		
Offeror: _____		
<p>This <i>FORM</i> is provided to help insure that all required Response elements have been completed and included, or certified as being available upon request. <u>Responses that do not comply with all requirements may be considered non-compliant.</u> Offeror's signatory must review each item below, and certify by initialing in the space to the right.</p>		
This Response Includes:	Init.	
1 An "Original" hard copy of the COMPLETE submission, including all required <i>FORMS</i> , plus one COMPLETE copy, each in a separate hard-sided 3-ring binder.		
2 A copy of the COMPLETE submission, including all required <i>FORMS</i> , in electronic format (CD, DVD, flash drive). Forms D & E are to be provided in an excel format.		
3 <i>An originally signed Form A from the all entities who are party to this submission and who should be offered a contract if this submission is successful. These entities should include the Apparatus Manufacturer, Franchised Texas Dealer and those dealers outside Texas who have current or past sales through the program (<u>Note: All other sales outside Texas should be coordinated through the manufacturer when possible</u>). In those cases where sales must go through a dealer due to franchise agreements, Form A's will be accepted from those dealers. For those only bidding conversions (i.e. brush trucks, light rescues), Form A's from in-state commercial chassis dealers for the underlying chassis make being quoted should be provided.</i>		
4 Forms A, B, C, D, E, G, H, (EXCEL FORMAT), 1295, W-9, CIQ, HB89, CCI. A 1295, W-9, CIQ, HB89 & CCI form shall be provided from each entity that has submitted a Form A for this submission.		
5 The required list of References .		
6 Details of " Service Organization ", including locations, hours, personnel and parts/service availability. (Applies to hard goods only.)		
7 Complete Warranty Documentation for all Products offered.		
8 The manufacturer's latest Specification Documents detailing standard features, operating characteristics, etc., for all products offered. Note: Bidder shall supply a spec/quote sheet for each product code bid on Form D. These sheets should detail what features are included in the price quoted on Form D.		
9 If the Non-Resident Reciprocal Bid Act applies, a copy of your state statute and a determination of the status of Texas bidders/proposers in your home state. If not applicable, indicate "N/A"		
10 If offer includes motor vehicles to be sold in Texas, copies of all current licenses as required by the Texas Motor Vehicle Commission.		
11 A Bid/Proposal Bond , or Cashier's Check in the amount of \$3000 . (A percentage bond is NOT acceptable.)	n/a	

FORM BASE OFFERING PRICES		Procurement No.	FS12-19
Offeror Name:			
Invitation No.:	FS12-19 - Fire Service Apparatus (All Types)		
<p>Note: All products listed below are to be considered as base model/units for purposes of this Invitation and any subsequent contract. The Bidder shall determine which Product Codes to bid and shall fill in a bid price in the appropriate cell. Bidder may then bid upgrades or downgrades to different product codes as options on Form E, with pricing equal to the differential amount between the base Product Item price and the upgrade or downgrade being offered. Bidders are to provide pricing for options and accessories as explained in Sections A and B, as well as specific apparatus variations as listed below:</p>			
1. Other available Cab/Chassis manufacturer choices for apparatus built on a commercial cab/chassis.			
2. Different available cab designs (2/4 Door/Tilt Cab etc.)			
3. Cab/Body sheet and structural metal choices (Galvanneal, Formed/Extruded Aluminum, Stainless Steel)			
4. Available rear axle configurations (Single/Tandem/Tandem Front Steering/Triple Rear)			
5. Different fire pumps and mounting locations (1250/1500/2500 GPM Pump/Rear and Mid-Mounted)			
6. Various body configurations (Walk-In/Non-Walk-In Body) for Rescue, Re-Hab, Hazmat, Mobile Command Centers			
7. Aerial Categories (Construction/Turntable Positions/Aerial Device Functions)			
IMPORTANT: Bidder MUST submit copies of the following with their bid:			
(1) A copy of each participating bidder/dealer's TxMVD dealer license identifying the make/brand of apparatus being bid.			
(2) An originally signed Form A from the all entities who are party to this submission and who should be offered a contract if this submission is successful. These entities should include the <u>Apparatus Manufacturer</u> , <u>Franchised Texas Dealer</u> and those dealers outside Texas who have current or past sales through the program (<i>Note: All other sales outside Texas should be coordinated through the manufacturer when possible</i>). In those cases where sales must go through a dealer due to franchise agreements, Form A's will be accepted from those dealers. For those only bidding conversions (i.e. brush trucks, light rescues), Form A's from in-state commercial chassis dealers for the underlying chassis make being quoted should be provided.			
(3) A copy of the bidders and/or manufacturers's Texas Motor Vehicle Converter license (where applicable).			
Note: The above requirements must be met prior to any contracts being issued.			
Product Code	Model & Description (Note: Bid only the base Item/Model on this Form . No changes/modifications to Form D descriptions will be accepted and will result in bid item being deemed non-compliant. Bid available options noted above on Form E)		Base Offered Price
A. Alexis			
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)			
FS19AA01	Spartan, 4-Door Custom Full Tilt Aluminum Cab Single axle, 75' rear mount aerial, stainless steel body, 300 gallons, side stack hose bed, single stage 1500 gpm pump mid mounted		
FS19AA02	Spartan, 4-Door Custom Full Tilt Aluminum Cab Tandem axle, 110' rear mount aerial with stainless steel body, 300 gallons of water, side stack hose bed, single stage 1500 gpm pump mid mounted		
FS19AA03	Spartan, 4-Door Custom Full Tilt Aluminum Cab Tandem axle, rear mount 100' platform, stainless steel body, 300 gallons of water, hose bed, single stage 1500 gpm pump mid mounted		
FS19AA04	Spartan, 4-Door Custom Full Tilt Aluminum Cab Tandem axle, mid-mount 100' platform, stainless steel body, 300 gallons of water, hose bed, single stage 1500 gpm pump mid mounted		
B. Wildland Fire Apparatus (Brush Fire)			
FS19AB01	Ford F550 4x4, aluminum flatbed body, portable pump, 300 gallons of water		
FS19AB02	Ford F550, 4x4 2-door, stainless steel Body, Rescue Unit with Skid		

FS19AB03	Ford F600 4x4, aluminum flatbed body, portable pump, 300 gallons of water	
FS19AB04	Ford F600, 4x4 2-door, stainless steel Body, Rescue Unit with Skid	
C. Pumper Fire Apparatus		
FS19AC01	Freightliner, 2-Door, Commercial Cab, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19AC02	International 2-Door, Commercial Cab, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19AC03	Spartan, 4-Door Custom Full Tilt Aluminum Cab, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19AC04	Ford F-550 4x4 Mini Pumper 1250 gpm, 300 tank	
FS19AC05	Ford F-600 4x4 Mini Pumper 1250 gpm, 300 tank	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19AD01	Ford F550, 4x4 2-door, stainless steel Body, Non Walk-in Rescue Unit	
FS19AD02	Ford F550, 4x4 2-door, stainless steel Body, Walk-in Rescue Unit	
FS19AD03	Ford F600, 4x4 2-door, stainless steel Body, Non Walk-in Rescue Unit	
FS19AD04	Ford F600, 4x4 2-door, stainless steel Body, Walk-in Rescue Unit	
FS19AD05	Ford F750, 2-door, stainless steel Body, Non Walk-in Rescue Unit	
FS19AD06	Ford F750 2-door, stainless steel Body, Walk-in Rescue Unit	
FS19AD07	Freightliner, 2-door, stainless steel body, Heavy Duty Non Walk-in Rescue Unit	
FS19AD08	Freightliner, 2-door, Stainless Steel Body, Heavy Duty Walk-In Rescue Unit	
FS19AD09	International, 2-door, stainless steel body Heavy Duty Non Walk-in Rescue Unit	
FS19AD10	International, 2-door, Stainless Steel Body, Heavy Duty Walk-In Rescue Unit	
FS19AD11	Spartan, 4-Door Custom Full Tilt Aluminum Cab, Stainless Steel Body, Heavy Duty Non Walk-in Rescue Vehicle	

FS19AD12	Spartan, 4-Door Custom Full Tilt Aluminum Cab, Stainless Steel Body, Heavy Duty Walk-in Rescue Vehicle	
E. Pumper/Tankers & Tankers		
FS19AE01	Freightliner, 2-Door Commercial Cab, Pumper/Tanker, Stainless Steel Body, 2000 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19AE02	Freightliner, 2-Door, Commercial Cab, Pumper/Tanker, Stainless Steel Body, 3000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19AE03	International 2-Door Commercial Cab, Pumper/Tanker, Stainless Steel Body, 2000 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19AE04	International, 2-Door, Commercial Cab, Pumper/Tanker, Stainless Steel Body, 3000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19AE05	Spartan, 4-Door Custom Full Tilt Aluminum Cab Pumper/Tanker, Stainless Steel Body, 2000 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19AE06	Spartan, 4-Door Custom Full Tilt Aluminum Cab Pumper/Tanker, Stainless Steel Body, 3000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
B. Blanchat Manufacturing		
B. Wildland Fire Apparatus (Brush Fire)		
FS19BB01	B-3-F450 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 325 gals water mounted on a Ford F450 Chassis 60" CA.	
FS19BB02	B-3- D3500 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 325 gals water mounted on a Dodge 3500 Chassis 60"CA.	
FS19BB03	B-4-F550 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 400 gal poly tank mounted on Ford F550 chassis 60"CA.	
FS19BB04	B-4-D5500 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 400 gal poly tank mounted on a Dodge 5500 chassis.	
FS19BB05	B-5-F550 Welded steel bed with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 500 gal poly tank mounted on Ford F550 chassis 84" CA.	
FS19BB06	B-5-D5500 Welded steel bed with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 500 gal poly tank mounted on a Dodge 5500 chassis 84" CA.	
FS19BB07	B-8-Ford Welded steel bed with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 800 gal poly tank mounted on a Ford F-750 Chassis.	
FS19BB08	B-24-F550 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 400 gal poly tank, single upswing door per side mounted on a Ford F550 60" CA.	
FS19BB09	B-24-D5500 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor, 400 gal poly tank single upswing door per side mounted on a Dodge 5500 60" CA.	
FS19BB10	B-24-F550 Welded steel body with crosswalk and pump and roll capabilities HPX200 pump driven by a 23HP briggs motor 400 gal poly tank, single upswing door per side	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19BD01	B-27-F550 Rescue first response. Welded steel superstructure transverse crosswalk with pump and roll capabilities dual swing up doors per side HPX200 pump driven by a 23HP briggs motor 400 gal poly tank, mounted on a ford F550 chassis 84" CA.	

FS19BD02	B-27-D5500 Rescue first response. Welded steel superstructure transverse crosswalk with pump and roll capabilities dual swing up doors per side HPX200 pump driven by a 23HP briggs motor 400 gal poly tank, mounted on a Dodge F550 chassis 84" CA.	
FS19BD03	B-56-Ford Rescue first response. Welded steel superstructure transverse crosswalk with pump and roll capabilities dual swing up doors per side, dual HPX200 pump driven by 23HP briggs motors, 800 gal poly tank, mounted on a Ford F-750 chassis.	
C. BFX		
B. Wildland Fire Apparatus (Brush Fire)		
FS19CB01	Attack One Brush Truck, minimum 280 gallons of water, minimum 21HP rear mounted gasoline pump, Composite apparatus body, light duty chassis with minimum 16,000 GVWR, 4x4, 60.00-inch cab-to-axle	
FS19CB02	Attack One Brush Truck, minimum 280 gallons of water, minimum 21HP rear mounted gasoline pump, metal apparatus body, light duty chassis with minimum 16,000 GVWR, 4x4, 60.00-inch cab-to-axle	
FS19CB03	Attack One Brush Truck, minimum 280 gallons of water, minimum 21HP rear mounted gasoline pump, aluminum flatbed, light duty chassis with minimum 16,000 GVWR, 4x4, 60.00-inch cab-to-axle	
FS19CB04	Attack One Brush Truck, minimum 280 gallons of water, minimum 21HP rear mounted gasoline pump, aluminum flatbed with exterior riding position, light duty chassis with minimum 16,000 GVWR, 4x4, 60.00-inch cab-to-axle	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile		
FS19CD01	Sentinel Support Vehicle, Helitack/Rescue, composite apparatus body, enclosed load bed, light duty chassis with minimum 16,000 GVWR, 4x4, 60.00-inch cab-to-axle	
FS19CD02	Sentinel Support Vehicle, Superintendent, composite apparatus body, open load bed, light duty chassis with minimum 11,400 GVWR, 4x4, 60.00-inch cab-to-axle	
FS19CD03	Sentinel Support Vehicle, Highland, composite apparatus body, enclosed load bed, light duty chassis with minimum 11,400 GVWR, 4x4, 60.00-inch cab-to-axle	
D. Boise Mobile Equipment		
B. Wildland Fire Apparatus (Brush Fire)		
FS19DB01	BME, Type 3, International HV, 4WD, 4-Door ,Crew Cab. 600 Gallon Water Tank, 25 Gallon Foam Tank, Hale CBP 250 PTO Pump, Pump and Roll Capability, FoamPro 2001 Foam System,	
FS19DB02	BME, Type 3, Freightliner M2-106, 4WD, 4-Door ,Crew Cab. 600 Gallon Water Tank, 25 Gallon Foam Tank, Hale CBP 250 PTO Pump, Pump and Roll Capability, FoamPro 2001 Foam System,	
FS19DB03	BME, Type 3, Urban Interface (Model 34). International HV, 4WD, 4-Door, Crew Cab. 500 Gallon Water Tank, 25 Gallon Foam Tank, Darley JMP 500 2-Stage Pump, Darley 1-1/2AGE 24 HP Kubota D902 Diesel Auxiliary Pump	
FS19DB04	BME, Type 3, Urban Interface (Model 34) Freightliner M2-106, 4WD, 4-Door, Crew Cab. 500 Gallon Water Tank, 25 Gallon Foam Tank, Darley JMP 500 2-Stage Pump, Darley 1-1/2AGE 24 HP Kubota D902 Diesel Auxiliary Pump	
FS19DB05	BME, Type 4, International HV, 4WD, 4-Door, Crew Cab. 800 Gallon Water Tank, 25 Gallon Foam Tank, Rear Mounted Darley 1-1/2AGE 34HP Kubota Diesel Pump, Two (2) Hannay 150' Hose Reels, NFPA Compliant Whelen Light Package	
FS19DB06	BME, Type 4, Freightliner M2-106, 4WD, 4-Door, Crew Cab. 800 Gallon Water Tank, 25 Gallon Foam Tank, Rear Mounted Darley 1-1/2AGE 34HP Kubota Diesel Pump, Two (2) Hannay 150' Hose Reels, NFPA Compliant Whelen Light Package	
FS19DB07	BME, Type 6, Ford F550, 4WD, 4-Door 6.7L Diesel, 6-Speed A/T. 300 Gallon Water Tank Darley 1-1/2AGE 24HP Kubota D902 Diesel Auxiliary Pump	
FS19DB08	BME, Type 6, Dodge 5500, 4WD, 4-Door 6.7L Diesel, 6-Speed A/T. 300 Gallon Water Tank Darley 1-1/2AGE 24HP Kubota D902 Diesel Auxiliary Pump	
FS19DB09	BME, Type 6, (Flatbed) Ford F550, 4WD, 4-Door 6.7L Diesel, 6-Speed A/T. 300 Gallon Water Tank Darley 1-1/2AGE 24HP Kubota D902 Diesel Auxiliary Pump	
FS19DB10	BME, Type 6, (Flatbed) Dodge 5500, 4WD, 4-Door 6.7L Diesel, 6-Speed A/T. 300 Gallon Water Tank Darley 1-1/2AGE 24HP Kubota D902 Diesel Auxiliary Pump	
FS19DB11	BME, Type 6, "X-Treme" Dodge 5500, Full Aluminum Body, 300 Gallon Water Tank, Darley 1-1/2 AGE Pump, Off Road Package.	

FS19DB12	BME, Type 3, CalFire Model 34, International HV 4x4 chassis, 500 gallon water tank, JMP500 Darley pump, 1-1/2 AGE Darley Aux Pump	
C. Pumper Fire Apparatus		
FS19DC01	BME, Commercial Pumper, Side Mount, Freightliner Chassis, 1000 Gallon Water Tank, 1500 GPM Pump	
FS19DC02	BME, Commercial Pumper, Side Mount, International HV Chassis, 1000 Gallon Water Tank, 1500 GPM Pump	
FS19DC03	BME, Commercial Pumper, Top Mount, Freightliner Chassis, 1000 Gallon Water Tank, 1500 GPM Pump	
FS19DC04	BME, Commercial Pumper, Top Mount, International HV Chassis, 1000 Gallon Water Tank, 1500 GPM Pump	
FS19DC05	BME, Custom Pumper, Side Mount, Custom Chassis, 1000 Gallon Water Tank, 1500 GPM Pump	
FS19DC06	BME, Custom Pumper, Top Mount, Custom Chassis, 1000 Gallon Water Tank, 1500 GPM Pump	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19DD01	BME, Walk Around, Light Rescue, Ford F550	
FS19DD02	BME, Walk Around, Medium Rescue, Freightliner M2-106, 2WD	
FS19DD03	BME, Walk Around, Medium Rescue, International MV	
E. Pumper/Tankers & Tankers		
FS19DE01	BME, Commercial Tender, Freightliner Chassis, Single Axle, 2000 Gallon Water Tank, 750GPM Pump	
FS19DE02	BME, Commercial Tender, International Chassis, Single Axle, 2000 Gallon Water Tank, 750GPM Pump	
FS19DE03	BME, Commercial Tender, Freightliner Chassis, Tandem Axle, 3000 Gallon Water Tank, 750GPM Pump	
FS19DE04	BME, Commercial Tender, International Chassis, Tandem Axle, 3000 Gallon Water Tank, 750GPM Pump	
FS19DE05	BME, Tender, Model 22, Freightliner, 2WD, 2-Door, Single Axle. 1500 Gallon Stainless Steel Elliptical Water Tank.	
FS19DE06	BME, Tender, Model 22, International HV, 2WD, 2-Door, Single Axle. 1500 Gallon Stainless Steel Elliptical Water Tank.	
E. Custom Fire		
B. Wildland Fire Apparatus (Brush Fire)		
FS19EB01	Ford F550 4 door 4x4, 150gpm Gas engine driven pump, 300 Gallon Poly Tank, CustomFIRE Stainless Steel Initial Attack Body	
C. Pumper Fire Apparatus		
FS19EC01	Freightliner Single Axle, 1500gpm Side Mount, 750 Gallon Poly, CustomFIRE Stainless Steel Pumper Body	
FS19EC02	Freightliner Single Axle, 1500gpm Enclosed Top Mount, 750 Gallon Poly, CustomFIRE Stainless Steel Pumper Body, Full Response Crew Cab	
FS19EC03	Spartan MFD 10" Single Axle, 1500gpm Side Mount, 750 Gallon Poly, CustomFIRE Stainless Steel Pumper Body	
FS19EC04	Freightliner 4 door 4x4 Single Axle, 1250gpm Side Mount, 500 Gallon Poly, CustomFIRE Stainless Steel Interface Pumper Body	
FS19EC05	Spartan MFD 20" Single Axle, 1500gpm Enclosed Top Mount, 750 Gallon Poly, CustomFIRE Stainless Steel Pumper Body	
D. Special Service Apparatus (Walk-In & Non-Walk In Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19ED01	Ford F550 4 door 4x4 Single Axle, CustomFIRE Stainless Steel Light Rescue Non-Walk-In Body	

FS19ED02	Freightliner Single Axle, CustomFIRE Stainless Steel Heavy Rescue Walk-In Body	
FS19ED03	Freightliner Single Axle, CustomFIRE Stainless Steel Heavy Rescue Non-Walk-In Body	
FS19ED04	Spartan MFD 10" Single Axle, CustomFIRE Stainless Steel Heavy Rescue Non-Walk-In Body	
FS19ED05	Spartan MFD 10" Single Axle, CustomFIRE Stainless Steel Heavy Rescue Walk-In Body	

E. Pumper/Tankers & Tankers

FS19EE01	Freightliner Single Axle, 500gpm Side Mount, 2000 Gallon Poly, CustomFIRE Stainless Steel Tender Body	
FS19EE02	Freightliner Tandem Axle, 500gpm Side Mount, 3000 Gallon Poly, CustomFIRE Stainless Steel Tender Body	
FS19EE03	Spartan MFD 10" Tandem, 1500gpm Side Mount, 3000 Gallon Poly, CustomFIRE Stainless Steel Pumper Tanker Body	

F. DACO

B. Wildland Fire Apparatus (Brush Fire)

FS19FB01	Self-Contained Slip-In Unit	
FS19FB02	Brush Fire Apparatus, Ford F-550 Chassis, Steel Flatbed	
FS19FB03	Brush Fire apparatus, Ford F-550 Chassis, Formed Aluminum Flatbed	
FS19FB04	Brush Fire apparatus, Ford F-550 Chassis, Steel Utility Bed	
FS19FB05	Brush Fire apparatus, Ford F-550 Chassis, Formed Aluminum Utility Bed	
FS19FB06	Brush Fire apparatus Freightliner M-2 4 x4 Chassis Steel flatbed.	
FS19FB07	Brush Fire apparatus Freightliner M-2 4 x 4 Chassis Formed Aluminum Flatbed.	
FS19FB08	Brush Fire apparatus Freightliner M-2 4 x 4 Chassis Formed Aluminum Utility Bed.	
FS19FB09	Brush Fire Apparatus, Dodge 5500 Chassis, Steel Flatbed	
FS19FB10	Brush Fire Apparatus, Dodge 5500 Chassis, Formed Aluminum Flatbed	
FS19FB11	Brush Fire Apparatus, Dodge 5500 Chassis, Formed Aluminum Utility Bed	
FS19FB12	Brush Fire Apparatus, IH HV507 Chassis, 4x4, Formed Aluminum Flatbed	
FS19FB13	Brush Fire Apparatus, IH HV507 Chassis, 4x4, Formed Aluminum Utility Bed	
FS19FB14	Brush Fire Apparatus, Chevrolet 5500 Chassis, Formed Aluminum Flatbed	
FS19FB15	Brush Fire Apparatus, Chevrolet 5500 Chassis, Formed Aluminum Utility Bed	

G. Danko

B. Wildland Fire Apparatus (Brush Fire)

FS19GB01	Skid Unit, 250 gallon tank, 150 GPM pump, pump engine, booster reel with booster hose.	
FS19GB02	High pressure skid unit	
FS19GB03	Wildland Flatbed, Ford F550 4x4 chassis, aluminum flatbed, 300 gallon skid unit, 150 GPM pump	
FS19GB04	Wildland Flatbed, Ram 5500, 4x4 chassis, aluminum flatbed, 300 gallon skid unit, 150 GPM pump	
FS19GB05	Wildland quick attack body, Ford F550, 4x4 diesel, 3/16" aluminum body, 300 gallon skid, 150GPM pump.	
FS19GB06	Wildland quick attack body, Ram 5500, 4x4 diesel, 3/16" aluminum body, 300 gallon skid, 150GPM pump.	
FS19GB07	Wildland Flatbed, Freightliner/M2, 1000 gallon water, 300 GPM pump, aluminum flatbed, pump and roll.	
FS19GB08	Wildland Flatbed, I-H chassis, 1000 gallon water, 300 GPM pump, aluminum flatbed, pump and roll.	
FS19GB09	Wildland Flatbed, Peterbilt chassis, 1000 gallon water, 300 GPM pump, aluminum flatbed, pump and roll.	
FS19GB10	Wildland Flatbed, Kenworth chassis, 1000 gallon water, 300 GPM pump, aluminum flatbed, pump and roll	
FS19GB11	Danko Quick Attack, Ford F550 4x4 diesel, 3/16" painted aluminum body, 300 gallon water, 150GPM pump.	

FS19GB12	Danko Quick Attack, Ram 5500, 4x4 diesel, 3/16" painted aluminum body, 300 gallon water 150GPM pump.	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19GD01	Rescue, Ford F550, 4x4 chassis, Non-Walk-In Rescue Body, 10' painted 3/16" aluminum body.	
FS19GD02	Rescue, Ram 5500, 4x4 chassis, Non-Walk-In Rescue Body, 10' painted 3/16" aluminum body.	
E. Pumper/Tankers & Tankers		
FS19GE01	Ford 550, Mini Pumper 4 door, 4x4, diesel chassis, 1250GPM pump, 300 gallon water, painted 3/16" aluminum body.	
FS19GE02	IHC, 2-door chassis, Pumper Tanker, single axle, 750 GPM pump, 2000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE03	Freightliner, 2-door chassis, Pumper Tanker, single axle, 750 GPM pump, 2000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE04	Kenworth, 2-door chassis, Pumper Tanker, single axle, 750 GPM pump, 2000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE05	Peterbilt, 2-door chassis, Pumper Tanker, single axle, 750 GPM pump, 2000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE06	IHC, 2-door chassis, Pumper Tanker, tandem axle, 750 GPM pump, 3000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE07	Freightliner, 2-door chassis, Pumper Tanker, tandem axle, 750 GPM pump, 3000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE08	Kenworth, 2-door chassis, Pumper Tanker, tandem axle, 750 GPM pump, 3000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE09	Peterbilt, 2-door chassis, Pumper Tanker, tandem axle, 750 GPM pump, 3000 gallon poly tank, swivel dump valve, hose bed, LED lighting	
FS19GE10	IHC, 2-door chassis, Tanker, single axle, 400 GPM auxiliary pump with diesel engine, 2000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE11	Freightliner 2-door chassis, Tanker, single axle, 400 GPM auxiliary pump with diesel engine, 2000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE12	Kenworth, 2-door chassis, Tanker, single axle, 400 GPM auxiliary pump with diesel engine, 2000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE13	Peterbilt, 2-door chassis, Tanker, single axle, 400 GPM auxiliary pump with diesel engine, 2000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE14	IHC, 2-door chassis, Tanker, tandem axle, 400 GPM auxiliary pump with diesel engine, 3000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE15	Freightliner, 2-door chassis, Tanker, tandem axle, 400 GPM auxiliary pump with diesel engine, 3000 gal poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE16	Kenworth, 2-door chassis, Tanker, tandem axle, 400 GPM auxiliary pump with diesel engine, 3000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE17	Peterbilt, 2-door chassis, Tanker, tandem axle, 400 GPM auxiliary pump with diesel engine, 3000 gallon poly tank, stainless plumbing, swivel dump, LED lights	
FS19GE18	Ford 750 2-door chassis, Tanker, single axle, 400 GPM auxiliary pump with gas engine, 1800 gallon poly tank, stainless plumbing, swivel dump, LED lights.	
FS19GE19	Freightliner, 2 door chassis, Crossmount pumper, single axle, 1000 GPM pump with V10 Gas Engine, 1000 gallon poly tank, top mount controls, ladder storage, LED lights, aluminum body.	
FS19GE20	Freightliner, 4 door chassis, Pumper, single axle, 1250 GPM pump, 1000 gallon poly tank, aluminum body, ladder storage, hosebed, side mount controls, LED lights.	
FS19GE21	Freightliner, 4 door chassis, Pumper/tanker, 1250 GPM pump, 1600 gallon poly tank, aluminum body, rear swivel dump, portable tank storage, hosebed, LED lights	
H. Darley		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19HA01	Spartan Single Rear Axle Chassis, Poly Body, 1500 GPM Midship CAFS Pump, Rear Mount 78 ft Steel Aerial, 500 Gallon Tank	
FS19HA02	Spartan Tandem Rear Chassis, Poly Body, 1500 GPM Midship CAFS Pump, Rear Mount 109 ft Steel Aerial, 300 Gallon Tank	

B. Wildland Fire Apparatus (Brush Fire)		
FS19HB01	Darley Wildland Attack Unit, Ford F550, Poly Body with Foam System	
C. Pumper Fire Apparatus		
FS19HC01	IH 2-Door Single Rear Axle Chassis, Poly Body, 1500 GPM CAFS Midship Pump, 1000 Gallon Tank	
FS19HC02	Spartan Single Rear Axle Chassis, Poly Body, 1500 GPM CAFS Midship Pump, 1000 Gallon Tank	
FS19HC03	Spartan Tandem Rear Axle Chassis, Poly Body, 1500 GPM Midship Pump, 2500 Gallon Tank	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19HD01	IH 2-Door Single Rear Axle, Heavy Rescue Poly Body, Non-Walk-In Body	
FS19HD02	Spartan Single Rear Axle, Heavy Rescue Poly Body, Non-Walk-In Body	
E. Pumper/Tankers & Tankers		
FS19HE01	Spartan Single Rear Axle Chassis, Poly Body, 1000 GPM Midship Pump, 2000 Gallon Tank	
FS19HE02	IH 2-Door Tandem Rear Axle Chassis, Poly Body, 1250 GPM Midship Pump, 2500 Gallon Tank	
FS19HE03	Spartan Tandem Rear Axle Chassis, Poly Body, 1500 GPM Midship Pump, 3500 Gallon Tank	
I. Deep South		
B. Wildland Fire Apparatus (Brush Fire)		
FS19IB01	Deep South Wildland Fire Apparatus, Ford Gas F-550 Regular Cab, 4X4, - 9' Alum. Flatbed Fire Body w/skid unit-150 GPM pump, 250 gallon tank.	
FS19IB02	Deep South Wildland Fire Apparatus, IHC 4400 Regular Cab, 4X2, 15' Alum. Flatbed Fire Body w/skid unit-150 GPM pump, 250 gallon tank.	
FS19IB03	Skid Unit, 100 GPM pump, 250 gallon water tank, Hose reel, 200' of 1" redline	
FS19IB04	Deep South Wildland Fire Apparatus, Ford Diesel F-350, Regular Cab, 4x4, 8' Factory Truck Bed w/skid unit, 150 GPM pump, 250 gallon water tank	
C. Pumper Fire Apparatus		
FS19IC01	1000 Series Pumper / KW T-370 2 door. Hi/Low Series Pumper, 750 Gallon Poly Tank - 1/8" Hi/Low Alum. body. Side-mount 1250 GPM pump.	
FS19IC02	1000 Series Pumper / Spartan Metro 4 door. Hi/Low Series Pumper, 750 Gallon Poly Tank - 1/8" Hi/Low Alum. Body. Side-mount 1250 GPM pump.	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19ID01	Quick Response Rescue / Fire Apparatus, Ford Gas F-550 Regular cab, 4X4, 9' - 1/8" Alum. 68" High Rescue / Fire Body.	
FS19ID02	Medium-Duty "Walk-Around" Rescue Body / KW T-370 2- door 12' - 1/8" Alum. 84" High Rescue / Fire Body.	
FS19ID03	Heavy Duty "Walk-Around" Rescue Body/Spartan Metro 4 Door, 18' Alum. 84" High Rescue/Fire Body.	
E. Pumper/Tankers & Tankers		
FS19IE01	Classic Series Mild Steel Tank / KW T-370 2 door - 3/16" Semi-Elliptical 1800 gallon coated mild steel tank body & subframe, 500 GPM PTO pump.	
FS19IE02	Classic Series Poly Tank / KW T-370 2 door. 1800 gallon Poly Tank 1/8" Aluminum Body & Subframe, 500 GPM PTO pump.	
FS19IE03	Classic Series Poly Tank / Spartan Metro 4 dr - 1800 gallon Poly Tank 1/8" Alum. Body & Subframe, 500 GPM PTO pump.	
J. Emergency One (E-One)		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19JA01	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Single Axle, 1500 GPM Single Stage Pump, 500 Gallon Tank, Welded Aluminum 50' Boom - 50 FT. 300# Tip Load, Mid Mount Telescoping Boom with Rescue Ladder	

FS19JA02	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Single Axle, 1500 GPM Single Stage Pump, 500 Gallon Tank, Welded Extruded Aluminum HP75 - 75 FT. 550# Tip Load, Rear Mount Telescoping Ladder	
FS19JA03	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Single Axle, 1500 GPM Single Stage Pump, 500 Gallon Tank, Welded Extruded Aluminum HP78 - 78 FT. 650# Tip Load, Rear Mount Telescoping Ladder	
FS19JA04	E-One Quest, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Single Axle, 1500 GPM Single Stage Pump, 500 Gallon Tank, Welded Extruded Aluminum HP78 - 78 FT. 825# Tip Load, Rear Mount Telescoping Ladder	
FS19JA05	E-One Typhoon, 4 Door Full Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Single Axle, No Pump, No Tank, Welded Extruded Aluminum Metro 100 - 100 FT. 300# Tip Load, Rear Mounted Telescoping Ladder.	
FS19JA06	E-One Typhoon, 4 Door Full Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Single Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Extruded Aluminum HR100 - 100 FT. 300# Tip Load, Rear Mounted Telescoping Ladder.	
FS19JA07	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 500 Gallon Tank, Welded Extruded Aluminum HP100 - 100 FT. 550# Tip Load, Rear Mounted Telescoping Ladder	
FS19JA08	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Steel HPS105 - 105 FT. 575# Tip Load, Rear Mounted Telescoping Ladder	
FS19JA09	E-ONE Quest, 4 Door Full Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Extruded Aluminum CR137 - 137 FT. 300# Tip Load, Rear Mount Telescoping Ladder	
FS19JA10	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Extruded Aluminum L193 - 95' 1305# Tip Load, Mid-Mounted Telescoping Ladder Platform	
FS19JA11	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Extruded Aluminum L095- 92' 1025# Tip Load, Rear Mounted Telescoping Ladder with Platform	
FS19JA12	E-ONE Typhoon, 4 Door full Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Extruded Aluminum HP100 - 100 FT. 1305# Tip Load, Rear Mounted Telescoping Ladder with Platform	
FS19JA13	E-ONE Typhoon, 4 Door full Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Steel HPS100P - 100 FT. 1305# Tip Load, Rear Mounted Telescoping Ladder with Platform	
FS19JA14	E-One Typhoon, 4-Door Full-Tilt Welded Extruded Aluminum Cab, Six (6) Man Seating, Welded Extruded Aluminum Body, Tandem Axle, 1500 GPM Single Stage Pump, 300 Gallon Tank, Welded Steel SM10 100' 1305# Tip Load, Mid Mounted Telescoping Ladder with Platform	
FS19JA15	E-One Typhoon, 4-Door Full-Tilt Aluminum Cab, Extruded Aluminum Body, Tandem/Axle, 2000 GPM Single Stage Pump, 300 Gallon Tank, Bronto 116'+ 1400# Tip Load Rear Mounted Telescoping & Articulating Steel Boom with Platform	
B. Wildland Fire Apparatus (Brush Fire)		
FS19JB01	E-ONE Ford F550 4X4 Quick Attack Pumper, 500 GPM, Welded Extruded Aluminum Body, Single Axle, Side Mount Pump Module	

C. Pumper Fire Apparatus

FS19JC01	Freightliner M2, 2-Door Commercial Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	
FS19JC02	International 4400, 2-Door Commercial Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	
FS19JC03	Kenworth T370, 2-Door Commercial Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	
FS19JC04	Peterbilt 348, 2-Door Commercial Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	
FS19JC05	E-One Typhoon, 4-Door Custom Full-Tilt Welded Aluminum Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	
FS19JC06	E-ONE Typhoon, 4 Door Custom Full Tilt Welded Aluminum Cab, Rear Engine Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	
FS19JC07	E-ONE Quest, 4 Door Custom Full Tilt Welded Aluminum Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Rear Mount Pump Module	
FS19JC08	E-One Typhoon Urban Interface Pumper, 4-Door Custom Full-Tilt Welded Aluminum Cab, Pumper, Welded Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mount Pump Module	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19JD01	Ford F550, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Non-Walk-In Rescue	
FS19JD02	Freightliner M2, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Non-Walk-In Rescue	
FS19JD03	International 4400, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Non-Walk-In Rescue	
FS19JD04	Kenworth T370, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Non-Walk-In Rescue	
FS19JD05	Peterbilt 348, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Non-Walk-In Rescue	
FS19JD06	Kenworth T370, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Walk-In Rescue	
FS19JD07	Peterbilt 348, 2-Door, OEM Cab, Single Axle, Welded Extruded Aluminum Body, Walk-In Rescue	
FS19JD08	Freightliner M2, 2-Door, OEM Cab, Single Axle, Welded Stainless Body, Walk-In Rescue	
FS19JD09	International 4400, 2-Door, OEM Cab, Single Axle, Welded Stainless Body, Walk-In Rescue	
FS19JD10	Kenworth T370, 2-Door, OEM Cab, Single Axle, Welded Stainless Body, Walk-In Rescue	
FS19JD11	Peterbilt 348, 2-Door, OEM Cab, Single Axle, Welded Stainless Body, Walk-In Rescue	
FS19JD12	E-One Typhoon, 4-Door Custom, Full-Tilt, Welded Aluminum Cab, Single Axle, Welded Extruded Aluminum Body, Non-Walk-In Rescue	
FS19JD13	E-One Typhoon, 4-Door Custom, Full-Tilt, Welded Aluminum Cab, Single Axle, Welded Extruded Aluminum Body, Walk-In Rescue	

E. Pumper/Tankers & Tankers

FS19JE01	Freightliner M2, 2-Door, Commercial Cab, Pumper/Tanker, Welded Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pump Module	
FS19JE02	International, 2-Door, Commercial Cab, Pumper/Tanker, Welded Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pump Module	
FS19JE03	Kenworth T370, 2-Door, Commercial Cab, Pumper/Tanker, Welded Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pump Module	
FS19JE04	Peterbilt 348, 2-Door, Commercial Cab, Pumper/Tanker, Welded Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pump Module	
FS19JE05	International 4400, 2-Door Commercial Cab, 2000 Gallon Tanker, Wet Side Body, Single Axle, 500 GPM Pump, Stainless Steel Body	

FS19JE06	Freightliner M2, 2-Door Commercial Cab, 2000 Gallon Tanker, Wet Side Body, Single Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE07	Kenworth T370, 2-Door Commercial Cab, 2000 Gallon Tanker, Wet Side Body, Single Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE08	Peterbilt 348, 2-Door Commercial Cab, 2000 Gallon Tanker, Wet Side Body, Single Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE09	International, 2-Door Commercial Cab, rear 3000 Gallon Tanker, Wet Side Body, Tandem Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE10	Freightliner M2, 2-Door Commercial Cab, rear 3000 Gallon Tanker, Wet Side Body, Tandem Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE11	Kenworth T370, 2-Door Commercial Cab, rear 3000 Gallon Tanker, Wet Side Body, Tandem Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE12	Peterbilt 348, 2-Door Commercial Cab, rear 3000 Gallon Tanker, Wet Side Body, Tandem Axle, 500 GPM Pump, Stainless Steel Body	
FS19JE13	International 4400, 2-Door, Commercial Cab, 2000 Gallon Elliptical Vacuum Tanker, Welded Stainless Steel Body, Single Axle, 500 GPM Pump	
FS19JE14	International, 2-Door, Commercial Cab, 3500 Gallon Elliptical Vacuum Tanker, Welded Stainless Steel Body, Tandem Axle, 500 GPM Pump	
FS19JE15	Freightliner M2, 2-Door, Commercial Cab, 2000 Gallon Elliptical Vacuum Tanker, Welded Stainless Steel Body, Single Axle, 500 GPM Pump	
FS19JE16	Freightliner, 2-Door, Commercial Cab, 3500 Gallon Elliptical Vacuum Tanker, Welded Stainless Steel Body, Tandem Axle, 500 GPM Pump	
FS19JE17	E-ONE Typhoon, 4-Door, Custom Full-Tilt, Welded Aluminum Cab, Pumper/Tanker, Welded Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pump Module	

F. Airport Rescue Fire-Fighting Vehicles

FS19JF01	E-ONE Titan 4x4 P801-Class 4 ARFF, Coil Spring Suspension, 1585 water/205 foam gallons, 500 lbs dry chemical, NFPA 414 & FAA Compliant	
FS19JF02	E-ONE Titan 6x6 P811, Class 5 ARFF, Coil Spring Suspension, 3170 water/420 foam gallons, 500 lbs dry chemical, NFPA 414 & FAA Compliant	

K. Emergency Vehicles, Inc. (EVI)

D. Special Service Apparatus (Walk-In & Non-Walk In Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile

FS19KD01	Ford F-550 2-Door, Single Axle 10' Non-Walk-In Rescue (Aluminum)	
FS19KD02	Ford F-550 2-Door, Single Axle 12' Non-Walk-In Rescue (Aluminum)	
FS19KD03	Ford F-550 4-Door, Single Axle 12' Non-Walk-In Rescue (Aluminum)	
FS19KD04	Ford F-550 2-Door, Single Axle 12' Walk-In Rescue (Aluminum)	
FS19KD05	Freightliner M2, 2-Door, Single Axle 16' Non-Walk-In Rescue (Aluminum)	
FS19KD06	International 4400, 2-Door, Single Axle 16' Non-Walk-In Rescue (Aluminum)	
FS19KD07	Freightliner M2, 4-Door, Single Axle 16' Non-Walk-In Rescue (Aluminum)	
FS19KD08	Freightliner M2, 2-Door, Single Axle 16' Walk-In Rescue (Aluminum)	
FS19KD09	International 4400, 2-Door, Single Axle 16' Walk-In Rescue (Aluminum)	
FS19KD10	Freightliner M2, 4-Door, Single Axle 18' Walk-In Rescue (Aluminum)	
FS19KD11	International 4400, 4-Door, Single Axle 18' Walk-In Rescue (Aluminum)	
FS19KD12	Freightliner M2, 2-Door, Single Axle 18' Crew-Body Rescue (Aluminum)	
FS19KD13	Freightliner M2, 2-Door, Single Axle 18' Mobile Command Center (Aluminum)	
FS19KD14	Spartan, 4-Door Full Tilt, Single Axle 21' Non-Walk-In Rescue (Aluminum)	
FS19KD15	Spartan, 4-Door Full Tilt, Single Axle 21' Walk-In Rescue (Aluminum)	
FS19KD16	Freightliner M2, 4-Door, Single Axle 25' Walk-In Rescue (Aluminum)	
FS19KD17	International 4400, 4-Door, Single Axle 25' Walk-In Rescue (Aluminum)	
FS19KD18	Freightliner M2, 4-Door, Tandem Axle 25' Walk-In Rescue (Aluminum)	
FS19KD19	International 4400, 4-Door, Tandem Axle 25' Walk-In Rescue (Aluminum)	
FS19KD20	Spartan, 4-Door, Full Tilt, Tandem Axle 30' Walk-In Rescue (Aluminum)	
FS19KD21	Freightliner M2, 2-Door, Tandem Axle 30' Walk-In Command Center (Aluminum)	

FS19KD22	Ford F-550 2-Door, Single Axle 14' Crew-Body Rescue (Aluminum)	
FS19KD23	Ford F-550 4-Door, Single Axle 12' 1250 GPM Mini-Pumper (Aluminum)	
FS19KD24	Ford F-550 2-Door, Single Axle 10' Quick Attack (Aluminum)	
FS19KD25	Ford Expedition SUV Single Axle Command Vehicle	
FS19KD26	Ford F-350 4-Door Pick Up, Single Axle Command Vehicle	
FS19KD27	Ford F-550 2-Door, Single Axle 16' Walk-In Special Service Unit (Aluminum)	
FS19KD28	Ford Transit 350, Single Axle Command Unit	
FS19KD29	Freightliner M2 2-Door, Single Axle 32' Walk-In Command Center (Aluminum)	
FS19KD30	Spartan, 3-Door, Single Axle 24' Crew-Body Haz-Mat Unit (Aluminum)	
FS19KD31	Spartan, 3-Door, Single Axle 24' Non-Walk-In Haz-Mat Unit (Aluminum)	
FS19KD32	Spartan, 4-Door Tandem Axle 26' Non-Walk-In Rescue (Aluminum)	
FS19KD33	International 4400 2-Door, Single Axle 15' Air-Light Unit (Aluminum)	
FS19KD34	Ford F-550 Super Cab, Single Axle 10' ESU Unit (Aluminum)	
FS19KD35	Ford Transit 350, single axle tactical unit	

L. Ferrara

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19LA01	Cinder, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Single Axle, 57' Rear Mounted Telescoping Ladder	
FS19LA02	Igniter, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Single Axle, 57' Rear Mounted Telescoping Ladder	
FS19LA03	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Single Axle, 57' Rear Mounted Telescoping Ladder	
FS19LA04	Cinder, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Single Axle, 77' Rear Mounted Telescoping Ladder	
FS19LA05	Igniter, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Single Axle, 77' Rear Mounted Telescoping Ladder	
FS19LA06	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Single Axle, 77' Rear Mounted Telescoping Ladder	
FS19LA07	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 107' Rear Mounted Telescoping Ladder	
FS19LA08	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 127' Rear Mounted Telescoping Ladder	
FS19LA09	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder	
FS19LA10	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 85' Mid-Mounted Telescoping Ladder with Platform	
FS19LA11	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 85' Rear Mounted Telescoping Ladder with Platform	
FS19LA12	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 100' Rear Mounted Telescoping Ladder with Platform	
FS19LA13	Inferno, 4-Door Full-Tilt OEM Cab, Extruded Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	
FS19LA14	Inferno, 4-Door Full-Tilt OEM Cab, Aluminum Body, Tandem Axle, 100' Tractor Drawn Ladder	

B. Wildland Fire Apparatus (Brush Fire)

FS19LB01	Self-Contained Slip-In Unit	
FS19LB02	Ferrara Brush Fire Apparatus, Ford Truck, Extruded Aluminum Flatbed	
FS19LB03	Ferrara Brush Fire Apparatus, Dodge Truck, Extruded Aluminum Flatbed	

C. Pumper Fire Apparatus

FS19LC01	Freightliner M2, 2-Door, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19LC02	Freightliner M2, 4-Door, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19LC03	Custom Cinder, 4-Door, Full-Tilt Cab, Extruded Aluminum Body, Single Axle, 1500 GPM Pump, Mid-Mounted Pumper	
FS19LC04	Custom Igniter, 4-Door, Full-Tilt Cab, Extruded Aluminum Body, Single Axle, 1500 GPM Pump, Mid-Mounted Pumper	

FS19LC05	Custom Inferno, 4-Door, Full-Tilt Cab, Extruded Aluminum Body, Single Axle, 1500 GPM Pump, Mid-Mounted Pumper	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile		
FS19LD01	Ford 550, 2-door Cab, Single Axle, Extruded Aluminum Body, NON-Walk-In LIGHT Rescue	
FS19LD02	Ford 550, 2-door Super Cab, Single Axle, Extruded Aluminum Body, NON-Walk-In LIGHT Rescue	
FS19LD03	Ford 550, 4-door Cab, Single Axle, Extruded Aluminum Body, NON-Walk-In LIGHT Rescue	
FS19LD04	Freightliner M2, 2-door Cab, Single Axle, Extruded Aluminum Body, NON-Walk-In MEDIUM Rescue	
FS19LD05	Freightliner M2, 4-door Cab, Single Axle, Extruded Aluminum Body, NON-Walk-In MEDIUM Rescue	
FS19LD06	Freightliner M2, 2-door Cab, Single Axle, Extruded Aluminum Body, Walk-In MEDIUM Rescue	
FS19LD07	Freightliner M2, 4-door Cab, Single Axle, Extruded Aluminum Body, Walk-In MEDIUM Rescue	
FS19LD08	Cinder, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, NON Walk-In HEAVY Rescue	
FS19LD09	Cinder, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, Walk-In HEAVY Rescue	
FS19LD10	Igniter, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, NON Walk-In HEAVY Rescue	
FS19LD11	Igniter, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, Walk-In HEAVY Rescue	
FS19LD12	Inferno, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, NON Walk-In HEAVY Rescue	
FS19LD13	Inferno, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, Walk-In HEAVY Rescue	
FS19LD14	Inferno, 4-Door, Full-Tilt, OEM Cab, Single Axle, Extruded Aluminum Body, Incident Command Vehicle	
E. Pumper/Tankers & Tankers		
FS19LE01	M2 Freightliner, 2-Door, Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pumper/Tanker (3000 Gallons)	
FS19LE02	M2 Freightliner, 4-Door, Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pumper/Tanker (3000 Gallons)	
FS19LE03	Custom Cinder 2, 4-Door, Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pumper/Tanker (3000 Gallons)	
FS19LE04	Custom Igniter, 4-Door, Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pumper/Tanker (3000 Gallons)	
FS19LE05	Custom Inferno, 4-Door, Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted Pumper/Tanker (3000 Gallons)	
M. Firematic		
B. Wildland Fire Apparatus (Brush Fire)		
FS19MB01	Firematic, RALLY B.R.A.T. ® Ford F550, 4WD, 4-Door , Aluminum flatbed body, 300 Gallon Water Tank, 18 HP Pump, Pump and Roll Capability, Super Single wheels and tires	
FS19MB02	Firematic, Rally B.R.A.T. ® Ford F550, 4WD, 4-Door , Aluminum compartment body, 300 Gallon Water Tank, 18 HP Pump, Pump and Roll Capability, Super Single wheels and tires	
FS19MB03	Firematic, Rally B.R.A.T. ® Ford F350, 4WD, 2-Door , Aluminum flatbed body, 250 Gallon Water Tank, Hale HPX200 Pump, Pump and Roll Capability, Super Single wheels and tires	
FS19MB04	Firematic, Army 2.5 ton Brush Breaker, 6WD, 2-Door , Steel flatbed and tube body, 600 Gallon Water Tank, Hale 30FS/Deutz Diesel Pump, Pump and Roll Capability	
FS19MB05	Firematic, Army 5 ton Brush Breaker, 6WD, 2-Door , Steel flatbed and tube body, 1000 Gallon Water Tank, Hale 30FS/Deutz Diesel Pump, Pump and Roll Capability, Super Single wheels and tires	

FS19MB06	Firematic, Rally B.R.A.T. ® Dodge 5500, 4WD, 4-Door , Aluminum flatbed body, 300 Gallon Water Tank, 18 HP Pump, Pump and Roll Capability, Super Single wheels and tires	
FS19MB07	Firematic, B.R.A.T. ® Ford F550, 4WD, 4-Door , Aluminum flatbed body, Aluminum investment protection cage, 300 Gallon Water Tank, 18 HP Pump, Pump and Roll Capability, Super Single wheels and tires	
FS19MB08	Firematic, Rally Grass Rig Ford F450, 4WD, 2-Door , Aluminum flatbed body with walkway, 300 Gallon Water Tank, Hale HPX200 Pump, Pump and Roll Capability, Super Single wheels and tires	

C. Pumper Fire Apparatus

FS19MC01	Firematic, B.R.A.T. ® 1000. Commercial Pumper, Aluminum compartment body, Mid Mount, Ford F550 4x4, 300 Gallon Water Tank, 1250 GPM Pump	
FS19MC02	Firematic, Rally B.R.A.T. ® 1000. Commercial Pumper, Aluminum flatbed body, Mid Mount, Ford F550 4x4, 300 Gallon Water Tank, 1250 GPM Pump	
FS19MC03	Firematic, Brute Commercial Pumper, Aluminum compartment body, Front Mount, Freightliner 4x4, 750 Gallon Water Tank, 1250 GPM Pump	
FS19MC04	Firematic, Brute Commercial Pumper, Aluminum compartment body, Front Mount, International 7400 4x4, 750 Gallon Water Tank, 1500 GPM Pump	
FS19MC05	Firematic, Brute Commercial Pumper, Aluminum compartment body, Mid Mount, 750 Gallon Water Tank, 1250 GPM Pump	

D. Special Service Apparatus (Walk-In & Non-Walk In Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19MD01	Firematic, Rescue B.R.A.T. ® Non Walk In, Aluminum Body Light Rescue, Ford F550	
FS19MD02	Firematic, Rescue B.R.A.T. ® Walk In, Aluminum Body Light Rescue, Ford F550	
FS19MD03	Firematic, Commercial Rescue, non Walk In, Aluminum Body	
FS19MD04	Firematic, Commercial Rescue, Walk In, Aluminum Body	
FS19MD05	Firematic, Special Purpose, Chief's Vehicle, Ford	
FS19MD06	Firematic, Special Purpose, Chief's Vehicle, Chevy	
FS19MD07	Firematic, Special Purpose, Chief's Vehicle, Dodge	

N. HME

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19NA01	Ahrens-Fox Fire Engine Co. AF1 Chassis, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, Stainless Steel Body, 1500 GPM Single Stage Pump, 400 Gallon Tank, Steel Ladder, 1000# Tip Load, Rear Mounted Telescoping Ladder	
FS19NA02	HME 1871W, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, Stainless Steel Body, 1500 GPM Single Stage Pump, 400 Gallon Tank, Steel Ladder HAF80L, 1000# Tip Load, Rear Mounted Telescoping Ladder	
FS19NA03	Ahrens-Fox Fire Engine Co. AF1, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Tandem Axle, Stainless Steel Body, 1500 GPM Single Stage Pump, 400 Gallon Tank, Steel Ladder, 1000# Tip Load, Rear Mounted Telescoping Ladder	
FS19NA04	HME 1871W, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Tandem Axle, Stainless Steel Body, 1500 GPM Single Stage Pump, 400 Gallon Tank, Steel Ladder HAF111L, 1000# Tip Load, Rear Mounted Telescoping Ladder	
FS19NA05	HME SFO, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, Stainless Steel Body, 1500 GPM Single Stage Pump, 500 Gallon Tank, HAF51T, 1000# Tip Load, Rear Mounted Steel Boom	
FS19NA06	Ahrens-Fox Fire Engine Co. AF1, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six Man Seating, Tandem Axle, Stainless Steel Body, 10GPM Single Stage Pump, 500 Gallon Tank, Stainless Platform, 500# Tip Load, Rear Mounted Telescoping Ladder	

B. Wildland Fire Apparatus (Brush Fire)

FS19NB01	HME Ford F-550 4x4 Initial Attack MiniEvo, 1500 GPM Side Mounted Pump, Stainless Steel Body, 400 Gallons	
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FS19NB02	HME SFO Initial Attack Type I, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, 1250 GPM Side Mounted Pump, Stainless Steel Body, Single Axle, 850 Gallons	
FS19NB03	HME International 4x4 Quick Attack Type III/34D, 500 GPM Side Mounted Pump, Stainless Steel Body, Single Axle, 500 Gallons	
FS19NB04	Ahrens-Fox Fire Engine Co. WUI (Wildland Urban Interface), 4-Door Custom, SFO-MFDxl, 4x4 AWD, Extruded Aluminum Cab, Four (4) Man Seating, 1500 GPM Distributed Water System, Pump and Roll, Stainless Steel Body, 700 Gallons, Michelin 445/50R 22.5 Super Single Tires	

C. Pumper Fire Apparatus

FS19NC01	Ahrens-Fox Fire Engine Co. AF1, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Pumper, Stainless Steel Body, Single Axle, 1250 GPM Side Mounted Pump, 1045 Gallons	
FS19NC02	HME 1871W, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Pumper, Stainless Steel Body, Single Axle, 1250 GPM Side Mounted Pump, 1045 Gallons	
FS19NC03	HME SFO, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Pumper, Stainless Steel Body, Single Axle, 1250 GPM Side Mounted Pump, 1045 Gallons	
FS19NC04	HME International 2-Door Commercial Cab, Pumper, Stainless Steel Body, Single Axle, 1250 GPM Side Mounted Pump, 1045 Gallons	
FS19NC05	HME International 4-Door Commercial Cab, Pumper, Stainless Steel Body, Single Axle, 1250 GPM Side Mounted Pump, 1045 Gallons	
FS19NC06	HME 4x4 SFO H.X.R., 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (4) Man Seating, Pumper, Stainless Steel Body, Single Axle, 1500 GPM Side Mounted Pump, 500 Gallon Tank, Michelin 445/50R 22.5 Super Single Tires	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19ND01	Ahrens-Fox Fire Engine Co. AF1, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, 14' Stainless Steel Body, Non-Walk-In Rescue	
FS19ND02	HME 1871W, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, 14' Stainless Steel Body, Non-Walk-In Rescue	
FS19ND03	HME SFO, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, 14' Stainless Steel Body, Non-Walk-In Rescue	
FS19ND04	Ahrens-Fox Fire Engine Co. AF1, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, 18' Stainless Steel Body, Non-Walk-In Rescue	
FS19ND05	HME 1871W, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, 18' Stainless Steel Body, Non-Walk-In Rescue	
FS19ND06	HME SFO, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Single Axle, 18' Stainless Steel Body, Non-Walk-In Rescue	
FS19ND07	HME Ford F-550 4x4 4-Door Light Rescue PackRat, Non-Walk-In Stainless Steel Rescue Body	

E. Pumper/Tankers & Tankers

FS19NE01	Ahrens-Fox Fire Engine Co. AF1, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Stainless Steel Body, Tandem Axle, 1250 GPM Side Mounted Pumper/Tanker, 3000 Gallons	
FS19NE02	HME 1871W, 4-Door Custom Full-Tilt Extruded Aluminum Cab, Six (6) Man Seating, Stainless Steel Body, Tandem Axle, 1250 GPM Side Mounted Pumper/Tanker, 3000 Gallons	
FS19NE03	HME International 2-Door Commercial Cab, Stainless Steel Body, Tandem Axle, 1250 GPM Side Mounted Pumper/Tanker, 3000 Gallons	
FS19NE04	HME International 4-Door Commercial Cab, Stainless Steel Body, Tandem Axle, 1250 GPM Side Mounted Pumper/Tanker, 3000 Gallons	

O. KME

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19OA01	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 79' 500# Rear Mounted Telescoping Steel Ladder	
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FS19OA02	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 103', 4 Section, 500# Rear Mounted Telescoping Steel Ladder	
FS19OA03	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 79' 750# Rear Mounted Telescoping Steel Ladder	
FS19OA04	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 123' 500# Rear Mounted Telescoping Steel Ladder	
FS19OA05	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 102' 1000# Rear Mounted Telescoping Ladder with Platform	
FS19OA06	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' 1000# Mid-Mounted Telescoping Ladder with Platform	
FS19OA07	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 100' 500# (Mid-Mount), Telescoping Steel Ladder	
FS19OA08	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 55' Water Tower (FireStix)	
FS19OA09	International 4400, 4-Door, Formed Aluminum Body, Single Axle, 55' Water Tower (FireStix)	
FS19OA10	KME, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Tractor Drawn Aerial (TDA), 100', 4 Section 500# Steel Telescoping Ladder	

B. Wildland Fire Apparatus (Brush Fire)

FS19OB01	Ford F-550, 4 x 4, 2-Door, Skid Mounted Pumper Body	
FS19OB02	Ford F-550, 4 x 4, 2-Door, Flatbed Style Skid Mounted Pumper	
FS19OB03	Ford F-550, 4 x 4, 2-Door, Aluminum Minipumper Body, 300 gal. Tank, 1000 gpm Midship PTO Pump	
FS19OB04	International 7400, 4x4, 4-Door, Ridgerunner, Dual Pump, 500/20 Gals Water/Foam, NFPA 1901/1906	
FS19OB05	International 7400, 4 x 4, 4-Door, OEM Interface Pumper, Formed Alum Body, Single Axle, 750 GPM, 500 Gallon Water	

C. Pumper Fire Apparatus

FS19OC01	Freightliner M2, 2-Door, OEM Pumper, Formed Aluminum Body, Single Axle, 1250 GPM Pump, 750 Gal Tank-Challenger Series Pumper	
FS19OC02	International 4400, 2-Door, OEM Pumper, Formed Aluminum Body, Single Axle, 1250 GPM Pump, 750 Gal Tank-Pumper	
FS19OC03	KME Panther Chassis, 4-Door, Full-Tilt, Aluminum Cab, Formed Aluminum Body, Single Axle, 1250 GPM Pump, 750 Gal Tank-Pumper	
FS19OC04	KME Predator Chassis, 4-Door, Full-Tilt, Aluminum Cab, Alum Body, Single Axle, 1250 GPM Pump, Pumper	
FS19OC05	KME Severe Service Chassis, 4-Door, Full-Tilt, Aluminum Cab, Alum Body, Single Axle, 1250 GPM Pump, 750 Gal Tank Pumper	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19OD01	Ford F-550 4 x 2 Chassis, 2 Door, Light Duty Walk-Around Body	
FS19OD02	Intl 4300, 4 x 2, 2-Door, Medium Duty Walk-Around Body	
FS19OD03	International 4400, 4 x 2, 2-Door, Medium Duty Walk-In Body	
FS19OD04	KME Predator Chassis, 4-Door, Full-Tilt, Aluminum Cab, Alum Body, Single Axle, Heavy Duty Walk-Around Body	
FS19OD05	KME Custom, 4-Door, Full-Tilt, Aluminum Cab, Alum Body, Single Axle, Heavy Duty Combination Walk-in / Walk-Around Body	
FS19OD06	International 4400 4x2, 2-Door, 10 person Crew Carrier	

E. Pumper/Tankers & Tankers

FS19OE01	International 4400, 2-Door, Aluminum Treadplate Body, Single Axle, 1250 GPM Pump, Painted 1800 Gal Elliptical Tanker	
FS19OE02	International 7400, 2-Door, Aluminum Treadplate Body, Tandem Axle, 1250 GPM Pump, Painted 2500 Gal Elliptical Tanker	
FS19OE03	International 4400, 2-Door, Aluminum Treadplate Body, Single Axle, 500 GPM Pump, Painted 1800 Gal Wetside Tanker	
FS19OE04	International 7400, 2-Door, Aluminum Treadplate Body, Tandem Axle, 500 GPM Pump, Painted 2500 Gal Wetside Tanker	

FS19OE05	International 4400, 2-Door, Formed Galvanneal Body, Single Axle, 750 GPM Pump, 1800 Gal Dryside Tanker	
FS19OE06	International 7400, 2-Door, Formed Galvanneal Body, Tandem Axle, 750 GPM Pump, 3000 Gal Dryside Tanker	
FS19OE07	International 4400, 2-Door, Formed Galvanneal Body, Single Axle, 1250 GPM Pump, 1800 Gal Pumper/Tanker	
FS19OE08	International 7400, 2-Door, Formed Galvanneal Body, Tandem Axle, 1250 GPM Pump, 2500 Gal Pumper/Tanker	
FS19OE09	KME Predator, 4-Door, Full-Tilt, Aluminum Cab, Alum Body, Tandem Axle, 3,000 Gallon, Pumper-Tanker with 1250gpm Pump	

F. Airport Rescue Fire-Fighting Vehicles

FS19OF01	Ford F550, 4 x 4, 4-Door, Class 1 RIV, 120 GAL AFFF Pre-mix	
FS19OF02	Ford F550, 4 x 4, 4-Door, Class 2 RIV, 500 GPM Pump, 300/40 Gal Water/Foam Tank	
FS19OF03	International 7400 4 x 4, 2-Door, Class 3 RIV, 500 GPM Pump, 500/75 Gal Water/Foam Tank	
FS19OF04	KME Custom Class 4 ARFF, 4 x 4, 2000 GPM, 1500/200 Gal Water/Foam Tank	
FS19OF05	KME Custom Class 5 ARFF, 6 x 6, 2000 GPM, 3000/400 Gal Water/Foam Tank	

P. Marion

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19PA01	Spartan 4-Door, Aluminum Tilt Cab, Extruded Aluminum Body, 1500 GPM Pump, rear mount, 75' 3-section, telescopic steel ladder, Single Axle, 500#, 300 Gal. Tank	
FS19PA02	Spartan 4-Door, Aluminum Tilt Cab, Extruded Aluminum Body, 1500 GPM Pump, Rear Mount, 110' 4-section telescopic steel ladder, Tandem Axle, 750#, 300 Gal. Tank	

C. Pumper Fire Apparatus

FS19PC01	IH 4400, 2-Door, Pumper, Extruded Aluminum Body, Single axle, 1250 GPM Pump, Side Mounted, 750 Gal. Tank	
FS19PC02	Freightliner M2, 2-Door, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mounted, 750 Gal. Tank	
FS19PC03	Spartan 4-Door, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side Mounted, 750 Gal. Tank	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19PD01	Ford F550, 2-Door, Aluminum Extruded Body, Single Axle, Non-Walk-in, Roll up doors, Rescue 12'	
FS19PD02	IH4400, 2-Door, Aluminum Extruded Body, Single Axle, Non-Walk-in, Roll up doors, Rescue 17'	
FS19PD03	Spartan 4-Door, Aluminum Tilt Cab, 10" Raised Roof, Aluminum Extruded Body, Single Axle, Non-Walk-in, Roll up doors, Rescue 17'	
FS19PD04	IH4400, 2-Door, Aluminum Extruded Body, Single Axle, Walk-in, Roll up doors, Rescue 19'	
FS19PD05	Spartan 4-Door, Aluminum Tilt Cab, 10" Raised Roof, Aluminum Extruded Body, Walk-in, Single Axle, Roll up doors, Rescue 19'	

E. Pumper/Tankers & Tankers

FS19PE01	IH4400, 2-Door, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, 1800 Gal. Tank, Single Dump Valve	
FS19PE02	IH7400, 2-Door, Extruded Aluminum Body, Tandem Axle, 1250 GPM Pump, 3000 Gal. Tank, 3 Dump Valves	
FS19PE03	Spartan 2-Door, Custom Tilt Cab, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, 1800 Gal. Tank, Single Dump Valve	

Q. Maintainer Custom Bodies, Inc. (MCB)

B. Wildland Fire Apparatus

FS19QB01	Spitfire Series, Quick Attack, 300-Gallon Tank & CET Honda Pump, 9' All Aluminum Body on Ford F550 Diesel, 2-Door, 4X4 Chassis	
FS19QB02	Spitfire Series, Quick Attack, 300-Gallon Tank & CET Honda Pump, 9' All Aluminum Body on Ram 5500 Diesel, 2-Door, 4X4 Chassis	

FS19QB03	Spitfire Series, Quick Attack, 300-Gallon Tank & CET Honda Pump, 9' All Aluminum Body on Chevrolet MD Diesel, 2-Door, 4X4 Chassis	
FS19QB04	Responder Series, Quick Attack Urban Interface, 300-Gallon Tank & CET Honda Pump, 10' All Aluminum Body on Ford F550 Diesel, 2-Door, 4X4 Chassis	
FS19QB05	Responder Series, Quick Attack Urban Interface, 300-Gallon Tank & CET Honda Pump, 10' All Aluminum Body on Ram 5500 Diesel, 2-Door, 4X4 Chassis	
FS19QB06	Responder Series, Quick Attack Urban Interface, 300-Gallon Tank & CET Honda Pump, 10' All Aluminum Body on Chevrolet MD Diesel, 2-Door, 4X4 Chassis	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19QD01	MCB Responder Super Squad Series, 9' All Aluminum Walk-Around Squad on Ford F350 Diesel, Super Cab, 4X4 Chassis	
FS19QD02	MCB Responder Series 10' All Aluminum Walk-Around Rescue on Ford F450 Diesel, 4-Door, 4X4 Chassis	
FS19QD03	MCB Responder Series 10' All Aluminum Walk-Around Rescue on Dodge RAM 5500 Diesel, 4-Door, 4X4 Chassis	
FS19QD04	MCB Responder Series 10' All Aluminum Walk-Around Rescue on Chevrolet MD Diesel, 4-Door, 4X4 Chassis	
FS19QD05	MCB Responder Series 12' All Aluminum Walk-around Rescue on Ford F550 Diesel, 4-Door, 4X4 Chassis	
FS19QD06	MCB Responder Series 12' All Aluminum Walk-Around Rescue on Ram 5500 Diesel, 4-Door, 4X4 Chassis	
FS19QD07	MCB Responder Series 12' All Aluminum Walk-Around Rescue on Chevrolet MD Diesel, 4-Door, 4X4 Chassis	
FS19QD08	MCB Responder Series 15' All Aluminum Walk-Around Rescue on Ford F550 Diesel, 2-Door, 4X4 Chassis	
FS19QD09	MCB Responder Series 15' All Aluminum Walk-Around Rescue on Ram 5500 Diesel, 2-Door, 4X4 Chassis	
FS19QD10	MCB Responder Series 15' All Aluminum Walk-Around Rescue on Chevrolet MD Diesel, 2-Door, 4X4 Chassis	
FS19QD11	MCB Responder Series 15' Forward Crew Walk-In Rescue on Ford F550 Diesel, 2-Door, 4X2 Chassis	
FS19QD12	MCB Responder Series 15' Forward Crew Walk-In Rescue on Ram 5500 4x2 Diesel, 2-Door, 4X4 Chassis	
FS19QD13	MCB Responder Series 15' Forward Crew Walk-In Rescue on Chevrolet MD Diesel, 2-Door, 4X4 Chassis	
FS19QD14	MCB Responder Series 18' All Aluminum Walk-Around Rescue on International MV607, 2-Door, 4X2 Chassis	
FS19QD15	MCB Responder Series 18' All Aluminum Walk-Around Rescue on Freightliner M2-106, 2-Door, 4X2 Chassis	
FS19QD16	MCB Responder Series 20' All Aluminum Walk-Around Rescue on International MV607, 2-Door, 4X2 Chassis	
FS19QD17	MCB Responder Series 20' All Aluminum Walk-Around Rescue on Freightliner M2-106, 2-Door, 4X2 Chassis	
FS19QD18	MCB Responder Series 22' All Aluminum Walk-Around Rescue on International MV607, 2-Door, 4X2 Chassis	
FS19QD19	MCB Responder Series 22' All Aluminum Walk-Around Rescue on Freightliner M2-106, 2-Door, 4X2 Chassis	
FS19QD20	MCB Responder Series 24' All Aluminum Walk-Around Rescue on International MV607, 2-Door, 4X2 Chassis	
FS19QD21	MCB Responder Series 24' All Aluminum Walk-Around Rescue on Freightliner M2-106, 2-Door, 4X2 Chassis	
R. Metro Fire Apparatus Specialists		
B. Wildland Fire Apparatus (Brush Fire)		
FS19RB01	Self Contained Slide In Unit, 250 gallon	
FS19RB02	Metro Brush Truck, Ford F450 2Dr, Aluminum Flat Bed, 300 Tank	
FS19RB03	Metro Brush Truck, Ford F550 2Dr, Aluminum Flat Bed, 300 Tank	

FS19RB04	Metro Brush Truck, Ford F600 2Dr, Aluminum Flat Bed, 300 Tank	
FS19RB05	Metro Brush Truck, Ford F650 2Dr, Aluminum Flat Bed, 300 Tank	
C. Pumper Fire Apparatus		
FS19RC01	Metro Mini-Pumper, Ford F550 2Dr, Aluminum Body, 1250gpm pump, 500 Tank	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19RD01	Metro Light Rescue, Ford F550 2Dr, Aluminum Body, Non-Walk-In	
FS19RD02	Metro Light Rescue, Ford F600 2Dr, Aluminum Body, Non-Walk-In	
FS19RD03	Metro Light Rescue, Ford F650 2Dr, Aluminum Body, Non-Walk-In	
FS19RD04	Spartan Metro Star Chassis	
FS19RD05	Spartan Gladiator Chassis	
S. Midwest Fire		
B. Wildland Fire Apparatus (Brush Fire)		
FS19SB01	Midwest Fire Brush Unit - F-550 Diesel, Aluminum Flatbed, Pump and Roll Capabilities, 400 GPM portable pump, 250 gallons, Regular Cab, 60" CA	
FS19SB02	Midwest Fire Brush Unit - F-550 Diesel, Aluminum Flatbed, Pump and Roll Capabilities, 400 GPM portable pump, 250 gallons, Regular Cab, 84" CA	
FS19SB03	Midwest Fire <i>All-Poly</i> Quick Attack - F-550 Diesel, Regular Cab, 400 GPM portable pump, 250 gallons, ROM Doors, 84" CA	
C. Pumper Fire Apparatus		
FS19SC01	Midwest Fire <i>All-Poly</i> Pumper, 1000 Gallon, Rescue Style Lockers, Freightliner M2 Regular Cab, 1250 GPM Pump, Side Mounted Pump, Single Axle	
FS19SC02	Midwest Fire <i>All-Poly</i> Pumper, 1000 Gallon, Rescue Style Lockers, Freightliner M2 Crew Cab, 1250 GPM Pump, Side Mounted Pump, Single Axle	
E. Pumper/Tankers & Tankers		
FS19SE01	Midwest Fire <i>All-Poly</i> Tanker-Pumper, 2000 Gallon, Freightliner M2, 1000 GPM PTO, Pump and Roll, Single Axle	
FS19SE02	Midwest Fire <i>All-Poly</i> Tanker-Pumper, 3000 Gallon, Freightliner M2, 1000 GPM PTO, Pump and Roll, Tandem Axle	
FS19SE03	Midwest Fire <i>All-Poly</i> Tanker, 2000 Gallon, Freightliner M2, 750 GPM PTO pump, Pump and Roll, Single Axle, Under 30'	
FS19SE04	Midwest Fire <i>All-Poly</i> Tanker, 3000 Gallon, Freightliner M2, 250 GPM portable pump, pump and roll	
FS19SE05	Midwest Fire <i>All-Poly</i> Tactical Tender, 2000 Gallons, Freightliner M2, 750 GPM PTO Pump, Pump and Roll, Short Wheelbase Single Axle	
T. Nevada Pacific Services Inc.		
B. Wildland Fire Apparatus (Brush Fire)		
FS19TB01	Brush Fire Apparatus, Ford F-450, 2 door, gas engine Steel Flatbed	
FS19TB02	Brush Fire Apparatus Ford F-550, 2 Door, Gas Engine, Steel Flatbed w/ work stations	
FS19TB03	Brush Fire Apparatus, Ford F-550 2 Dr, Diesel engine Extruded Aluminum Flatbed w/ Aluminum compartments	
FS19TB04	Brush Fire Apparatus, Ford F-550, 2 Dr, Diesel engine Ply-Utility Body	

FS19TB05	Brush Fire Apparatus, Ford F-550 2 Door, Diesel Engine, with Aluminum Flatbed w/ work stations, Aluminum Compartments	
FS19TB06	Ford F-550 XL 4x4, 2-Dr, Gas Engine, 60" CA, Brush Truck, Aluminum flatbed and compartments 300 Gallon Tank, Water Pump, 200gpm Pump.	
FS19TB07	Ford F-550 XL 4X4, 4-Dr., 60" CA, Gas engine Brush Truck, Aluminum flatbed w/ Aluminum Compartment., 300 Gallon Tank, 240 gpm water pump.	
FS19TB08	Ford F-550 XL 4x4 Crew Cab, Diesel Engine, 60" CA, 9' Multi-Purpose Brush Truck/ Light Rescue 300 Gallon Tank, 300 gpm Water Pump.	
FS19TB09	Ford F-550 XL 4x4, 2-Dr, Diesel Engine, 165" WB, 12' Rescue Brush Truck, 300 Gallon Tank, Diesel Driven 220 gpm Water Pump.	
FS19TB10	Brush Fire Apparatus, Ford F-550, 60" CA, Crew Cab, Diesel Engine Steel Flatbed W/ work stations and Aluminum cabinets, 300 gal drop in tank 200 gpm pump	
FS19TB11	Brush Fire Apparatus, Ford F-550, Crew Cab, Diesel Engine 60" CA Aluminum Flatbed with work stations and Poly cabinets, 300 gal drop in tank 200 gpm pump	
FS19TB12	Brush Fire Apparatus, Ford F-550, 60" CA, 2 Door, Gas Engine, Steel Flatbed W/ work stations and Aluminum cabinets, 300 gal drop in tank 200 gpm pump	
FS19TB13	Self-Contained Slip-In Unit, Fire skid unit 11hp Honda pump 200gal tank hose reel with hose (option foam cell system & gallon tank sizes).	
FS19TB14	Self-Contained Slip-In-Unit, Fire skid unit 24 hp diesel pump 300 gal tank hose reel with hose, (option foam cell system & gallon tank sizes)	
FS19TB15	Self-Contained Slip-In-Unit, Fire skid unit 18 hp gasoline pump 400 gal tank hose reel with hose, (option foam cell system & gallon tank sizes)	
FS19TB16	Self-Contained Slip-In-Unit, Fire skid unit 18 hp gasoline pump 400 gal tank hose reel with hose, (option foam cell system & gallon tank sizes)	
FS19TB17	Self-Contained Slip-In-Unit, Fire skid unit CAFS 400gal tank(STORED ENERGY) hose reel with hose (option foam cell system & purple K, & gallon tank sizes).	
FS19TB18	Self-Contained Glider Kit Aluminum flatbed, aluminum compartments, 300 gal Tank 200gpm pump, hose reel with hose.	
FS19TB19	Self-Contained Glider Kit Aluminum flat bed, aluminum compartments, 300 gal Tank, 200gpm pump, hose reel with hose.	
FS19TB20	Self-Contained Glider Kit Aluminum flatbed, Aluminum compartments, 300 gal Tank 200gpm pump, hose reel with hose.	
FS19TB21	Brush fire apparatus Freightliner M2-106 4WD standard cab with aluminum flatbed, aluminum compartments, 800 gallon tank, Diesel 300 gpm pump. Emergency lighting packag.	
FS19TB22	Brush fire apparatus Freightliner M2-106 4WD EXTENDED cab with aluminum flatbed, aluminum compartments, 800 gallon tank, Diesel 300 gpm pump. Emergency lighting packag.	
FS19TB23	Brush fire apparatus Freightliner M2-106 4WD CREW CAB with aluminum flatbed, aluminum compartments, 800 gallon tank, Diesel 300 gpm pump. Emergency lighting packag.	
FS19TB24	Brush fire apparatus Freightliner SD-108 4WD STANDARD CAB with aluminum flatbed, aluminum compartments, 800 gallon tank, Diesel 300 gpm pump. Emergency lighting packag.	
FS19TB25	Brush fire apparatus Freightliner SD-108 4WD CREW CAB with aluminum flatbed, aluminum compartments, 800 gallon tank, Diesel 300 gpm pump. Emergency lighting packag.	
FS19TB26	Water Tender Freightliner SD-108 4WD STANDARD CAB with aluminum flatbed, aluminum compartments, 1600 gallon tank, Diesel 300 gpm pump. Emergency lighting packag.	
FS19TB27	Freightliner, 2- door chassis, Tanker, tandem axle, 1000 GPM PTO pump, 4000 gal poly tank and body, stainless pumb, swivel dump, LED LIGHTS.	
FS19TB28	Freightliner, 2 - door chassis, Tanker tandem axle, 750 GPM PTO Pump, 3000, gal poly tank and body, stainless plumb, swivel dump, LED LIGHTS	
FS19TB29	Freightliner, 2 - door chassis, Tanker single axle, 750 GPM PTO Pump, 2000, gal poly tank and body, stainless plumb, swivel dump, LED LIGHTS	
U. OshKosh		
F. Airport Rescue Fire-Fighting Vehicles		
FS19UF01	Oshkosh Striker 4x4, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (375/750 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (1500 gal.), Foam Tank Capacity (210 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	

FS19UF02	Oshkosh Striker 6x6, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (3000 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	
FS19UF03	Oshkosh Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQA, Single Stage Centrifugal, 1950 gpm at 240 psi)	
FS19UF04	Oshkosh New Generation Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi), dual engine driveline	
FS19UF05	Oshkosh Stinger Class 2 ARFF vehicle; 2-Door Ford 4x4 F550 Cab/chassis, 2 Passenger Seating, Bumper Turret, one (1) twin agent handline, Water Tank Capacity (300 gal.), Foam Tank Capacity (40 gal.), Dry Chemical 500 pounds.	
FS19UF06	Oshkosh H-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 50,000 GVWR, Single Axle	
FS19UF07	Oshkosh HT-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 55,000 GVWR, Single Axle	
FS19UF08	Oshkosh P-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 51,000 GVWR, Single Axle	
V. Pierce		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19VA01	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	
FS19VA02	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	
FS19VA03	Pierce Enforcer Chassis 4-Door 75' Aluminum Rear Mounted Telescoping Ladder, Formed Aluminum Body	
FS19VA04	Pierce Arrow Chassis 4-Door 100' Aluminum Rear Mount Aerial, Aluminum Body, Tandem Axle	
FS19VA05	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Rear-Mounted Telescoping Ladder	
FS19VA06	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 107' Rear-Mounted Telescoping Ladder	
FS19VA07	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 110' Rear-Mounted Telescoping Platform	
FS19VA08	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 105' Rear-Mounted Telescoping Ladder (500#)	
FS19VA09	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	
FS19VA10	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Rear-Mounted Telescoping Ladder with Platform (750#)	
FS19VA11	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Tractor Drawn - Mid-Mounted Telescoping Ladder (#500)	
B. Wildland Fire Apparatus (Brush Fire)		

FS19VB01	Pierce Brush Fire Apparatus, Ford F450, Formed Aluminum Utility Body	
FS19VB02	Pierce Brush Fire Apparatus, Ford F-550 Mini Pumper 500 gpm, 300 tank	
FS19VB03	Freightliner 4-Door 4 x 4 Wildland, 500 water, 1000 gpm Pump	
C. Pumper Fire Apparatus		
FS19VC01	M2 Freightliner, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19VC02	IHC, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19VC03	KW, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19VC04	Peterbilt, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19VC05	Pierce Saber 4- Door Full Tilt Aluminum Cab, Ford Engine, Aluminum Body, 1250 gpm, mid-mounted Pump	
FS19VC06	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19VC07	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19VC08	Pierce Velocity, 4- Door Full Tilt Cab, Aluminum Long Body, 1250 gpm mid-mounted Pump	
FS19VC09	Pierce Dash CF, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, PUC Body Pumper	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19VD01	Ford F-550 4- Door, 12 'Non-Walk-in Formed Aluminum Body	
FS19VD02	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19VD03	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19VD04	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19VD05	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19VD06	Pierce Saber FR, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Encore Body 18.5'	
FS19VD07	Pierce Enforcer 4-Door, Aluminum Cab, Single Axle, Formed Aluminum Body, Non Walk-in HDR Body	
FS19VD08	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Non-Walk-in HDR Body	
FS19VD09	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19VD10	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19VD11	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19VD12	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19VD13	Pierce Enforcer 4-Door, Full Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-in HDR Body	
FS19VD14	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in HDR Body	
FS19VD15	Pierce Velocity 2-Door, Aluminum Cab, Tandem Axle, Combination Formed Aluminum Body	
FS19VD16	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in Communications Body	

E. Pumper/Tankers & Tankers		
FS19VE01	Freightliner 2 Door, Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	
FS19VE02	IHC 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	
FS19VE03	Kenworth 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	
FS19VE04	Peterbilt 2dr Single Axle Tanker, Aluminum w/2000 water & 500 pump	
FS19VE05	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted	
FS19VE06	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted	
FS19VE07	Freightliner 2dr, Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	
FS19VE08	IHC 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	
FS19VE09	Kenworth 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	
FS19VE10	Peterbilt 2dr Tandem Axle Tanker, Aluminum w/3000 water & 500 pump	
FS19VE11	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	
FS19VE12	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	
FS19VE13	Pierce Velocity, 4-Door Aluminum Cab, Tandem Axle, Aluminum Pumper/Tanker 2000 Gallon Body, 1500 GPM Pump	
W. Precision Fire Apparatus		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19WA01	Precision, Single Axle, Spartan Chassis, 75' Rear Mount Aerial, Welded Extruded Aluminum Body, 300 Gallon Tank, 1,500 GPM Single Stage Pump	
FS19WA02	Precision, Tandem Axle, Spartan Chassis, 110' Rear Mount Aerial, Welded Extruded Aluminum Body, 300 Gallon Tank, 1,500 GPM Single Stage Pump	
FS19WA03	Precision, Tandem Axle, Spartan Chassis, 110' Rear Mount Platform, Welded Extruded Aluminum Body, 300 Gallon Tank, 1,500 GPM Single Stage Pump	
FS19WA04	Precision, Tandem Axle, Spartan Chassis, 100' Mid-Mount Platform, Welded Extruded Aluminum Body, 300 Gallon Tank, 1,500 GPM Single Stage Pump	
FS19WA05	Precision, Spartan Chassis, 55' Snorkel Rear Mount Articulating Boom Platform, Welded Extruded Aluminum Body, Single Axle	
B. Wildland Fire Apparatus (Brush Fire)		
FS19WB01	Precision, Dodge 5500 4x4, Quick Attack Pumper, 500 GPM, Welded Extruded Aluminum Body, 250 Gallon Tank	
FS19WB02	Precision, Dodge 5500 4x4, Quick Attack Pumper, 500 GPM, Welded Extruded Aluminum Body, 250 Gallon Tank	
C. Pumper Fire Apparatus		
FS19WC01	International 4400, 2-Door Cab, Pumper, Welded Extruded Aluminum Body, 750 Gallon Tank, 1,250 GPM Single Stage Pump	
FS19WC02	Freightliner M2, 2-Door Cab, Pumper, Welded Extruded Aluminum Body, 750 Gallon Tank, 1,250 GPM Single Stage Pump	
FS19WC03	Kenworth, 2-Door Cab, Pumper, Welded Extruded Aluminum Body, 750 Gallon Tank, 1,250 GPM Single Stage Pump	
FS19WC04	Precision, Spartan Chassis, 4-Door Custom Full Tilt Aluminum Cab, Pumper, Welded Extruded Aluminum Body, 1,250 GPM Single Stage Pump, 750 Gallon Tank	
FS19WC05	Precision, Spartan Chassis, 4-Door Custom Full Tilt Aluminum Cab, CAFS Pumper, Welded Extruded Aluminum Body, 1,500 GPM Single Stage Pump, 750 Gallon Tank	

FS19WC06	Ford F550 Severe Duty 4x4, 4-Door, Rear Mount Pumper, 300 Gallon Tank, 1,250 GPM Single Stage Pump, 22,500 GVWR	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile		
FS19WD01	International 4400, 2-Door Cab, Welded Extruded Aluminum Body, Rescue Body	
FS19WD02	Freightliner M2, 2-Door Cab, Welded Extruded Aluminum Body, Rescue Body	
FS19WD03	Kenworth, 2-Door Cab, Welded Extruded Aluminum Body, Rescue	
FS19WD04	Precision, Spartan Chassis, 4-Door Custom Full Tilt Aluminum Cab, Welded Extruded Aluminum Body, Rescue Body	
E. Pumper/Tankers & Tankers		
FS19WE01	International 4400, 2-Door Cab, Pumper/Tanker, Welded Extruded Aluminum Body, 2,000 Gallon Tank, 750 GPM Single Stage Pump	
FS19WE02	Freightliner M2, 2-Door Cab, Pumper/Tanker, Welded Extruded Aluminum Body, 2,000 Gallon Tank, 750 GPM Single Stage Pump	
FS19WE03	Kenworth, 2-Door Cab, Pumper/Tanker, Welded Extruded Aluminum Body, 2000 Gallon Tank, 750 GPM Single Stage Pump	
FS19WE04	Precision, Spartan Chassis, 4-Door Custom Full Tilt Aluminum Cab, Pumper/Tanker, Welded Extruded Aluminum Body, 750 GPM Single Stage Pump, 2,500 Gallon Tank	
X. Rosenbauer		
F. Airport Rescue Fire-Fighting Vehicles		
FS19XF01	Rosenbauer Panther 1500, 2-Door, Aluminum Cab, High Performance Off Road suspension, 3 Passenger Seating, Roof Turret (375/750 gpm), bumper Turret (300 gpm), One (1) left side pre-connected Handline (Foam/Water) one (1) right side twin agent handline, Water Tank Capacity (1600 gal.), Foam Tank Capacity (200 gal.), Dry Chemical 500 pounds, Fire Pump (Power divider driven Rosenbauer N80, Dual Stage Centrifugal high pressure, 2100 gpm)	
FS19XF02	Rosenbauer Panther 3000, 2-Door, Aluminum Cab, High Performance Off Road suspension, 3 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One (1) left side pre-connected Handline (Foam/Water) one (1) right side twin agent handline, Water Tank Capacity (3170 gal.), Foam Tank Capacity (400 gal.), Dry Chemical 500 pounds, Fire Pump (Power divider driven Rosenbauer N80, Dual Stage Centrifugal high pressure, 2100 gpm)	
FS19XF03	Rosenbauer Panther 3000 with HRET, 2-Door, Aluminum Cab, High Performance Off Road suspension, 2 Passenger Seating, 1000 gpm High Reach Extendable turret (500/1000 gpm), bumper Turret (300 gpm), One (1) left side pre-connected Handline (Foam/Water) one (1) right side twin agent handline, Water Tank Capacity (3000 gal.), Foam Tank Capacity (400 gal.), Dry Chemical 500 pounds, Fire Pump (Power divider driven Rosenbauer N80, Dual Stage Centrifugal high pressure, 2100 gpm)	
FS19XF04	Rosenbauer Airwolf C2 2-Door Ford 4x4 F550 Cab/chassis, 2 Passenger Seating, bumper Turret, one (1) twin agent handline, Water Tank Capacity (300 gal.), Foam Tank Capacity (40 gal.), Dry Chemical 500 pounds, Fire Pump 300 gpm	
FS19XF05	Rosenbauer Airwolf C3 2-Door International 7400 4x4 Cab/chassis, 2 Passenger Seating, bumper Turret, one (1) twin agent handline, Water Tank Capacity (500 gal.), Foam Tank Capacity (60 gal.), Dry Chemical 500 pounds, Fire Pump 300 gpm	
Y. Rosenbauer Minnesota LLC		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19YA01	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 78' Rear Mount Steel Ladder	
FS19YA02	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 78' Rear Mount Steel Ladder	
FS19YA03	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 100' Rear Mount Steel Ladder	
FS19YA04	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 109' Rear-Mount Steel Ladder	
FS19YA05	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 100' Mid-Mount Steel Ladder	

FS19YA06	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 101' Rear Mount Steel Platform	
FS19YA07	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 104' Rear Mount Steel Platform	
FS19YA08	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 100' Mid Mount Steel Platform	
FS19YA09	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 100' Tractor Drawn Steel Ladder	
FS19YA10	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 65' Rear Mount Steel Ladder	
FS19YA11	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 51' Rear Mount Boom	
FS19YA12	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 68' Rear Mount Boom	
FS19YA13	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 102' Raptor Rear Mount Ladder	
FS19YA14	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 114' Articulating-Telescoping T-REX Platform	
FS19YA15	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Tandem Axle, 100' Rear Mount KING COBRA Steel Platform,	
FS19YA16	Rosenbauer Commander, 4-Door Tilt Cab, Extruded Aluminum Body, Single Axle, 75' Mid Mount Steel Ladder	

B. Wildland Fire Apparatus

FS19YB01	IH HV507, 4x4, 2-Door, OEM Timberwolf, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Rear Mount	
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C. Pumper Fire Apparatus

FS19YC01	M2 Freightliner, 2-Door, OEM, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side-Mounted Pumper	
FS19YC02	IH MV607, 2-Door, OEM, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side-Mounted Pumper	
FS19YC03	Kenworth, 2-Door, OEM, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side-Mounted Pumper	
FS19YC04	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Pump, Side-Mounted Pumper	
FS19YC05	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Pumper, Extruded Aluminum Body, Single Axle, 1500 GPM Pump, Side-Mounted Pumper	
FS19YC06	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Pumper, Extruded Aluminum Body, Single Axle, 1500 GPM Pump, Rear-Mounted Pumper	
FS19YC07	Ford F550, 4x2, 2-Door OEM Cab, Mini Pumper, Formed Aluminum Body, 500 GPM PTO Pump, Side Mounted	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19YD01	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Extruded Aluminum Body, Non-Walk-In Body	
FS19YD02	IH MV607, 2-Door, OEM Cab, Single Axle, Extruded Aluminum Body, Non-Walk-In Body	
FS19YD03	M2 Freightliner, 2-Door, OEM Cab, Tandem Axle, Extruded Aluminum Body, Non-Walk-In Body	
FS19YD04	Ford F-550, 2-Door, OEM Ccab, Single Axle, Extruded Aluminum Body, Non-Walk-In Body	
FS19YD05	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Single Axle, Extruded Aluminum Body, Non-Walk-In Body	
FS19YD06	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Tandem Axle, Extruded Aluminum Body, Non-Walk-In Body	
FS19YD07	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Extruded Aluminum Body, Walk-In Body	
FS19YD08	IH MV607, 2-Door, OEM Cab, Single Axle, Extruded Aluminum Body, Walk-In Body	
FS19YD09	M2 Freightliner, 2-Door, OEM Cab, Tandem Axle, Extruded Aluminum Body, Walk-In Body	

FS19YD10	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Single Axle, Extruded Aluminum Body, Walk-In Body	
FS19YD11	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Tandem Axle, Extruded Aluminum Body, Walk-In Body	

E. Pumper/Tankers & Tankers

FS19YE01	M2 Freightliner, 2-Door, OEM Cab, Pumper/Tanker, Extruded Aluminum Body, 1800 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19YE02	IH MV607, 2-Door, OEM Cab, Pumper/Tanker, Extruded Aluminum Body, 1800 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19YE03	M2 Freightliner, 2-Door, OEM Cab, Pumper/Tanker, Extruded Aluminum Body, 2000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19YE04	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Pumper/Tanker, Extruded Aluminum Body, 1800 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19YE05	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Pumper/Tanker, Extruded Aluminum Body, 2000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	

Z. Rosenbauer South Dakota LLC

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19ZA01	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Single Axle, 78' Rear Mount Steel Ladder	
FS19ZA02	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 78' Rear Mount Steel Ladder	
FS19ZA03	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 100' Rear Mount Steel Ladder	
FS19ZA04	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 109' Rear Mount Steel Ladder	
FS19ZA05	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mount Steel Ladder	
FS19ZA06	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 101' Rear Mount Steel Platform	
FS19ZA07	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 104' Rear Mount Steel Platform	
FS19ZA08	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mount Steel Platform	
FS19ZA09	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Single Axle, 65' Rear Mount Steel Ladder	
FS19ZA10	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Single Axle, 51' Rear Mount Boom	
FS19ZA11	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Single Axle, 68' Rear Mount Boom	
FS19ZA12	Rosenbauer Commander 4-Door Tilt Cab, Formed Aluminum Body, Single Axle 75' Mid Mount Steel Ladder	
FS19ZA13	Rosenbauer Commander 4-door Tilt Cab, Formed Aluminum Body, Single Axle, 75' Mid Mount Steel Platform	
FS19ZA14	M2 Freightliner, 2-Door OEM Cab, Formed Aluminum Body, Single Axle, 51' Rear Mount Boom	
FS19ZA15	Rosenbauer Commander, 4-Door Tilt Cab, Formed Aluminum Body, Single Axle, 100' Rear Mount Steel Ladder	
FS19ZA16	Rosenbauer Commander, 4-Door Tilt Cab, Formed Aluminum Body, Tandem Axle, 100' Rear Mount KING COBRA Steel Platform,	

B. Wildland Fire Apparatus

FS19ZB01	M2 Freightliner, 4x4, 2-Door OEM Cab, WILDLAND Pumper, FX Formed Aluminum Body, Single Axle, 1000 GPM Pump, Side Mounted	
FS19ZB02	M2 Freightliner, 4x4, 2-Door OEM Cab, WILDLAND CT Pumper, Formed Stainless Steel Body, Single Axle, 1000 GPM Pump, Rear Mounted	
FS19ZB03	IH MV607, 4x4, 2-Door OEM Cab, WILDLAND Pumper, FX Formed Aluminum Body, Single Axle, 1000 GPM Pump, Side Mounted	
FS19ZB04	IH MV607, 4x4, 2-Door OEM Cab, WILDLAND CT Pumper, Formed Stainless Steel Body, Single Axle, 1000 GPM Pump, Rear Mounted	

FS19ZB05	M2 Freightliner, 4x4, 2-Door OEM Cab, MAVERICK Pumper, Aluminum Body, Single Axle, 1000 GPM Pump, 1500 Gallon Tank	
FS19ZB06	IH HV507, 4x4, 2-Door OEM Cab, MAVERICK Pumper, Aluminum Body, Single Axle, 1000 GPM Pump, 1500 Gallon Tank	
FS19ZB07	Ford F550, 4x4, 2-Door OEM Cab, , Wildland Aluminum Huck Bolt Body, 200 GPM Pump, 300 Gallon Tank	

C. Pumper Fire Apparatus

FS19ZC01	M2 Freightliner, 2-Door OEM Cab, Pumper, Formed Aluminum Body, Single Axle 1250 GPM Pump, Side Mounted	
FS19ZC02	IH MV607, 2-Door OEM Cab, Pumper, Formed Aluminum Body, Single Axle, 1250GPM Pump, Side Mounted	
FS19ZC03	Kenworth, 2-Door OEM Cab, Pumper, Formed Aluminum Body, Single Axle, 1250 GPM Pump, Side Mounted	
FS19ZC04	M2 Freightliner, 2-Door OEM Cab, Firestar Pumper, Formed Aluminum Body, Single Axle 1250 GPM Pump, Side Mounted	
FS19ZC05	Rosenbauer Commander, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 1250 GPM Pump, Side Mounted	
FS19ZC06	Rosenbauer Commander, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 1250 GPM Pump, Rear Mounted	
FS19ZC07	Rosenbauer Commander, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 1500 GPM Pump, Side Mounted	
FS19ZC08	Rosenbauer Commander, 4-Door Full-Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 1500 GPM Pump, Rear Mounted	
FS19ZC09	Rosenbauer Warrior, 4-Door Full-Tilt, Aluminum Cab, Formed Aluminum Body, Single Axle, 1250 GPM Pump, Side Mounted	
FS19ZC10	Ford F550, 4x2, 2-Door OEM Cab, Mini Pumper, Formed Aluminum Body, 500 GPM PTO Pump, Side Mounted	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19ZD01	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19ZD02	IH MV607, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19ZD03	Rosenbauer Commander, 4-Door, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19ZD04	Rosenbauer Commander, 4-Door, Full-Tilt, Aluminum Cab, Tandem Axle, Formed Aluminum Body, Non-Walk-In Body	
FS19ZD05	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19ZD06	IH MV607, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19ZD07	Rosenbauer Commander, 4-Door, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-In Body	
FS19ZD08	Rosenbauer Commander, 4-Door, Full-Tilt, Aluminum Cab, Tandem Axle, Formed Aluminum Body, Walk-In Body	
FS19ZD09	Ford F-550, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	

E. Pumper/Tankers & Tankers

FS19ZE01	M2 Freightliner, 2-Door, OEM Cab, Pumper/Tanker, Formed Aluminum Body, 1800 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE02	M2 Freightliner, 2-Door, OEM Cab, Pumper/Tanker, Formed Aluminum Body, 2000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE03	IH MV607, 2-Door, OEM Cab, Pumper/Tanker, Formed Aluminum Body, 1800 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE04	IH7400, 2-Door, OEM Cab, Pumper/Tanker, Formed Aluminum Body, 2000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE05	Kenworth T300, 2-Door, OEM Cab, Pumper/Tanker, Formed Aluminum Body, 1800 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE06	Kenworth T300, 2-Door, OEM Cab, Pumper/Tanker, Formed Aluminum Body, 2000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	

FS19ZE07	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Pumper/Tanker, Formed Aluminum Body, 1800Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE08	Rosenbauer Commander, 4-Door Full-Tilt, Aluminum Cab, Pumper/Tanker, Formed Aluminum Body, 2000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19ZE09	M2 Freightliner, 2-Door, OEM Cab, Wet Side Tanker, Formed Aluminum Body, 3000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
AA. Seagrave		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19AAA01	Seagrave Marauder II Custom 4-Door Full Tilt Stainless Steel Cab and Body, Single Axle, 75' Rear Mount Ladder (Meanstick) Telescoping Ladder (500#)	
FS19AAA02	Seagrave Marauder II Custom 4-door Full Tilt Stainless Steel Cab and Body, Tandem Axle, 100' Rear Mount Ladder Telescoping (500#)	
FS19AAA03	Seagrave Marauder II Custom 4-door Full Tilt Stainless Steel Tractor and Body, Single Axle, 100' Tractor Drawn Aerial - Mid Mounted Telescoping Ladder (250#)	
FS19AAA04	Seagrave Marauder II Custom 4-door Full Tilt Stainless Steel Tractor and Body, Single Axle, 100' Tractor Drawn Aerial - Mid Mounted Telescoping Ladder (500#)	
FS19AAA05	Seagrave Marauder II Custom 4-door Full Tilt Stainless Steel Cab and Body, Tandem Axle, 105' Rear Mount Telescoping Ladder Platform (1200#)	
FS19AAA06	Seagrave Marauder II Custom 4-door Full Tilt Stainless Steel Cab and Body, Tandem Axle, 75' Mid Mounted Telescoping Platform (1000#) - Aerialscope	
FS19AAA07	Seagrave Marauder II Custom 4-Door Full Tilt Stainless Steel Cab and Body, Tandem Axle, 95' Mid Mount Telescoping Platform (1000#) - Aerialscope	
FS19AAA08	Seagrave Marauder II Custom 4-Door Full Tilt Stainless Steel Cab and Body, Single Axle, 60' Articulating Water Tower.	
B. Wildland Fire Apparatus (Brush Fire)		
FS19AAB01	Ford F550, 2-Door, OEM Cab, 4x4, Brush Truck, Aluminum Bed with Aluminum Compartments	
FS19AAB02	Freightliner, 4-Door, OEM Cab, 4 x 4, Wildland Pumper, Polypropylene Body, 1250 GPM Pump, Side Mount	
FS19AAB03	Freightliner, 4-Door, OEM Cab, 4 x 4, Wildland Pumper, Stainless Steel Body, 1250 GPM Pump, Side Mount	
C. Pumper Fire Apparatus		
FS19AAC01	Seagrave Marauder II, Custom 4-Door Full Tilt Stainless Steel Cab and Body, Single Rear Axle, 1500 GPM Pump, Mid Mounted Pump	
FS19AAC02	Freightliner, 4-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid Mounted Pump	
FS19AAC03	Freightliner, 2-Door, OEM Cab, Polypropylene Body, Single Axle, 1250 GPM Pump, Mid Mounted Pump	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19AAD01	Seagrave Marauder II Custom 4-Door Full Tilt Stainless Steel Cab and Body, Single Axle, Non-Walk-In Body	
FS19AAD02	Freightliner, 2-Door, OEM Cab, Single Axle, Polypropylene Rescue, Non-Walk-In Body	
FS19AAD03	Seagrave Marauder II Custom 4-Door Full Tilt Stainless Steel Cab and Body, Single Axle, Walk-In Body	
E. Pumper/Tankers & Tankers		
FS19AAE01	Seagrave Marauder II Custom 4-Door Full Tilt Stainless Steel Cab and Body, Tandem Axle, 1500 GPM Pump, Mid Mounted Pump, 2000 Gallon Tank	
FS19AAE02	Freightliner, 2-Door, OEM Cab, Polypropylene Body, Single Axle, PTO Pump, Side Mount, 2000 Gallon Tank	
FS19AAE03	Freightliner, 2-Door, OEM Cab, Polypropylene Body, Tandem Axle, PTO Pump, Side Mount, 3000 Gallon Tank	
FS19AAE04	Freightliner, 2-Door, OEM Cab, Polypropylene Body, Tandem Axle, Gas Pump, 3000 Gallon Tank	
BB. Skeeter		
B. Wildland Fire Apparatus (Brush Fire)		

FS19BBB01	Slip In Unit: Complete Slip in firefighting package for flatbed or pickup bed. Heavy Duty frame, 200 GPM pump, 300 gallon poly tank. 150' hose reel. Hose Tray. Stainless steel plumbing.	
FS19BBB02	Skeeter Type 3 or 4 F-650: Brush unit, Large (33,000 gvw). Custom firefighting body. 750 gallon poly tank. 200-750 gpm pump. 150' hose reel. Stainless steel plumbing. Hose tray. Tool tray. Side body compartments.	
FS19BBB03	Skeeter Type 5 F-550: Brush unit, Medium (19,500 gvw). Custom firefighting body. 400 gallon poly tank. 200 gpm pump. 150' hose reel. Stainless steel plumbing. Hose tray. Tool tray. Side body compartments.	
FS19BBB04	Skeeter Type 6 F-350: Brush unit, Small (13,000 gvw). Custom firefighting body. 300 gallon poly tank. 200 gpm pump. 150' hose reel. Stainless steel plumbing. Hose tray. Tool tray. Side body compartments.	
FS19BBB05	Type 5 Ram 5500 (19,000 GVW) Brush Unit Medium – 400 gallons/200 GPM pump. Hose Reel.	
FS19BBB06	Type 6 Ram 3500 (12,500 GVW) Brush Unit Small – 300 gallons/200 GPM pump. Hose Reel	
FS19BBB07	Type 3 International 7400 (35,000 GVW) Brush Unit Large – 750 gallons/200-750 GPM Pump. Hose reel.	
FS19BBB08	Type 3 Freightliner M2 (37,000 GVW) Brush Unit Large – 750 gallons/200-750 GPM Pump. Hose reel.	
FS19BBB09	Squad Rescue Ford F-450 - Small Rescue Body with (2) Front Vertical Compartments, (2) Rear Vertical Compartments and (2) Center Compartments	
FS19BBB10	Squad Rescue Ram - 4500 Small Rescue Body with (2) Front Vertical Compartments, (2) Rear Vertical Compartments and (2) Center Compartments	
FS19BBB11	Type 5 Chevy 5500 (19,000 GVW) Brush Unit Medium – 400 gallons/200 GPM pump. Hose Reel.	
FS19BBB12	Type 6 Chevy 4500 (12,500 GVW) Brush Unit Small – 300 gallons/200 GPM pump. Hose Reel	
FS19BBB13	Type 3 Chevy 6500 (22,900 GVW) Brush Unit Large – 750 gallons/200-750 GPM Pump. Hose reel.	

CC. Smeal

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19CCA01	55' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19CCA02	75' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19CCA03	75' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA04	100' Mid Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA05	105' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA06	110' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA07	125' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA08	85' Mid-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA09	93' Mid-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA10	100' Rear-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA11	100' Mid-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA12	100' Tractor Drawn Telescoping Ladder (TDA), Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Single Axle	

FS19CCA13	105' Tractor Drawn Telescoping Ladder (TDA), Formed Aluminum Body, Spartan Gladiator, 4-Door Tilt Cab, Single Axle	
FS19CCA14	105' Tractor Drawn Telescoping Ladder Quint (TDA), Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19CCA15	54' Squirt - Rear Mount Articulating Water Tower , Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19CCA16	50' Tele-Squirt - Rear Mount Water Tower w/ Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19CCA17	65' Tele-Squirt - Rear Mount Water Tower w/ Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19CCA18	55' Snorkel - Rear Mount Articulating Platform, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	

B. Wildland Fire Apparatus (Brush Fire)

FS19CCB01	Type III Wildland Pumper, 500 GPM, Formed Aluminum Body, International Chassis, 4-Door, 4x4, OEM Cab, Single Axle	
FS19CCB02	Type I Wildland Pumper, 1250 GPM, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	

C. Pumper Fire Apparatus

FS19CCC01	Pumper, Midship, 1250 GPM, Formed Aluminum Body, Freightliner Chassis, 2-Door, OEM Cab, Single Axle	
FS19CCC02	Pumper, Midship, 1250 GPM, Formed Aluminum Body, International Chassis, 2-Door, OEM Cab, Single Axle	
FS19CCC03	Pumper, Midship, 1250 GPM, Formed Aluminum Body, Kenworth Chassis, 2-Door, OEM Cab, Single Axle	
FS19CCC04	Pumper, Midship, 1250 GPM, Formed Aluminum Body, Freightliner Chassis, 4-Door, OEM Cab, Single Axle	
FS19CCC05	Pumper, Midship, 1250 GPM, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19CCC06	Pumper, Midship, 1250 GPM, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Tandem Axle	

E. Pumper/Tankers & Tankers

FS19CCE01	Pumper/Tanker, Midship, 1250 GPM, 1500 Gallon Tank, Formed Aluminum Body, Freightliner Chassis, 2-Door, Single Axle	
FS19CCE02	Pumper/Tanker, Midship, 1250 GPM, 1500 Gallon Tank, Formed Aluminum Body, International Chassis, 2-Door, Single Axle	
FS19CCE03	Pumper/Tanker, Midship, 1250 GPM, 1500 Gallon Tank, Formed Aluminum Body, Kenworth Chassis, 2-Door, Single Axle	
FS19CCE04	Pumper/Tanker, Midship, 1250 GPM, 3000 Gallon Tank, Formed Aluminum Body, Freightliner Chassis, 2-Door, Tandem Axle	

DD. Southeast Apparatus**B. Wildland Fire Apparatus (Brush Fire)**

FS19DDB01	Southeast Apparatus Wildland Fire Apparatus, Ford Gas F-550 Regular Cab, 4X4 - 9' Aluminum Flatbed Body with High-Side Compartments - Skid Unit, 300 GPM Pump, 250 Gallon Polypropylene Tank, Booster Reel.	
FS19DDB02	Southeast Apparatus Wildland Fire Apparatus, Ford Gas F-550 Regular Cab, 4X4 - 11' Aluminum Flatbed Body with Standing Stations, Crosswalk and High-Side Compartments - Skid Unit, 300 GPM Pump, 250 Gallon Polypropylene Tank, Booster Reel.	
FS19DDB03	Southeast Apparatus Large Wildland Fire Apparatus - KW T-370 2-Door - Diamond Tread Aluminum Body with Low-Side Compartments, Catwalks, Crosswalk, Handrails, Inward Swinging Gates - 375 GPM Auxiliary Pump, 500 Gallon Polypropylene Tank, 1.0" Booster Reel, 2.5" Rear Discharge, Capable of Drafting 12' Vertical.	

C. Pumper Fire Apparatus

FS19DDC01	Southeast Apparatus Extreme Duty 3/16" All Aluminum 14' Pumper Body - KW T-370 2 Door - 750 Gallon Polypropylene Tank - Side-Mount 1,250 GPM Pump.	
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FS19DDC02	Southeast Apparatus Extreme Duty 3/16" All Aluminum 14' Pumper Body - Spartan Metro 4-Door Custom - 750 Gallon Polypropylene Tank - Side-Mount 1,250 GPM Pump.	
FS19DDC03	Southeast Apparatus Extreme Duty 3/16" All Aluminum Mini-Pumper Body - Ford 550 4-Door, 4X4, Diesel - 300 Gallon Polypropylene Tank - Side-Mount 1,250 GPM Pump.	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile		
FS19DDD01	Southeast Apparatus Extreme Duty 3/16" All Aluminum 9' Dry Rescue Body - Ford Gas F-550 Regular Cab, 4X4	
FS19DDD02	Southeast Apparatus Extreme Duty 3/16" All Aluminum 9' Wet Rescue Body - Ford Gas F-550 Regular Cab, 4X4 - 300 GPM Pump, 250 Gallon Polypropylene Tank, Booster Reel	
FS19DDD03	Southeast Apparatus Extreme Duty 3/16" All Aluminum 10' Dry Rescue Body - Ford Gas F-550 Regular Cab, 4X4	
FS19DDD04	Southeast Apparatus Extreme Duty 3/16" All Aluminum 10' Wet Rescue Body - Ford Gas F-550 Regular Cab, 4X4 - 300 GPM Pump, 250 Gallon Polypropylene Tank, Booster Reel	
FS19DDD05	Southeast Apparatus Extreme Duty 3/16" All Aluminum 11' Dry Rescue Body - Ford Gas F-550 Regular Cab, 4X4	
FS19DDD06	Southeast Apparatus Extreme Duty 3/16" All Aluminum 11' Wet Rescue Body - Ford Gas F-550 Regular Cab, 4X4 - 300 GPM Pump, 250 Gallon Polypropylene Tank, Booster Reel	
FS19DDD07	Southeast Apparatus Extreme Duty 3/16" All Aluminum 12' Dry Rescue Body - Ford Gas F-550 Regular Cab, 4X4	
FS19DDD08	Southeast Apparatus Extreme Duty 3/16" All Aluminum 12' Wet Rescue Body - Ford Gas F-550 Regular Cab, 4X4 - 300 GPM Pump, 250 Gallon Polypropylene Tank, Booster Reel	
FS19DDD09	Southeast Apparatus Extreme Duty 3/16" All Aluminum Heavy Rescue Body - KW T-370 2-Door	
FS19DDD10	Southeast Apparatus Extreme Duty 3/16" All Aluminum Heavy Rescue Body - Spartan 4-Door Custom Cab	
E. Pumper/Tankers & Tankers		
FS19DDE01	Southeast Apparatus Extreme Duty 3/16" All Aluminum 12' Tanker Body - KW T-370 2 Door - 2,000 Gallon Polypropylene Rectangular Tank - 500 GPM Pump, Dump Valve, Tank Fill Valve	
FS19DDE02	Southeast Apparatus Extreme Duty 3/16" All Aluminum 12' Tanker Body - KW T-370 2 Door - 2,000 Gallon Polypropylene "T" Tank - 500 GPM Pump, Dump Valve, Tank Fill Valve	
FS19DDE03	Southeast Apparatus Extreme Duty 3/16" All Aluminum 16' Tanker Body - KW T-370 2 Door - 3,000 Gallon Polypropylene "T" Tank - 500 GPM Pump, Dump Valve, Tank Fill Valve	
FS19DDE04	Southeast Apparatus Extreme Duty 3/16" All Aluminum 18' Tanker Body - KW T-370 2 Door - 3,000 Gallon Polypropylene Rectangular Tank - 500 GPM Pump, Dump Valve, Tank Fill Valve	
FS19DDE05	Southeast Apparatus Extreme Duty 3/16" All Aluminum 12' Tanker Body - Spartan 4-Door Custom Cab - 2,000 Gallon Polypropylene Rectangular Tank - 500 GPM Pump, Dump Valve, Tank Fill Valve	
FS19DDE06	Southeast Apparatus Extreme Duty 3/16" All Aluminum 18' Tanker Body - Spartan 4-Door Custom Cab - 3,000 Gallon Polypropylene Rectangular Tank - 500 GPM Pump, Dump Valve, Tank Fill Valve	
EE. Spartan ERV		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19EEA01	55' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19EEA02	Single Axle	
FS19EEA03	75' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Tandem Axle	

FS19EEA04	100' Mid Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA05	105' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA06	Tandem Axle	
FS19EEA07	125' Rear Mount Telescoping Ladder, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA08	85' Mid-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA09	93' Mid-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA10	100' Rear-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA11	100' Mid-Mount Telescoping Ladder with Platform, Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA12	100' Tractor Drawn Telescoping Ladder (TDA), Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Single Axle	
FS19EEA13	105' Tractor Drawn Telescoping Ladder (TDA), Formed Aluminum Body, Spartan Gladiator, 4-Door Tilt Cab, Single Axle	
FS19EEA14	105' Tractor Drawn Telescoping Ladder Quint (TDA), Formed Aluminum Body, Spartan Gladiator, 4-Door, Tilt Cab, Tandem Axle	
FS19EEA15	54' Squirt - Rear Mount Articulating Water Tower , Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19EEA16	50' Tele-Squirt - Rear Mount Water Tower w/ Ladder, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19EEA17	4-Door, Tilt Cab, Single Axle	
FS19EEA18	55' Snorkel - Rear Mount Articulating Platform, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	

B. Wildland Fire Apparatus (Brush Fire)

FS19EEB01	Ford F550, 4x2, Aluminum Flat Bed Body	
FS19EEB02	International 2-Door, 4x2, Aluminum Flat Bed Body	
FS19EEB03	International 2-Door 4x2, Wildland Interface, Aluminum body	
FS19EEB04	Type III Wildland Pumper, 500 GPM, Aluminum Body, International Chassis, 4-Door, 4X4, OEM Cab, Single Axle	

C. Pumper Fire Apparatus

FS19EEC01	Ford F-550 2-Door, Pumper, 4x2, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted	
FS19EEC02	Pumper, Midship, 1250 GPM, Aluminum Body, Freightliner Chassis, 2-Door, 4X2, OEM Cab, Single Axle	
FS19EEC03	Pumper, Midship, 1250 GPM, Aluminum Body, Kenworth Chassis, 2-Door, 4X2, OEM Cab, Single Axle	
FS19EEC04	Pumper, Midship, 1250 GPM, Aluminum Body, International Chassis, 2-Door, 4X2, OEM Cab, Single Axle	
FS19EEC05	Freightliner 2-Door, Pumper, 4x2, Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19EEC06	Pumper, Midship, 1250 GPM, Formed Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19EEC07	Spartan 4-Door Custom Full-Tilt Aluminum Cab, Pumper, 4x2, Aluminum Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted	
FS19EEC08	Type I Wildland Urban Interface, Midship, 1250 GPM, Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19EEC09	Pumper, Midship, 1250 GPM, Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, Single Axle	
FS19EEC10	Pumper, Midship, 1250 GPM, IPS, Aluminum Body, Spartan Metro Star, 4 Door, Tilt Cab, Single Axle	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19EED01	Non Walk-In Rescue, Aluminum Body, Ford F550, 2-Door, 4X2, Single Axle	
FS19EED02	Non Walk-In Rescue, Aluminum Body, International 4400, 2-Door, 4X2, Single Axle	
FS19EED03	Non Walk-In Rescue, Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, 4X2, Single Axle	
FS19EED04	Walk-In Rescue, Aluminum Body, International 4400, 2-Door, 4x2, Single Axle	
FS19EED05	Walk-In Rescue, Aluminum Body, Spartan Metro Star, 4-Door, Tilt Cab, 4x2, Single Axle	

E. Pumper/Tankers & Tankers

FS19EEE01	Pumper/Tanker, Midship, 1250 GPM, Aluminum Body, Freightliner Chassis, 2-Door, 4X2, Single Axle	
FS19EEE02	Pumper/Tanker, Midship, 1250 GPM, Aluminum Body, International Chassis, 2-Door, 4X2, Single Axle	
FS19EEE03	Pumper/Tanker, Midship, 1250 GPM, Aluminum Body, Kenworth Chassis, 2-Door, 4X2, Single Axle	
FS19EEE04	Pumper/Tanker, Midship, 1250 GPM, Aluminum Body, Freightliner Chassis, 2-Door, 4X2, Tandem Axle	
FS19EEE05	Elliptical Tanker, Midship, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, Freightliner Chassis, 2-Door, Single Axle	
FS19EEE06	Elliptical Tanker, Midship, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, International Chassis, 2-Door, Single Axle	
FS19EEE07	Elliptical Tanker, Midship, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, Kenworth Chassis, 2-Door, Single Axle	
FS19EEE08	Elliptical Tanker, Midship, 1250 GPM, 3000 Gallon Tank, Stainless Steel Body, Freightliner Chassis, 2-Door, Tandem Axle	

FF. Summit
B. Wildland Fire Apparatus (Brush Fire)

FS19FFB01	Summit Fire Single Rear Wheel Brush Unit, 200 Gallon Tank, 11HP Rear Mounted Gasoline Pump, 116L" x 86w" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F350, 2 Door Chassis, 4x4, Single Rear Wheel, 60" CA	
FS19FFB02	Summit Fire Brush Unit, 200 Gallon Tank, 11HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F350 2 Door Chassis, 4x4, 60" CA	
FS19FFB03	Summit Fire Brush Unit, 300 Gallon Tank, 11HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F450, 2 Door Chassis, 4x4, 60" CA	
FS19FFB04	Summit Fire Brush Unit, 300 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F450, 2 Door Chassis, 4x4, 60" CA	
FS19FFB05	Summit Fire Brush Unit, 300 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F550, 2 Door Chassis, 4x4, 60" CA	
FS19FFB06	Summit Fire Brush Unit, 300 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F550, 4 Door Chassis, 4x4, 60" CA	
FS19FFB07	Summit Fire Brush Unit, 400 Gallon Tank, 23HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F550, 2 Door Chassis, 4x4, 60" CA	
FS19FFB08	Summit Fire Severe Duty Brush Unit, 300 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F550, 2 Door Chassis, 4x4, Large Tire & Wheel Package, Super Single Rear Wheel, 60" CA	

FS19FFB09	Summit Fire Severe Duty Brush Unit, 300 Gallon Tank, 23HP Rear Mounted Gasoline Pump, 116" Aluminum Platform Body W/ Bulkhead & Side Storage Boxes, Ford F550, 2 Door Chassis, 4x4, Large Tire & Wheel Package, Super Single Rear Wheel, 60" CA	
FS19FFB10	Summit Fire Brush / Utility ERB Unit, 250 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 112" Aluminum Roll Up Door Body, Ford F550, 2 Door Chassis, 4x4, 60" CA	
FS19FFB11	Summit Fire Brush / Utility ERB Unit, 250 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 140" Aluminum Roll Up Door Body, Ford F550, 2 Door Chassis, 4x4, 84" CA	
FS19FFB12	Summit Fire Brush / Utility ERB Unit, 250 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 112" Aluminum Roll Up Door Body, RAM 5500, 2 Door Chassis, 4x4, 60" CA	
FS19FFB13	Summit Fire Brush / Utility ERB Unit, 250 Gallon Tank, 18HP Rear Mounted Gasoline Pump, 140" Aluminum Roll Up Door Body, RAM 5500, 2 Door Chassis, 4x4, 84" CA	
C. Pumper Fire Apparatus		
FS19FFC01	Summit Fire Quick Attack / Mini Pumper, 500 GPM PTO Pump, 300 Gallon tank, Aluminum Roll Up Door Short Body, Ford F550, 2 door , 4x4, 84" CA	
FS19FFC02	Summit Fire Quick Attack / Mini Pumper, 500 GPM PTO Pump, 300 Gallon tank, Aluminum Roll Up Door Tall Body, Ford F550, 4 door , 4x4, 84" CA	
FS19FFC03	Summit Fire Quick Attack / Mini Pumper, 1000 GPM MidShip Pump, 300 Gallon tank, Aluminum Roll Up Door Short Body, Ford F550, Super Cab, 4x4, 84" CA	
FS19FFC04	Summit Fire Quick Attack / Mini Pumper, 1000 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door Short Body, Ford F550, 4 door , 4x4, 84" CA	
FS19FFC05	Summit Fire Quick Attack / Mini Pumper, 1000 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door, Short Body, Enclosed Pump House, Ford F550, Super Cab, 4x4, 84" CA	
FS19FFC06	Summit Fire Quick Attack / Mini Pumper, 1000 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door, Short Body, Enclosed Pump House, Ford F550, 4 door , 4x4, 84" CA	
FS19FFC07	Summit Fire Quick Attack / Mini Pumper, 1250 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door, Short Body, Ford F550, Super Cab, 4x4, 84" CA	
FS19FFC08	Summit Fire Quick Attack / Mini Pumper, 1250 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door, Short Body, Ford F550, 4 door , 4x4, 84" CA	
FS19FFC09	Summit Fire Severe Duty Quick Attack / Mini Pumper, 1250 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door, Short Body, Ford F550, 4 door, 4x4, 84" CA, Large Tire & Wheel Package	
FS19FFC10	Summit Fire Severe Duty Quick Attack / Mini Pumper, 1250 GPM Midship Pump, 300 Gallon tank, Aluminum Roll Up Door, Short Body, Ford F550, 4 door , 4x4, 84" CA, Large Tire & Wheel Package	
FS19FFC11	Summit Commercial Smart Pumper, Highside / Lowside Aluminum Swing Door Body, 1250 GPM Midship Pump, 1000 Gallon Tank, Freightliner M2, 2 Door	
FS19FFC12	Summit Commercial Smart Pumper, Highside / Lowside Aluminum Roll Up Door Body, 1250 GPM Midship Pump, 1000 Gallon Tank, Freightliner M2, 2 Door	
FS19FFC13	Summit Commercial Rescue Style Pumper, Aluminum Roll Up Door Body, 1250 GPM Midship Pump, 750 Gallon Tank, Freightliner M2, 2 Door	
FS19FFC14	Summit Commercial Rescue Style Pumper, Aluminum Roll Up Door Body, 1250 GPM Midship Pump, 1000 Gallon Tank, Freightliner M2, 2 Door,	
FS19FFC15	Summit Commercial Rescue Style Pumper, HighSide / Midside Aluminum Roll Up Door Body, 1250 GPM Midship Pump, 750 Gallon Tank, Freightliner M2, 2 Door	
FS19FFC16	Summit Fire Custom Smart Pumper, HighSide / Lowside Aluminum Swing Door Body, 1250 GPM Midship Pump, 1000 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	

FS19FFC17	Summit Fire Custom Smart Pumper, HighSide / Highside Aluminum Swing Door Body, 1250 GPM Midship Pump, 1000 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
FS19FFC18	Summit Fire Custom Cab Rescue Style Pumper, Aluminum HighSide/Midside, Roll Up Door Body, 1250 GPM Midship Pump, 750 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
FS19FFC19	Summit Fire Custom Cab Rescue Style Pumper, Aluminum HighSide/Highside, Roll Up Door Body, 1250 GPM Midship Pump, 750 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
FS19FFC20	Summit Fire Custom Cab Stainless Steel Pumper, HighSide/Midside, Roll Up Door Body, 1250 GPM Midship Pump, 750 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
FS19FFC21	Summit Fire Custom Cab Stainless Steel Pumper, HighSide/Highside, Roll Up Door Body, 1250 GPM Midship Pump, 750 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
FS19FFC22	Summit Fire Custom Cab Pumper Rescue, Aluminum HighSide/Highside, Roll Up Door Body, Roof Top Storage, 1250 GPM Midship Pump, 750 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
FS19FFC23	Summit Fire Custom Cab Pumper Rescue, Aluminum HighSide/Highside, Roll Up Door Body, Roof Top Storage, (Tall Body) 1250 GPM Midship Pump, 750 Gallon Tank, Spartan, 4 Door Custom Cab Chassis	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue,		
FS19FFD01	Summit Fire Remote Evacuation & Deployment Wagon (R.E.D Wagon)	
FS19FFD02	Summit Fire Remote Evacuation & Deployment Wagon T.W.O (R.E.D Wagon Trail & Wildland)	
FS19FFD03	Summit Fire Rescue ERB Unit, 7 bay, 112" Aluminum Roll Up Door Body, Ford F550, 2 Door Chassis, 4x4, 60" CA	
FS19FFD04	Summit Fire Rescue ERB Unit, 7 bay, 112" Aluminum Roll Up Door Body, RAM 5500, 2 Door Chassis, 4x4, 60" CA	
FS19FFD05	Summit Fire Rescue ERB Unit, 7 bay, 140" Aluminum Roll Up Door Body, Ford F550, 2 Door Chassis, 4x4, 84" CA	
FS19FFD06	Summit Fire Rescue ERB Unit, 7 bay, 140" Aluminum Roll Up Door Body, RAM 5500, 2 Door Chassis, 4x4, 84" CA	
FS19FFD07	Summit Fire Medium Duty Rescue, Aluminum 14 foot, 7 Bay Rescue, Roll up Door, Freightliner M2 chassis, 2 Door	
FS19FFD08	Summit Fire Medium Duty Rescue, Aluminum 16 foot, 9 Bay Rescue, Roll up Door, Freightliner M2 chassis, 2 Door	
FS19FFD09	Summit Fire Custom Cab Heavy Rescue, Aluminum 18 foot, 9 Bay Rescue, Roll Up Door, Roof Top Storage, Spartan 4door Custom Cab.	
FS19FFD10	Summit Fire Custom Cab Heavy Rescue, Stainless Steel 18 foot, 9 Bay Rescue, Roof top Storage, Roll Up Door, Spartan 4door Custom Cab Chassis.	
FS19FFD11	Summit Fire Custom Cab Heavy Rescue, Aluminum 20 foot, 9 Bay Rescue, Roll Up Door, Roof top Storage, Spartan 4door Custom Cab Chassis.	
FS19FFD12	Summit Fire Custom Cab Heavy Rescue, Stainless Steel, 20 foot, 9 Bay Rescue, Roll Up Door, Roof top Storage, Spartan 4door Custom Cab Chassis.	
E. Pumper/Tankers & Tankers		
FS19FFE01	Summit Fire ETB Economy Tanker, 1800 Gallon Poly Elliptical Tank, Single Rear Manual Dump Chute, Freightliner M2 Chassis cab, 2 Door, Single Rear Axle	
FS19FFE02	Summit Fire ETB Economy Tanker, 3000 Gallon Poly Elliptical Tank, Single Rear Manual Dump Chute, Freightliner M2 Chassis cab, 2 Door, Tandem Rear Axle	
FS19FFE03	Summit Fire ETB Pumper Tanker, 1800 Gallon Poly Elliptical Tank, Single Rear Manual Dump Chute, 1250 GPM Midship Pump, Freightliner M2 Chassis cab, 2 Door, Single Rear Axle	

FS19FFE04	Summit Fire ETB Pumper Tanker, 3000 Gallon Poly Elliptical Tanker, Single Rear Manual Dump Chute, 1250 GPM Midship Pump, Freightliner M2 Chassis cab, 2 Door, Tandem Rear Axle	
FS19FFE05	Summit Fire Wetside Square Tanker, 2000 Gallon Poly Tank, Single Rear Manual Dump Chute, Freightliner M2 Chassis cab, 2 Door, Single Rear Axle	
FS19FFE06	Summit Fire Wetside Square Tanker, 3000 Gallon Poly Tank, Single Rear Manual Dump Chute, Freightliner M2 Chassis cab, 2 Door, Tandem Rear Axle	
FS19FFE07	Summit Fire Wetside Pumper Tanker, 1800 Gallon Poly Tanker, Single Rear Manual Dump Chute, 1250 GPM Midship Pump, Freightliner M2 Chassis cab, 2 Door, Single Rear Axle	
FS19FFE08	Summit Fire Wetside Pumper Tanker, 3000 Gallon Poly Tank, Single Rear Manual Dump Chute, 1250 GPM Midship Pump, Freightliner M2 Chassis cab, 2 Door, Tandem Rear Axle	
FS19FFE09	Summit Fire Dryside Tanker, 2000 Gallon Poly Tank, Single Rear Manual Dump Chute, Freightliner M2 Chassis cab, 2 Door, Single Rear Axle	
FS19FFE10	Summit Fire Dryside Tanker, 3000 Gallon Poly Tank, Single Rear Manual Dump Chute, Freightliner M2 Chassis cab, 2 Door, Tandem Rear Axle	
FS19FFE11	Summit Fire Dryside Pumper Tanker, 1800 Gallon Poly Tanker, Single Rear Manual Dump Chute, 1250 GPM Midship Pump, Freightliner M2 Chassis cab, 2 Door, Single Rear Axle	
FS19FFE12	Summit Fire Dryside Pumper Tanker, 3000 Gallon Poly Tank, Single Rear Manual Dump Chute, 1250 GPM Midship Pump, Freightliner M2 Chassis cab, 2 Door, Tandem Rear Axle	
FS19FFE13	Summit Fire Stainless Steel Elliptical Tanker, 2000 Gallon Stainless Wrapped Poly Tank, Freightliner M2 Chassis, 2 Door, Single Rear Axle	
FS19FFE14	Summit Fire Stainless Steel Elliptical Tanker, 3000 Gallon Stainless Wrapped Poly Tank, Freightliner M2 Chassis, 2 Door, Tandem Rear Axle	
FS19FFE15	Summit Fire Commercial Dryside Stainless Steel Tanker, 3000 Gallon Poly Tank, Freightliner M2 Chassis, 2 Door, Tandem Rear Axle	
FS19FFE16	Summit Fire Custom Cab Dryside Stainless Steel Tanker, 3000 Gallon Stainless Wrapped Poly Tank, Spartan 4 Door Custom Cab & Chassis, Tandem Rear Axle	

GG. Sunbelt Fire, Inc.

B. Wildland Fire Apparatus (Brush Fire)

FS19GGB01	Ford F450, 2-door, Aluminum Fabricated Flatbed Body, 9' Flatbed Wildland Vehicle	
FS19GGB02	Dodge 5500, 2-door, Aluminum Fabricated Flatbed Body, 9' Flatbed Wildland Vehicle	
FS19GGB03	Ford F450, 2-door, Aluminum Extruded Body, 10' Quick Attack Wildland Vehicle	
FS19GGB04	Dodge 5500, 2-door, Aluminum Extruded Body, 10' Quick Attack Wildland Vehicle	
FS19GGB05	Skid Unit for Slide in Style Body	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19GGD01	Ford F450, 2-door, Aluminum Extruded Body, 10' Light Rescue Vehicle	
FS19GGD02	Dodge 5500, 2-door, Aluminum Extruded Body, 10' Light Rescue Vehicle	
FS19GGD03	Freightliner M2, 2-door Aluminum Extruded Body, 18' Walk-in Rehabilitation Vehicle	
FS19GGD04	IHC 4400, 2-door Aluminum Extruded Body, 18' Walk-in Rehabilitation Vehicle	
FS19GGD05	Freightliner M2, 2-door Aluminum Extruded Body, 18' Non-Walk-in Rescue Vehicle	
FS19GGD06	IHC 4400, 2-door Aluminum Extruded Body, 18' Non-Walk-in Rescue Vehicle	
FS19GGD07	Freightliner M2, 2-door Aluminum Extruded Body, 18' Command Vehicle	
FS19GGD08	IHC 4400, 2-door Aluminum Extruded Body, 18' Command Vehicle	

HH. SVI Trucks

B. Wildland Fire Apparatus (Brush Fire)

FS19HHB01	Ford F550, 2-Door, OEM Cab, 4x4, Single Axle, Aluminum Body, 100 GPM, 250 Gal Tank Slip-In, Wildland Type 6	
FS19HHB02	International HV507, 4-Door, OEM Cab, 4x4, Aluminum Body, Single Axle, 500 GPM, 500 Gallon, Mid-Mounted Wildland Type 3	

C. Pumper Fire Apparatus

FS19HHC01	International MV607, 2-Door, OEM Cab, 4x2, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19HHC02	Spartan 4-Door Chassis, Aluminum Tilt Cab, 4x2, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	
FS19HHC03	Ford F550, 4-Door, OEM Cab, 4x2, Aluminum Body, Single Axle, 1250 GPM Pump, 300 Gallon, Mid-Mounted Pumper	

D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center

FS19HHD01	Ford F550, 2-Door, OEM Cab, 4x2, Single Axle, Aluminum Body, Non-Walk-In Rescue	
FS19HHD02	International MV607, 2-Door, OEM Cab, 4x2, Single Axle, Aluminum Body, Non-Walk-In Rescue	
FS19HHD03	Spartan 4-Door Chassis, Aluminum Tilt Cab, 4x2, Single Axle, Aluminum Body, Non-Walk-In Body	
FS19HHD04	International MV607, 2-Door, OEM Cab, 4x2, Single Axle, Aluminum Body, Walk-In Rescue	
FS19HHD05	Spartan 4-Door Chassis, Aluminum Tilt Cab, 4x2, Single Axle, Aluminum Body, Walk-In Body	
FS19HHD06	International MV607, 2-Door, OEM Cab, 4 x 2 Single Axle, Aluminum Body, Mobile Bauer Compressor Unit	

E. Pumper/Tankers & Tankers

FS19HHE01	International MV607, 2-Door, OEM Cab, 4x2, Aluminum Body, Single Axle, 2,000 Gallon Tanker, 500 GPM Pump	
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II. Sutphen Corporation (Sutphen)

A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)

FS19IIA01	Sutphen SA75, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Single Axle, 75' Mid Mounted 1000# Telescoping Aluminum Box Boom with Climbing Ladder	
FS19IIA02	Sutphen SL75, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Single Axle, 75' Mid Mounted 1000# Aluminum Ladder	
FS19IIA03	Sutphen SL100, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Tandem Axle, 100' Mid Mounted 750# Aluminum Ladder	
FS19IIA04	Sutphen SP70, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Single Axle, 70' Mid Mounted 1000# Telescoping Aluminum Box Boom with Platform	
FS19IIA05	Sutphen SP95, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Tandem Axle, 95' Mid Mounted 1000# Telescoping Aluminum Box Boom with Platform	
FS19IIA06	Sutphen SPH100, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Tandem Axle, 100' Mid Mounted 1000# Telescoping Aluminum Box Boom with Platform	
FS19IIA07	Sutphen SP110, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Tandem Axle, 110' Mid Mounted 1000# Telescoping Aluminum Box Boom with Platform	
FS19IIA08	Sutphen SLR75, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Single Axle, 75' Rear Mounted 750# Aluminum Ladder	
FS19IIA09	Sutphen SLR108, Custom 4-Door Full-Tilt Aluminum Cab, Stainless Steel Body, Tandem Axle, 108' Rear Mounted 750# Aluminum Ladder	

B. Wildland Fire Apparatus (Brush Fire)

FS19IIB01	Sutphen/International 7400 4x4, Type 3 Pumper, 4-Door Commercial Cab, Extruded Aluminum Body, Single Axle, 750 GPM Mid-Mounted Two-Stage Pump	
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FS19IIB02	Sutphen Custom Wildland Urban Interface Pumper, 4 Door Full Tilt Aluminum Cab, Extruded Aluminum Body, Single Axle, 1250 GPM Mid-Mounted Pump	
C. Pumper Fire Apparatus		
FS19IIC01	Sutphen/International 4400, 2-Door Commercial Cab, Pumper, Extruded Aluminum Body, Single Axle, 1250 GPM Mid-Mounted Single Stage Pump	
FS19IIC02	Sutphen Program 1 Custom-Pumper, 4 Door Full Tilt Aluminum Cab, Extruded Aluminum Body, Single Axle, 1250 GPM Mid-Mounted Pump	
FS19IIC03	Sutphen Program 2 Custom Pumper, 4 Door Full Tilt Aluminum Cab, Extruded Aluminum Body, Single Axle, 1250 GPM Mid-Mounted Pump	
FS19IIC04	Sutphen Fully Customized Pumper, 4 Door Full Tilt Aluminum Cab, Extruded Aluminum Body, Single Axle, 1250 GPM Mid-Mounted Pump	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19IID01	Sutphen Custom Rescue, Non-Walk-In, 4 Door Full Tilt Aluminum Cab, Single Axle, Formed Aluminum Body	
E. Pumper/Tankers & Tankers		
FS19IIE01	Sutphen/International Pumper/Wetside Tanker, 2-Door Commercial Cab, Stainless Steel Body, Single Axle, 1250 GPM Mid-Mounted Pump	
FS19IIE02	Sutphen/International Pumper/Elliptical Tanker, 2-Door Commercial Cab, Stainless Steel Body, Single Axle, 1250 GPM Mid-Mounted Pump	
FS19IIE03	Sutphen/International Pumper/Wetside Tanker, 2-Door Commercial Cab, Stainless Steel Body, Tandem Axle, 1250 GPM Mid-Mounted Pump	
FS19IIE04	Sutphen/International Pumper/Elliptical Tanker, 2-Door Commercial Cab, Stainless Steel Body, Tandem Axle, 1250 GPM Mid-Mounted Pump	
FS19IIE05	Sutphen Custom Pumper Tanker, 4 Door Full Tilt Aluminum Cab, Extruded Aluminum Body, Tandem Axle, 1250 GPM Mid-Mounted Pump	
JJ. Toyne		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19JJA01	Toyne, single axle, Spartan chassis, 75' rear mount aerial, stainless steel body, 300 gallons, side stack hosebed, single stage 1500 gpm pump mid mounted	
FS19JJA02	Toyne tandem axle, Spartan chassis, 110' rear mount aerial with stainless steel body, 300 gallons of water, side stack hosebed, single stage 1500 gpm pump mid mounted	
FS19JJA03	Toyne tandem axle, Spartan chassis, rear mount 100' platform, stainless steel body, 300 gallons of water, hosebed, single stage 1500 gpm pump mid mounted	
FS19JJA04	Toyne tandem axle, Spartan chassis, mid-mount 100" platform, stainless steel body, 300 gallons of water, hosebed, single stage 1500 gpm pump mid mounted	
FS19JJA05	Toyne single axle, Spartan chassis 50' Tele Squirt, stainless steel body, 500 gallons of water, hose bed, single state 1,250 GPM pump mid mounted	
B. Wildland Fire Apparatus (Brush Fire)		
FS19JJB01	Toyne, Ford F550 4 door, stainless steel body, 1000 gpm midship pump, 300 gallons of water	
C. Pumper Fire Apparatus		
FS19JJC01	Freightliner M2, 2-Door Commercial Cab, Pumper, stainless steel Body, Single Axle, 1250 GPM Pump, Single Stage, Mid-Mounted, 750 gallons of water	
FS19JJC02	International 4400, 2-Door Commercial Cab, Pumper, stainless steel Body, Single Axle, 1250 GPM Pump, Single Stage, Mid-Mounted, 750 gallons of water	
FS19JJC03	Kenworth, 2-Door Commercial Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted, 750 gallons of water	
FS19JJC04	Spartan, 4 Door Custom Full Tilt Aluminum Cab, Pumper, stainless steel Body, Single Axle, 1250 GPM Pump, Mid Mounted, 750 gallons of water	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19JJD01	International 4400, 2-Door, Commercial Cab, Single Axle, stainless steel Body, Non-Walk-In Rescue (walk around type)	
FS19JJD02	Spartan, 4-Door, Full-Tilt, Aluminum Cab, Single Axle, stainless steel Body, Non-Walk-In Body (walk around type)	

FS19JJD03	Ford F550, 4 door Cab, Single Axle, stainless steel body, Non-Walk-In Rescue (walk around type)	
E. Pumper/Tankers & Tankers		
FS19JJE01	International, 2-Door, Commercial Cab, Pumper/Tanker, stainless steel Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted, 2500 gallons	
FS19JJE02	Spartan, 4-Door, Custom Full-Tilt, Aluminum Cab, Pumper/Tanker, stainless steel Body, Tandem Axle, 1250 GPM Pump, Mid-Mounted, 2500 gallons	
FS19JJE03	International, 2-Door, Commercial Cab, Elliptical Tpumper/tanker, welded stainless steel Body, Tandem Axle, 1250 GPM Pump, 2000 gallon	
FS19JJE04	International, 2-Door, Commercial Cab, wetside pumper/tanker, aluminum treadplate Body, single Axle, 750 gpm Pump, 3000 gallon	
KK. U S Tanker		
E. Pumper/Tankers & Tankers		
FS19KKE01	Elliptical Tanker, Midship Pump, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, Freightliner Chassis, 2-Door, Single Axle	
FS19KKE02	Elliptical Tanker, Midship Pump, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, International Chassis, 2-Door, Single Axle	
FS19KKE03	Elliptical Tanker, Midship Pump, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, Kenworth Chassis, 2-Door, Single Axle	
FS19KKE04	Elliptical Tanker, Midship Pump, 1250 GPM, 3000 Gallon Tank, Stainless Steel Body, Freightliner Chassis, 2-Door, Tandem Axle	
FS19KKE05	Wet Side Tanker, Midship Pump, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, Freightliner Chassis, 2-Door, Single Axle	
FS19KKE06	Wet Side Tanker, Midship Pump, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, International Chassis, 2-Door, Single Axle	
FS19KKE07	Wet Side Tanker, Midship Pump, 1250 GPM, 2000 Gallon Tank, Stainless Steel Body, Kenworth Chassis, 2-Door, Single Axle	
FS19KKE08	Wet Side Tanker, Midship Pump, 1250 GPM, 3000 Gallon Tank, Stainless Steel Body, Freightliner Chassis, 2-Door, Tandem Axle	
LL. Unruh Fire, Inc.		
B. Wildland Fire Apparatus (Brush Fire)		
FS19LLB01	Unruh Fire 11 ft Attack Brush, extruded aluminum brush body with crosswalk, F550, 4x4	
FS19LLB02	Unruh Fire 9 ft Attack brush, extruded aluminum brush body with work stations, F550, 4x4	
FS19LLB03	Unruh Fire 9 ft Attack Brush, extruded aluminum flatbed brush body, F550, 4x4	
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19LLD01	doors, F550 4x4	
FS19LLD02	Unruh Fire 11 ft Rapid Rescue, extruded aluminum dry rescue body, compartments with 7 roll up doors, F550, 4x4	
FS19LLD03	Unruh Fire 9 ft Rapid Rescue, extruded aluminum wet rescue body with 6 roll up door compartments, F550, 4x4	
FS19LLD04	Unruh Fire 11 ft Rapid Rescue, extruded aluminum wet rescue body, compartments with 6 roll up doors, F550, 4x4	
F. Airport Rescue Fire-Fighting Vehicles		
FS19LLF01	Unruh Fire 12 ft ARFF Rescue, extruded aluminum body with 6 roll up door compartments, 500lbs dry chemical, engine driven pump, F550, 4x4	
FS19LLF02	Unruh Fire 12 ft ARFF Rescue, extruded aluminum body with 6 roll up door compartments, stored energy CAFS, 500 lbs dry chemical, F550, 4x4	
MM. Weis Fire & Safety Equipment Co.		
B. Wildland Fire Apparatus (Brush Fire)		

FS19MMB01	Weis Fire Quick Attack 300, Rear Mount Pump Controls, 9' EXT Alum Fire Body with Walkway, on Ford F-350, 60" CA	
FS19MMB02	Weis Fire Quick Attack 300, Rear Mount Pump Controls, 9' EXT Alum Fire Body with Walkway, on Ford F-450 60" CA	
FS19MMB03	Weis Fire Quick Attack 400, Rear Mount Pump Controls, 11' EXT Alum Fire Body with Walkway, on Ford F-550 84" CA	
FS19MMB04	Weis Fire Quick Attack 500, Rear Mount Pump Controls, 11' EXT Alum Fire Body with Walkway, on Ford F-550 84" CA	
FS19MMB05	Weis Fire Quick Attack 300, Rear Mount Pump Controls, 9' EXT Alum Fire Body with Walkway, on Dodge 5500 Crew Cab, 60" CA	
FS19MMB06	Weis Fire Quick Attack 400, Rear Mount Pump Controls, 9' EXT Alum Fire Body with Walkway, on Dodge 5500 Crew Cab, 60" CA	
FS19MMB07	Weis Fire Quick Attack 400, Rear Mount Pump Controls, 11' EXT Alum Fire Body with Walkway, on Dodge 5500 84" CA	
FS19MMB08	Weis Fire Quick Attack 500, Rear Mount Pump Controls, 11' EXT Alum Fire Body with Walkway, on Dodge 5500 84" CA	

Note: Bidder must identify each option bid with an identifying Code or Part No. that should be referenced on all Contract Pricing Worksheets

[illegible]

FORM G:		SPECIAL STATEMENT OF WARRANTY
FS12-19		“Fire Service Apparatus (All Types)”
<p><i>This form shall be completed by the MANUFACTURER and signed by one of its Corporate Officers. No agent signature shall be acceptable on this document.</i></p> <p>_____, the "Manufacturer", warrants each newly manufactured Fire Apparatus, to the original user/purchaser only for the specified periods stated below, from the date of acceptance, ordinary wear and tear excepted:</p>		
Component:	Warranty:	
•Cab & Chassis	One (1) year, parts & labor	
•Chassis Frame Rails	Five (5) years, parts & labor	
•Diesel Engine	Five (5) years, parts & labor	
•Transmission	Five (5) years, parts & labor	
•Fire Pump	One (1) year, parts & labor	
•Fire Pump Panel Gauge	One (1) year, parts & labor	
•Water Tank	Twenty (20) years, parts & labor	
•Apparatus Body	One (1) year, parts & labor Ten (10) years, rust/corrosion penetration Ten (10) years or 100,000 miles, structural warranty Three (3) years, paint	
•Aerial Device	Twenty (20) years, structural Two (2) years, hydraulic components One (1) year, parts and labor One (1) year, waterway	
<p>The Manufacturer's obligations under this warranty shall be specifically limited to replacing or repairing, as the Manufacturer may elect, any part or parts of such product which to the Manufacturer's examination discloses to be defective in material or workmanship.</p> <p>Any part or parts considered to be covered by the conditions of this warranty shall be returned, freight prepaid, to the Manufacturer's factory located at _____</p> <p>or to such other location as may be approved in advance by the Manufacturer. Replaced or repaired parts determined to be included within the warranty shall be F.O.B. to the End User's physical location. Freight and labor to reinstall parts shall be paid by the Manufacturer.</p> <p>The Manufacturer's warranty shall not apply to the following:</p> <ul style="list-style-type: none"> • Wear items. • Normal adjustments and maintenance services. • Failures resulting from the product being operated in a manner not in accordance with the operation manual or for a purpose not recommended by the Manufacturer. • Any product which shall have been repaired, modified, or altered in any way so as to have been adversely affected the units stability or reliability. • Items subjected to misuse, negligence, accident, or improper maintenance. • Loss of time or use of the product, inconvenience or other incidental expenses. <p>Any trade accessory that has its own warranty shall have said warranty document attached with the bid response. If a separate warranty equal or exceeding is not attached, then the Manufacturer warrants any trade accessory not specifically covered by a separate warranty.</p> <p>Nothing contained in this warranty shall make the Manufacturer, liable beyond the express limitations hereof, for loss, injury, or damage of any kind to any person or entity resulting from any defect or failure of the product (except as covered by Product liability insurance).</p> <p>THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATIONS, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.</p>		
MANUFACTURER:		
Corporate Officer Signature:		
Printed Name and Title:		
WARRANTY ADMINISTRATOR:		
Printed Name and Title:		
Date:		

Form H - Marketing	Invitation No.: FS12-19
Offeror Name:	
Bidder shall provide a written narrative explaining in some detail activities that will be undertaken to actively market and promote an H-GAC contract to local government and non-profit End Users.	
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GENERAL PROVISIONS

This Agreement is made and entered into, by and between the Houston-Galveston Area Council hereinafter referred to as H-GAC having its principal place of business at 3555 Timmons Lane, Suite 120, Houston, Texas 77027 and _____, hereinafter referred to as the Contractor, having its principal place of business at _____.

WITNESSETH:

WHEREAS, H-GAC hereby engages the Contractor to perform certain services in accordance with the specifications of the Agreement; and

WHEREAS, the Contractor has agreed to perform such services in accordance with the specifications of the Agreement;

NOW, THEREFORE, H-GAC and the Contractor do hereby agree as follows:

ARTICLE 1: LEGAL AUTHORITY

The Contractor warrants and assures H-GAC that it possesses adequate legal authority to enter into this Agreement. The Contractor's governing body, where applicable, has authorized the signatory official(s) to enter into this Agreement and bind the Contractor to the terms of this Agreement and any subsequent amendments hereto.

ARTICLE 2: APPLICABLE LAWS

The Contractor agrees to conduct all activities under this Agreement in accordance with all applicable rules, regulations, directives, standards, ordinances, and laws, in effect or promulgated during the term of this Agreement, including without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Contractor shall furnish H-GAC with satisfactory proof of its compliance therewith.

ARTICLE 3: INDEPENDENT CONTRACTOR

The execution of this Agreement and the rendering of services prescribed by this Agreement do not change the independent status of H-GAC or the Contractor. No provision of this Agreement or act of H-GAC in performance of the Agreement shall be construed as making the Contractor the agent, servant or employee of H-GAC, the State of Texas or the United States Government. Employees of the Contractor are subject to the exclusive control and supervision of the Contractor. The Contractor is solely responsible for employee related disputes and discrepancies, including employee payrolls and any claims arising therefrom.

ARTICLE 4: WHOLE AGREEMENT

The General Provisions, Special Provisions, and Attachments, as provided herein, constitute the complete Agreement ("Agreement") between the parties hereto, and supersede any and all oral and written agreements between the parties relating to matters herein. Except as otherwise provided herein, this Agreement cannot be modified without written consent of the parties.

ARTICLE 5: SCOPE OF SERVICES

The services to be performed by the Contractor are outlined in an Attachment to this Agreement.

ARTICLE 6: PERFORMANCE PERIOD

This Agreement shall be performed during the period which begins _____ and ends _____. All services under this Agreement must be rendered within this performance period, unless directly specified under a written change or extension provisioned under Article 15, which shall be fully executed by both parties to this Agreement.

ARTICLE 7: PAYMENT OR FUNDING

Payment provisions under this Agreement are outlined in the Special Provisions.

ARTICLE 8: REPORTING REQUIREMENTS

If the Contractor fails to submit to H-GAC in a timely and satisfactory manner any report required by this Agreement, or otherwise fails to satisfactorily render performances hereunder, H-GAC may terminate this agreement with notice as identified in Article 16 of these General Provisions. H-GAC has final determination of the adequacy of performance and reporting by Contractor. Termination of this agreement for failure to perform may affect Contractor's ability to participate in future opportunities with H-GAC. The Contractor's failure to timely submit any report may also be considered cause for termination of this Agreement.

Any additional reporting requirements shall be set forth in the Special Provisions of this Agreement.

ARTICLE 9: INSURANCE

Contractor shall maintain insurance coverage for work performed or services rendered under this Agreement as outlined and defined in the attached Special Provisions.

ARTICLE 10: SUBCONTRACTS and ASSIGNMENTS

Except as may be set forth in the Special Provisions, the Contractor agrees not to subcontract, assign, transfer, convey, sublet or otherwise dispose of this Agreement or any right, title, obligation or interest it may have therein to any third party without prior written approval of H-GAC. The Contractor acknowledges that H-GAC is not liable to any subcontractor or assignee of the Contractor. The Contractor shall ensure that the performance rendered under all subcontracts shall result in compliance with all the terms and provisions of this Agreement as if the performance rendered was rendered by the Contractor. Contractor shall give all required notices, and comply with all laws and regulations applicable to furnishing and performance of the work. Except where otherwise expressly required by applicable law or regulation, H-GAC shall not be responsible for monitoring Contractor's compliance, or that of Contractor's subcontractors, with any laws or regulations.

ARTICLE 11: AUDIT

Notwithstanding any other audit requirement, H-GAC reserves the right to conduct or cause to be conducted an independent audit of any transaction under this Agreement, such audit may be performed by the H-GAC local government audit staff, a certified public accountant firm, or other auditors designated by H-GAC and will be conducted in accordance with applicable professional standards and practices. The Contractor understands and agrees that the Contractor shall be liable to the H-GAC for any findings that result in monetary obligations to H-GAC.

ARTICLE 12: EXAMINATION OF RECORDS

The Contractor shall maintain during the course of the work complete and accurate records of all of the Contractor's costs and documentation of items which are chargeable to H-GAC under this Agreement. H-GAC, through its staff or designated public accounting firm, the State of Texas, and United States Government, shall have the right at any reasonable time to inspect, copy and audit those records on or

off the premises by authorized representatives of its own or any public accounting firm selected by H-GAC. The right of access to records is not limited to the required retention period, but shall last as long as the records are retained. Failure to provide access to records may be cause for termination of the Agreement. The records to be thus maintained and retained by the Contractor shall include (without limitation): (1) personnel and payroll records, including social security numbers and labor classifications, accounting for total time distribution of the Contractor's employees working full or part time on the work, as well as cancelled payroll checks, signed receipts for payroll payments in cash, or other evidence of disbursement of payroll payments; (2) invoices for purchases, receiving and issuing documents, and all other unit inventory records for the Contractor's stocks or capital items; and (3) paid invoices and cancelled checks for materials purchased and for subcontractors' and any other third parties' charges.

The Contractor further agrees that the examination of records outlined in this article shall be included in all subcontractor or third-party agreements.

ARTICLE 13: RETENTION OF RECORDS

The Contractor and its subcontractors shall maintain all records pertinent to this Agreement, and all other financial, statistical, property, participant records, and supporting documentation for a period of no less than seven (7) years from the later of the date of acceptance of the final payment or until all audit findings have been resolved. If any litigation, claim, negotiation, audit or other action involving the records has been started before the expiration of the retention period, the records shall be retained until completion of the action and resolution of all issues which arise from it, or until the end of the seven (7) years, whichever is later, and until any outstanding litigation, audit, or claim has been fully resolved.

ARTICLE 14: CHANGES AND AMENDMENTS

- A. Any alterations, additions, or deletions to the terms of this Agreement, which are required by changes in federal or state law or by regulations, are automatically incorporated without written amendment hereto, and shall become effective on the date designated by such law or by regulation.
- B. To ensure the legal and effective performance of this Agreement, both parties agree that any amendment that affects the performance under this Agreement must be mutually agreed upon and that all such amendments must be in writing. After a period of no less than 30 days subsequent to written notice, unless sooner implementation is required by law, such amendments shall have the effect of qualifying the terms of this Agreement and shall be binding upon the parties as if written herein.

ARTICLE 15: TERMINATION PROCEDURES

The Contractor acknowledges that this Agreement may be terminated for Convenience or Default.

A. Convenience

H-GAC may terminate this Agreement at any time, in whole or in part, with or without cause, whenever H-GAC determines that for any reason such termination is in the best interest of H-GAC, by providing written notice by certified mail to the Contractor. Upon receipt of notice of termination, all services hereunder of the Contractor and its employees and subcontractors shall cease to the extent specified in the notice of termination.

The Contractor may cancel or terminate this Agreement upon submission of thirty (30) days written notice, presented to H-GAC via certified mail. The Contractor may not give notice of cancellation after it has received notice of default from H-GAC.

B. Default

H-GAC may, by written notice of default to the Contractor, terminate the whole or any part of the Agreement, in any one of the following circumstances:

- (1) If the Contractor fails to perform the services herein specified within the time specified herein or any extension thereof; or
- (2) If the Contractor fails to perform any of the other provisions of this Agreement for any reason whatsoever, or so fails to make progress or otherwise violates the Agreements that completion of services herein specified within the Agreement term is significantly endangered, and in either of these two instances does not cure such failure within a period often (10) days (or such longer period of time as may be authorized by H-GAC in writing) after receiving written notice by certified mail of default from H-GAC.

ARTICLE 16: SEVERABILITY

H-GAC and Contractor agree that should any provision of this Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Agreement, which shall continue in full force and effect.

ARTICLE 17: FORCE MAJEURE

To the extent that either party to this Agreement shall be wholly or partially prevented from the performance of any obligation or duty placed on such party by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident, order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of force majeure shall rest solely with H-GAC.

ARTICLE 18: CONFLICT OF INTEREST

No officer, member or employee of the Contractor or subcontractor, no member of the governing body of the Contractor, and no other public officials of the Contractor who exercise any functions or responsibilities in the review or Contractor approval of this Agreement, shall participate in any decision relating to this Agreement which affects his or her personal interest, or shall have any personal or pecuniary interest, direct or indirect, in this Agreement.

ARTICLE 19: FEDERAL COMPLIANCE

Contractor agrees to comply with all federal statutes relating to nondiscrimination, labor standards, and environmental compliance. Additionally, for work to be performed under the Agreement or subcontract thereof, including procurement of materials or leases of equipment, Contractor shall notify each potential subcontractor or supplier of the Contractor's federal compliance obligations. These may include, but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) the Fair Labor Standards Act of 1938 (29 USC 676 et. seq.), (d) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of handicaps and the Americans with Disabilities Act of 1990; (e) the Age Discrimination in Employment Act of 1967 (29 USC 621 et. seq.) and the Age Discrimination Act of 1974, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (f) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (g) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to the nondiscrimination on the basis of alcohol abuse or alcoholism; (h) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (i) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (j) any other nondiscrimination provisions in any specific statute(s)

applicable to any Federal funding for this Agreement; (k) the requirements of any other nondiscrimination statute(s) which may apply to this Agreement; (l) applicable provisions of the Clean Air Act (42 U.S.C. §7401 et seq.), the Federal Water Pollution Control Act, as amended (33 U.S.C. §1251 et seq.), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and the Environmental Protection Agency regulations at 40 CFR Part 15; (m) applicable provisions of the Davis- Bacon Act (40 U.S.C. 276a - 276a-7), the Copeland Act (40 U.S.C. 276c), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-332), as set forth in Department of Labor Regulations at 20 CFR 5.5a; (n) the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

ARTICLE 20: CRIMINAL PROVISIONS AND SANCTIONS

The Contractor agrees to perform the Agreement in conformance with safeguards against fraud and abuse as set forth by the H-GAC, the State of Texas, and the acts and regulations of any related state or federal agency. The Contractor agrees to promptly notify H-GAC of any actual or suspected fraud, abuse, or other criminal activity through the filing of a written report within twenty-four (24) hours of knowledge thereof. Contractor shall notify H-GAC of any accident or incident requiring medical attention arising from its activities under this Agreement within twenty-four (24) hours of such occurrence. Theft or willful damage to property on loan to the Contractor from H-GAC, if any, shall be reported to local law enforcement agencies and H-GAC within two (2) hours of discovery of any such act.

The Contractor further agrees to cooperate fully with H-GAC, local law enforcement agencies, the State of Texas, the Federal Bureau of Investigation and any other duly authorized investigative unit, in carrying out a full investigation of all such incidents.

The Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against the Contractor pertaining to this Agreement or which would adversely affect the Contractor's ability to perform services under this Agreement.

ARTICLE 21: INDEMNIFICATION AND RECOVERY

H-GAC's liability under this Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to its order processing charge. In no event will H-GAC be liable for any loss of use, loss of time, inconvenience, commercial loss, lost profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor agrees, to the extent permitted by law, to defend and hold harmless H-GAC, its board members, officers, agents, officials, employees and indemnities from any and all claims, costs, expenses (including reasonable attorney fees), actions, causes of action, judgements, and liens arising as a result of Contractor's negligent act or omission under this Agreement. Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against Contractor relating to this Agreement.

ARTICLE 22: LIMITATION OF CONTRACTOR'S LIABILITY

Except as specified in any separate writing between the Contractor and an END USER, Contractor's total liability under this Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, but excluding its obligation to indemnify H-GAC, is limited to the price of the particular products/services sold hereunder, and Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. In no event will Contractor be liable for any loss of use, loss of time, inconvenience, commercial loss, loss of profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor understands and agrees that it shall be liable to repay and shall repay upon demand to

END USER any amounts determined by H-GAC, its independent auditors, or any agency of State or Federal government to have been paid in violation of the terms of this Agreement.

ARTICLE 23: TITLES NOT RESTRICTIVE

The titles assigned to the various Articles of this Agreement are for convenience only. Titles shall not be considered restrictive of the subject matter of any Article, or part of this Agreement.

ARTICLE 24: JOINT WORK PRODUCT

This Agreement is the joint work product of H-GAC and the Contractor. This Agreement has been negotiated by H-GAC and the Contractor and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against any party.

ARTICLE 25: DISPUTES

All disputes concerning questions of fact or of law arising under this Agreement, which are not addressed within the Whole Agreement as defined pursuant to Article 4 hereof, shall be decided by the Executive Director of H-GAC or his designee, who shall reduce his decision to writing and provide notice thereof to the Contractor. The decision of the Executive Director or his designee shall be final and conclusive unless, within thirty (30) days from the date of receipt of such notice, the Contractor requests a rehearing from the Executive Director of H-GAC. In connection with any rehearing under this Article, the Contractor shall be afforded an opportunity to be heard and offer evidence in support of its position. The decision of the Executive Director after any such rehearing shall be final and conclusive. The Contractor may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a court of competent jurisdiction. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Agreement and in accordance with H-GAC's final decision.

ARTICLE 26: CHOICE OF LAW: VENUE

This Agreement shall be governed by the laws of the State of Texas. Venue and jurisdiction of any suit or cause of action arising under or in connection with the Agreement shall lie exclusively in Harris County, Texas. Disputes between END USER and Contractor are to be resolved in accordance with the law and venue rules of the state of purchase. Contractor shall immediately notify H-GAC of such disputes.

ARTICLE 27: ORDER OF PRIORITY

In the case of any conflict between or within this Agreement, the following order of priority shall be utilized: 1) General Provisions, 2) Special Provisions, 3) Scope of Work, and, 4) Other Attachments.

SIGNATURES:

H-GAC and the Contractor have read, agreed, and executed the whole Agreement as of the date first written above, as accepted by:

Signature

Name

Title

Date

H-GAC

Signature

Name Chuck Wemple

Title Executive Director

Date

SPECIAL PROVISIONS

Incorporated by attachment, as part of the whole agreement, H-GAC and the Contractor do, hereby agree to the Special Provisions as follows:

ARTICLE 1: BIDS/PROPOSALS INCORPORATED

In addition to the whole Agreement, the following documents listed in order of priority are incorporated into the Agreement by reference: Bid/Proposal Specifications and Contractor's Response to the Bid/Proposal.

ARTICLE 2: END USER AGREEMENTS ("EUA")

H-GAC acknowledges that the **END USER** may choose to enter into an End User Agreement ("EUA") with the **Contractor** through this Agreement, and that the term of the EUA may exceed the term of the current **H-GAC** Agreement. **H-GAC's** acknowledgement is not an endorsement or approval of the End User Agreement's terms and conditions. **Contractor** agrees not to offer, agree to or accept from the **END USER**, any terms or conditions that conflict with those in **Contractor's** Agreement with **H-GAC**. **Contractor** affirms that termination of its Agreement with H-GAC for any reason shall not result in the termination of any underlying EUA, which shall in each instance, continue pursuant to the EUA's stated terms and duration. Pursuant to the terms of this Agreement, termination of this Agreement will disallow the **Contractor** from entering into any new EUA with **END USERS**. Applicable **H-GAC** order processing charges will be due and payable to **H-GAC** on any EUAs, surviving termination of this Agreement between **H-GAC** and **Contractor**.

ARTICLE 3: MOST FAVORED CUSTOMER CLAUSE

Contractor shall provide its most favorable pricing and terms to H-GAC. If at any time during this Agreement, **Contractor** develops a regularly followed standard procedure of entering into agreements with other governmental customers within the State of Texas, and offers the same or substantially the same products/services offered to **H-GAC** on a basis that provides prices, warranties, benefits, and or terms more favorable than those provided to **H-GAC**, **Contractor** shall notify **H-GAC** within ten (10) business days thereafter, and this Agreement shall be deemed to be automatically retroactively amended, to the effective date of **Contractor's** most favorable past agreement with another entity. **Contractor** shall provide the same prices, warranties, benefits, or terms to **H-GAC** and its **END USER** as provided in its most favorable past agreement. **H-GAC** shall have the right and option at any time to decline to accept any such change, in which case the amendment shall be deemed null and void. If **Contractor** claims that a more favorable price, warranty, benefit, or term that was charged or offered to another entity during the term of this Agreement, does not constitute more favorable treatment, than **Contractor** shall, within ten (10) business days, notify **H-GAC** in writing, setting forth the detailed reasons **Contractor** believes the aforesaid offer is not in fact most favored treatment. **H-GAC**, after due consideration of **Contractor's** written explanation, may decline to accept such explanation and thereupon this Agreement between **H-GAC** and **Contractor** shall be automatically amended, effective retroactively, to the effective date of the most favored agreement, to provide the same prices, warranties,

benefits, or terms to H-GAC and the END USER.

EXCEPTION: *This clause shall not be applicable to prices and price adjustments offered by a bidder, Proposer or contractor, which are not within bidder's/proposer's control [example; a manufacturer's bid concession], or to any prices offered to the Federal Government and its agencies.*

ARTICLE 4: PARTY LIABILITY

Contractor's total liability under this Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to the price of the particular products/services sold hereunder. Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. Contractor accepts liability to repay, and shall repay upon demand to END USER, any amounts determined by H-GAC, its independent auditors, or any state or federal agency, to have been paid in violation of the terms of this Agreement.

ARTICLE 5: GOVERNING LAW & VENUE

Contractor and H-GAC agree that Contractor will make every reasonable effort to resolve disputes the **END USER** in accord with the law and venue rules of the state of purchase. **Contractor** shall immediately notify **H-GAC** of such disputes.

ARTICLE 6: SALES AND ORDER PROCESSING CHARGE

Contractor shall sell its products to **END USERS** based on the pricing and terms of this Agreement. **H-GAC** will invoice **Contractor** for the applicable order processing charge when H-GAC receives notification of an END USER order. **Contractor shall remit to H-GAC** the full amount of the applicable order processing charge, after delivery of any product or service and subsequent END USER acceptance. Payment of the Order Processing Charge shall be remitted from Contractor to H-GAC, within thirty (30) calendar days or ten (10) business days after receipt of an END USER's payment, whichever comes first, notwithstanding Contractor's receipt of invoice. For sales made by **Contractor** based on this Agreement, including sales to entities without Interlocal Agreements, **Contractor** shall pay the applicable order processing charges to **H-GAC**. Further, **Contractor** agrees to encourage entities who are not members of H-GAC's Cooperative Purchasing Program to execute an **H-GAC** Interlocal Agreement. **H-GAC** reserves the right to take appropriate actions including, but not limited to, Agreement termination if **Contractor** fails to promptly remit the appropriate order processing charge to H-GAC. In no event shall **H-GAC** have any liability to **Contractor** for any goods or services an **END USER** procures from **Contractor**. At all times, **Contractor** shall remain liable to pay to **H-GAC** any order processing charges on any portion of the Agreement actually performed, and for which compensation was received by **Contractor**.

ARTICLE 7: LIQUIDATED DAMAGES

Contractor and H-GAC agree that Contractor shall cooperate with the END USER at the time an END USER purchase order is placed, to determine terms for any liquidated damages.

ARTICLE 8: INSURANCE

Unless otherwise stipulated in Section B of the Bid/Proposal Specifications, **Contractor** must have the following insurance and coverage minimums:

- a. **General liability** insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General

Aggregate limit of at least two times the Single Occurrence limit.

Product liability insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit for all Products except Automotive Fire Apparatus. For Automotive Fire Apparatus, see Section B of the Bid/Proposal Specifications.

Property Damage or Destruction insurance is required for coverage of **End User** owned equipment while in **Contractor's** possession, custody or control. The minimum Single Occurrence limit is \$500,000.00 and the General Aggregate limit must be at least two times the Single Occurrence limit. This insurance may be carried in several ways, e.g. under an Inland Marine policy, as part of Automobile coverage, or under a Garage Keepers policy. In any event, this coverage must be specifically and clearly listed on insurance certificate(s) submitted to **H-GAC**.

- b. Insurance coverage shall be in effect for the length of any contract made pursuant to the Bid/Proposal, and for any extensions thereof, plus the number of days/months required to *deliver* any outstanding order after the close of the contract period.
- c. Original Insurance Certificates must be furnished to **H-GAC** on request, showing **Contractor** as the insured and showing coverage and limits for the insurances listed above.
- d. If any Product(s) or Service(s) will be provided by parties other than **Contractor**, all such parties are required to carry the minimum insurance coverages specified herein, and if requested by **H-GAC**, a separate insurance certificate must be submitted for each such party.
- e. **H-GAC** reserves the right to contact insurance underwriters to confirm policy and certificate issuance and document accuracy.

ARTICLE 9: PERFORMANCE AND PAYMENT BONDS FOR INDIVIDUAL ORDERS

H-GAC's contractual requirements DO NOT include a Performance & Payment Bond (PPB); therefore, Contractor shall offer pricing that reflects this cost savings. **Contractor** shall remain prepared to offer a PPB to cover any order if so requested by the **END USER**. **Contractor** shall quote a price to **END USER** for provision of any requested PPB, and agrees to furnish the PPB within ten business (10) days of receipt of **END USER's** purchase order.

ARTICLE 10: CHANGE OF STATUS

Contractor shall immediately notify **H-GAC**, in writing, of **ANY** change in ownership, control, dealership/franchisee status, Motor Vehicle license status, or name. Contractor shall offer written guidance to advise H-GAC if this Agreement shall be affected in any way by such change. **H-GAC** shall have the right to determine whether or not such change is acceptable, and to determine what action shall be warranted, up to and including cancellation of Agreement.

ARTICLE 11: TEXAS MOTOR VEHICLE BOARD LICENSING

All that deal in motor vehicles shall maintain current licenses that are required by the Texas Motor Vehicle Commission Code. If at any time during this Agreement term, any required **Contractor** license is denied, revoked, or not renewed, **Contractor** shall be in default of this Agreement, unless the Texas Motor Vehicle

Board issues a stay or waiver. Contractor shall promptly provide copies of all current applicable Texas Motor Vehicle Board documentation to **H-GAC** upon request.

Form **W-9**
(Rev. December 2014)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

**Give Form to the
requester. Do not
send to the IRS.**

Print or type See Specific Instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only one of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
7 List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number									
				-			-		
or									
Employer identification number									
				-					

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

CERTIFICATE OF INTERESTED PARTIES – FORM 1295

Certificate of Interested Parties (Form 1295 – must be filled out electronically with the Texas Ethics Commission’s online filing application, printed out, signed, notarized, and attached to proposal in the response - Section TAB A)

H-GAC is required to comply with House Bill 1295, which amended the Texas Government Code by adding Section 2252.908, Disclosure of Interested Parties. Section 2252.908 prohibits H-GAC from entering into a contract resulting from this RFP with a business entity unless the business entity submits a Disclosure of Interested Parties (Form 1295) to H-GAC at the time business entity submits the signed contract. The Texas Ethics Commission has adopted rules requiring the business entity to file Form 1295 electronically with the Texas Ethics Commission. The following **definitions** apply:

- (1) ***“Business Entity”*** means an entity recognized by law through which business is conducted, including a sole proprietorship, partnership, or corporation. TEX. GOV’T CODE § 2252.908(1).
- (2) ***“Interested Party”*** means a person:
 - a) who has a controlling interest in a business entity with whom H-GAC contracts; or
 - b) who actively participates in facilitating the contract or negotiating the terms of the contract, including a broker, intermediary, adviser, or attorney for the business entity. TEX. GOV’T CODE § 2252.908(3).
- (3) ***“Controlling interest”*** means:
 - a) an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock, or otherwise that exceeds 10 percent;
 - b) membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or
 - c) service as an officer of a business entity that has four or fewer officers, or service as one of the four officers most highly compensated by a business entity that has more than four officers. *Subsection (c) does not apply to an officer of a publicly held business entity or its wholly owned subsidiaries.* TEX. ETHICS COMM. RULE 46.3(c).
- (4) ***“Intermediary”*** means a person who actively participates in the facilitation of the contract or negotiating the contract, including a broker, adviser, attorney, or representative of or agent for the business entity who:
 - a) receives compensation from the business entity for the person’s participation;
 - b) communicates directly with the governmental entity or state agency on behalf of the business entity regarding the contract; and
 - c) is not an employee of the business entity. TEX. ETHICS COMM. RULE 46.3(e).

As a “business entity,” all vendors must:

- (1) **complete Form 1295 electronically** with the Texas Ethics Commission using the online filing application, which can be found at https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm
 - **All vendors must complete Form 1295, even if no interested parties exist**
 - In Section 2, insert “Houston-Galveston Area Council”
 - In Section 3, insert the H-GAC RFP # for this proposal
- (2) **print a copy of the completed form** (make sure that it has a computer-generated certification number in the “Office Use Only” box)
- (3) have an authorized agent of the business entity **sign the form**
- (4) **notarize the form**
- (5) **submit** the completed, signed, notarized Form 1295, with the certification of filing, by **attaching the form to your proposal in Section TAB A**

H-GAC must acknowledge the receipt of the filed Form 1295 by notifying the Texas Ethics Commission of the receipt of the filed Form 1295 no later than the 30th day after receipt by H-GAC. After H-GAC acknowledges the Form 1295, the Texas Ethics Commission will post the completed Form 1295 to its website with seven business days after receiving notice from H-GAC.

CERTIFICATE OF INTERESTED PARTIES**FORM 1295**

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

4 Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

 Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day
 of _____, 20 _____, to certify which, witness my hand and seal of office.

 Signature of officer administering oath

 Printed name of officer administering oath

 Title of officer administering oath

ADD ADDITIONAL PAGES AS NECESSARY

CONFLICT OF INTEREST QUESTIONNAIRE**FORM CIQ****For vendor doing business with local governmental entity****This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

Signature of vendor doing business with the governmental entity

Date

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

- (2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

- (i) a contract between the local governmental entity and vendor has been executed;
- or

- (ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

- (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

- (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

- (3) has a family relationship with a local government officer of that local governmental entity.

- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

- (1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

- (2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

House Bill 89 Verification Form

Prohibition on Contracts with Companies Boycotting Israel

The 85th Texas Legislature approved new legislation, effective Sept. 1, 2017, which amends Texas Local Government Code Section 1. Subtitle F, Title 10, Government Code by adding Chapter 2270 which states that a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it:

- 1) does not boycott Israel; and
- 2) will not boycott Israel during the term of the contract

Pursuant to Section 2270.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and
2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.

I, (authorized official) _____, do hereby depose and verify the truthfulness and accuracy of the contents of the statements submitted on this certification under the provisions of Subtitle F, Title 10, Government Code Chapter 2270 and that the company named below:

- 1) does not boycott Israel currently; and
- 2) will not boycott Israel during the term of the contract; and
- 3) is not currently listed on the State of Texas Comptroller's Companies that Boycott Israel List located at <https://comptroller.texas.gov/purchasing/publications/divestment.php>

Company Name

Signature of Authorized Official

Title of Authorized Official

Date

CONTRACTOR CONTACT INFORMATION

ATTENTION Houston-Galveston Area Council (H-GAC) Contractor: The following information is needed to communicate with your company concerning contract matters which may arise. To expedite the process, we ask that you provide the information requested below. During the term of this contract, notify H-GAC in writing of any changes to this information by emailing updates to: cpcontractfax@h-gac.com

Section I

CONTRACTOR: _____ Purchase Order Address: _____	CONTRACT #: _____ Invoice Address: _____
Contact Name: _____ Address: _____	Contact Name: _____ Address: _____
City _____ State _____ Zip Code _____	City _____ State _____ Zip Code _____
Telephone No.: _____ Fax No.# _____ Email Address: _____	Telephone No.# _____ Fax No.# _____ Email Address: _____

Section II

CONTRACT INFORMATION:

Indicate the person (s) authorized to sign contracts, requests for contract price increases, or other contract-related documents. A copy of your corporate resolution may be acceptable for Section II.

Printed Name of Signatory: _____ Corporate Title: _____ Tel. No.: _____ Fax No.: _____ Email Address: _____	Printed Name of Signatory: _____ Corporate Title: _____ Tel. No.: _____ Fax No.: _____ Email Address: _____
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Section III

SALES CONTACT INFORMATION

Person who End Users will contact for product information and pricing quotes

Contact Name: _____ Address: _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> Street City State Zip </div> Telephone No.: _____ Mobile No.: (optional) _____ Email Address: _____	Title: _____ Fax No.: _____
--	------------------------------------

☐ **Pre- Bid/Proposal Conference** ----- OR ----- ☒ **Bid/RFP Opening**

Invitation No. & Description:

Date:

FS12-19 Fire Services Apparatus (All Types)

07/24/2019

[illegible]

Please remember to leave us your business card.

FS12-19 Bid Tabulation						
Product Codes	Manufacturer	Description	Base Price		Awardees	
				Alexis Fire Equipment Company; SMJ Equipment LLC;	Blanchat Mfg. Inc.; Chastang Ford (BB01,BB03, BB05, BB07-BB08 ,BB10, BD01, BD03); Chastang CDJR (BB02, BB04, BB06,BB09)	SNF, Inc. dba BFX Fire Apparatus; Brasada Ford dba Northside Ford
FS19AA01	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab Single axle, 75' rear mount aerial, stainless steel body, 300 gallons, side stack hose bed, single stage 1500 gpm pump mid mounted	\$788,668.00	Awarded		
FS19AA02	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab Tandem axle, 110' rear mount aerial with stainless steel body, 300 gallons of water, side stack hose bed, single stage 1500 gpm pump mid mounted	\$1,006,100.00	Awarded		
FS19AA03	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab Tandem axle, rear mount 100' platform, stainless steel body, 300 gallons of water, hose bed, single stage 1500 gpm pump mid mounted	\$1,044,734.00	Awarded		
FS19AA04	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab Tandem axle, mid-mount 100' platform, stainless steel body, 300 gallons of water, hose bed, single stage 1500 gpm pump mid mounted	\$1,229,307.00	Awarded		
FS19AB01	Alexis	Ford F550 4x4, aluminum flatbed body, portable pump, 300 gallons of water	\$127,956.00	Awarded		
FS19AB02	Alexis	Ford F550, 4x4 2-door, stainless steel Body, Rescue Unit with Skid	\$160,988.00	Awarded		

FS19AB03	Alexis	Ford F600 4x4, aluminum flatbed body, portable pump, 300 gallons of water	\$132,956.00	Awarded		
FS19AB04	Alexis	Ford F600, 4x4 2-door, stainless steel Body, Rescue Unit with Skid	\$165,988.00	Awarded		
FS19AC01	Alexis	Freightliner, 2-Door, Commercial Cab, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$296,309.00	Awarded		
FS19AC02	Alexis	International 2-Door, Commercial Cab, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$300,861.00	Awarded		
FS19AC03	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$431,432.00	Awarded		
FS19AC04	Alexis	Ford F-550 4x4 Mini Pumper 1250 gpm, 300 tank	\$206,843.00	Awarded		
FS19AC05	Alexis	Ford F-600 4x4 Mini Pumper 1250 gpm, 300 tank	\$211,843.00	Awarded		
FS19AD01	Alexis	Ford F550, 4x4 2-door, stainless steel Body, Non Walk-in Rescue Unit	\$142,002.00	Awarded		

FS19AD02	Alexis	Ford F550, 4x4 2-door, stainless steel Body, Walk-in Rescue Unit	\$215,879.00	Awarded		
FS19AD03	Alexis	Ford F600, 4x4 2-door, stainless steel Body, Non Walk-in Rescue Unit	\$147,002.00	Awarded		
FS19AD04	Alexis	Ford F600, 4x4 2-door, stainless steel Body, Walk-in Rescue Unit	\$220,879.00	Awarded		
FS19AD05	Alexis	Ford F750, 2-door, stainless steel Body, Non Walk-in Rescue Unit	\$153,053.00	Awarded		
FS19AD06	Alexis	Ford F750 2-door, stainless steel Body, Walk-in Rescue Unit	\$226,322.00	Awarded		
FS19AD07	Alexis	Freightliner, 2-door, stainless steel body, Heavy Duty Non Walk-in Rescue Unit	\$240,760.00	Awarded		
FS19AD08	Alexis	Freightliner, 2-door, Stainless Steel Body, Heavy Duty Walk-In Rescue Unit	\$256,599.00	Awarded		
FS19AD09	Alexis	International, 2-door, stainless steel body Heavy Duty Non Walk-in Rescue Unit	\$245,312.00	Awarded		

FS19AD10	Alexis	International, 2-door, Stainless Steel Body, Heavy Duty Walk-In Rescue Unit	\$261,151.00	Awarded		
FS19AD11	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab, Stainless Steel Body, Heavy Duty Non Walk-in Rescue Vehicle	\$373,650.00	Awarded		
FS19AD12	Alexis	Spartan, 4-Door Custom Full Tilt Aluminum Cab, Stainless Steel Body, Heavy Duty Walk-in Rescue Vehicle	\$390,411.00	Awarded		
FS19AE01	Alexis	Freightliner, 2-Door Commercial Cab, Pumper/Tanker, Stainless Steel Body, 2000 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	\$294,957.00	Awarded		
FS19AE02	Alexis	Freightliner, 2-Door, Commercial Cab, Pumper/Tanker, Stainless Steel Body, 3000 Gallon Tank, Tandem Axle, 1250 GPM Pump, Mid-Mounted	\$307,807.00	Awarded		
FS19AE03	Alexis	International 2-Door Commercial Cab, Pumper/Tanker, Stainless Steel Body, 2000 Gallon Tank, Single Axle, 1250 GPM Pump, Mid-Mounted	\$299,509.00	Awarded		

WORLD



Associated Press

Cyclone Fani’s storm surge, which pushed waves deep inland, swamped villages in India and Pakistan. It might take months for people to rebuild their homes.

Plans for evacuation spared lives in India

By Hari Kumar, Jeffrey Gettleman and Sameer Yasir
NEW YORK TIMES

PURI, India – The road to Puri was lined with large downed trees.

Electricity poles made of cement and steel lay scattered on the ground, along with roofing tiles, pieces of billboard and crumpled iron sheeting. The walls of many buildings had collapsed, leaving countless people homeless.

But Saturday as residents of this seaside town emerged from shelters to assess the property damage unleashed by Cyclone Fani, there was a sense of relief. The storm, one of the biggest in years, had slammed into India’s eastern coast Friday, roaring through towns with winds of 120 mph.

Yet so many precious lives had been spared. There were fewer than 20 reported fatalities com-

pared with thousands killed 20 years ago, when a similar cyclone swept over the same area.

That is because authorities here had whiked more than 1 million people to safety, executing a meticulous evacuation plan they have been perfecting since that disastrous storm in 1999.

As the skies cleared Saturday, there was a widespread feeling this could have been much deadlier.

“It seems the worst is over,” said Bishnupada Sethi, the state’s special relief commissioner.

Over the past few days, as the cyclone barreled up the Bay of Bengal toward India, the Odisha authorities helped move people to higher ground and into cyclone shelters. In neighboring Bangladesh, which was being lashed by the weakened storm Saturday, another million people were similarly taken out of harm’s way.

Indian officials transmit-

ted millions of text messages, broadcast warnings over public address systems and sent fleets of buses to scoop up vulnerable people, bringing them to hundreds of sturdy cyclone shelters that had been stocked with water and food.

By the time Fani hit Friday morning, knocking down trees and obliterating shack houses, just about everybody was safe. Authorities said the relatively few fatalities were people who had not heeded their warnings.

Many people remained in the shelters, fearful of floods and other hazards such as downed electrical wires.

The cyclone’s storm surge, which pushed waves deep inland, swamped villages. Odisha is one of India’s poorest states, home to around 46 million people. Mohanty predicted it would take months for people to rebuild their homes.



Thailand’s Royal Public Relation Department

After the mourning comes his crowning

Royal bearers carry King Maha Vajiralongkorn of Thailand at a Buddhist temple in Bangkok on Saturday, the first day of formal coronation ceremonies. He took the throne in 2016 after the death of his father, King Bhumibol Adulyadej.

Weapons test puts Trump’s North Korea efforts at risk

By Choe Sang-Hun and Motoko Rich
NEW YORK TIMES

JEJU, South Korea – When North Korea launched a volley of projectiles off its east coast on Saturday, it sought to escalate the pressure on President Donald Trump to return to the negotiating table with a compromise on easing sanctions, analysts said, by signaling that it could scuttle his biggest diplomatic achievement with the North.

Saturday’s weapons tests were the most serious by the North since the country launched its Hwasong-15 intercontinental ballistic missiles in 2017. Although North Korea has not gone so far as to renege on its moratorium on nuclear and ICBM tests, which its leader, Kim Jong Un, announced last year, the launch indicated that Kim was toying with the idea of lifting the moratorium, analysts said.

Trump has repeatedly described the moratorium as

his biggest achievement on North Korea. The leaders have met twice: first in Singapore in June and again in Hanoi in February.

U.S. and South Korean authorities were analyzing flight data from the tests to identify what types of weapons were launched, the office of President Moon Jae-in of South Korea said. South Korean officials said the “short-range” projectiles flew only 42 to 124 miles off the North’s east coast, ruling out the possibility that the country had resumed tests of intermediate- or intercontinental-range ballistic missiles.

South Korean officials said they were also looking into the possibility that the projectiles were short-range Scud missiles or rockets from multiple-launch tubes – or both.

The potential implications of any short-range missile tests could be far-reaching. The short-range weapons were developed mainly to target South Korea and U.S. military bases there.

North Korea also tested weapons in November last year and again last month. But those weapons were largely considered tactical types with very small ranges.

By gradually increasing the ranges of weapons tests in recent weeks, Kim appeared to be carefully calibrating his options with Trump. Firing short-range weapons may be an attempt to force a breakthrough in the stalled negotiations with Washington while not provoking Trump too far, analysts said.

The Hanoi meeting in February abruptly ended when Trump rejected Kim’s suggestion that Washington lift the most painful of sanctions imposed against his country since 2016 in return for a partial dismantlement of its nuclear weapons program.

After returning home without badly needed relief from sanctions, Kim said he would give Trump until the end of the year to offer a new proposal.



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BIDS & PROPOSALS	BIDS & PROPOSALS
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The Texas Department of Criminal Justice (TDCJ) invites bids to "Install Fire Alarm System" at the Ferguson Unit located in Midway, Texas. A Pre-Bid Conference will be held at 11:00 A.M. on May 8, 2019 at the project site. Please contact the Contract Specialist Christina Bodin-Turner, CTCD at (936) 437-7055 or Christina.Bodin-Turner@tdcj.texas.gov.

Bid Documents can be purchased at a cost of \$60.00 (Sixty Dollars, non-refundable) per set, inclusive of mailing/delivery costs, or they may be viewed at various plan rooms. Payment checks for documents should be made payable to Parkhill, Smith & Cooper, Inc.:

Parkhill, Smith & Cooper, Inc.
Attn: Isaac Aguilar
4222 85th Street
Lubbock, Texas 79423
Phone: (806) 473-2200
Email: I.Aguilar@team-psc.com

Request for Proposals (RFP) #19-03 Commercial Real Estate Services The Harris County Housing Authority ("HCHA") is requesting proposal submissions from interested and qualified State of Texas licensed Commercial Real Estate Brokers and their designated agent(s) to provide commercial real estate brokerage services including but not limited to the purchase and/or sale of real property located in Harris County, Texas. **Proposals Due:** May 20, 2019 at 2:00 P.M. **Proposal Submission - Sealed submissions shall be submitted to:** Harris County Housing Authority, 8933 Interchange Drive, Houston, TX 77054. Attn: Affordable Housing Department. RFP #19-03 will be posted on and can be downloaded from HCHA's website www.hchatexas.org on April 30, 2019.

Gamma Construction invites you to propose on the Alvin Independent School District New High School Campus # 4. The proposals are due on Wednesday, May 22, 2019 at 2:00 p.m.. Please have your proposal emailed (phaynes@gammaconst.com), hand delivered or called in (713-963-0086) by 2:00 p.m. to Gamma Construction attention Pam Haynes. There will be a pre-proposal meeting Thursday, May 2, 2019 at 1:00 at Alvin ISD's West Transportation Center, 4411 County Road 64, Iowa Colony, TX 77583. This is not mandatory but highly encouraged. All plans will be available Tuesday, April 30 at Houston AGC, ABC, Dodge, ISQFT and Gamma's FTP site

INVITATION FOR BID - Project No. CFM019-ENG (C)-14; Sealed bids must be received by the Texas Military Department not later than 2:00 P.M. Central Time, Tuesday, June 18, 2019 at Camp Mabry, Building 37, Austin, Texas 78703 for the La Marque Readiness Center Indoor Firing Range Lead Abatement Project, located at 3006 Gulf Freeway, La Marque, TX 77568. A Pre-Bid site visit will be held at 1:00 P.M. Tuesday, May 21, 2019, at La Marque Readiness Center, 3006 Gulf Freeway, La Marque, TX 77568. Required bid documents are available at: <http://esbd.cpa.state.tx.us>

INVITATION FOR BID - Project No. CFM019-ENG (C)-13; Sealed bids must be received by the Texas Military Department not later than 3:00 P.M. Central Time, Tuesday, June 18, 2019 at Camp Mabry, Building 37, Austin, Texas 78703 for the Rosenberg Readiness Center Indoor Firing Range Lead Abatement Project, located at 2020 Wallace Wehring Road, Rosenberg, TX 77471. A Pre-Bid site visit will be held at 9:00 A.M. Wednesday, May 22, 2019, at the Rosenberg Readiness Center, 2020 Wallace Wehring Road, Rosenberg, TX 77471. Required bid documents are available at: <http://esbd.cpa.state.tx.us>

INVITATION FOR BID - Project No. CFM019-ENG (C)-12; Sealed bids must be received by the Texas Military Department not later than 1:00 P.M. Central Time, Tuesday, June 18, 2019 at Camp Mabry, Building 37, Austin, Texas 78703 for the Ellington Field Readiness Center Indoor Firing Range Lead Abatement Project, located at 10901 Brantley Avenue, Building 1182, Houston, TX 77034. A Pre-Bid site visit will be held at 9:00 A.M. Tuesday, May 21, 2019 at the Ellington Field Readiness Center, 10901 Brantley Avenue, Building 1182, Houston, TX 77034. Required bid documents are available at: <http://esbd.cpa.state.tx.us>

Sealed Bid Solicitation #FS12-19 Houston-Galveston Area Council Cooperative Purchasing Program Fire Service Apparatus (All Types) Pre-Bid Conference: 6/5/19 @ 9am Response Deadline: 7/24/19 @ 1pm Public Opening: 7/24/19 @ 2pm 3555 Timmons Lane, Houston, TX. Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-993-2466 or www.hgacbuy.org for info.

LEGAL NOTICES	LEGAL NOTICES
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PUBLIC NOTICE REQUEST FOR PROPOSALS FOR TEXAS CITY PARK & RIDE - ADMINISTRATION FACILITY CONSTRUCTION FOR THE GULF COAST CENTER Public Notice is hereby given that the Gulf Coast Center of Texas City, Texas, is soliciting responses for construction of a Park & Ride facility including parking lot, terminal facility, administration building and a Texas City Emergency Operations Center. The Gulf Coast Center will hold a non-mandatory Pre-Proposal Meeting on Thursday, May 16, 2019, 1:00 PM CDT, at the City of Texas City, City Hall Annex, 928 5th Avenue North, Texas City, TX 77590. This RFP is available in electronic form at the following link: <https://gulfcoastcenter.org/news/connect-transit-news/>. Interested vendors shall submit the proposals to the Gulf Coast Center no later than 10:00 AM CDT on Monday, June 3, 2019. The proposals may be delivered by Courier, Express Delivery, Certified or Registered U.S. Mail, or by hand to: Luis Diaz Director of Fixed Assets and Purchasing Gulf Coast Center 4352 E.F. Lowry Expressway Texas City, Texas 77591 Respondent bears the risk of late delivery. Si necesita información en otro idioma, póngase en contacto con Connect Transit a través del a 1-800-266-2320 o 409-945-0820 o connecttransit@gulfcoastcenter.org.

To place a legal notice e-mail

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NOTICE TO BIDDERS The Metropolitan Transit Authority of Harris County, Texas (METRO) is planning to issue the procurement documents listed in this advertisement. RFP No. 4019000071: for Banking Services. Solicitation will be available on or about 05/06/2019. IFB No. 4019000103: for Repair and Maintenance of METRO's Submersible Lift Pumps. Solicitation will be available on or about 05/07/2019. Prospective bidders/proposers can view and download these solicitations by visiting METRO's website at <https://www.ridemetroapp.org/procurement/>. If you are unable to download the documents or are having difficulty, please contact METRO Plan and Bid Room at (713) 739-4881.

LEGAL NOTICES	LEGAL NOTICES	LEGAL NOTICES
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KIPP Texas, Inc. is seeking Job Order Contract (JOC) in Austin, Dallas, Houston, and San Antonio for 1)Electrical; 2)Plumbing; 3) Site Utilities and Earthwork; 4) Mechanical; 5) Fire Alarm; and 1) Request for Qualifications for Construction Manager At Risk (CMAR) Services Two Step Process in Houston a nd Austin. JOC qualifications (electronic) to CAbdul@KIPPHouston.Org and CMAR Statement of Qualifications (3-hard copies) to Gensler, Attention: Robert Bradford, 711 Louisiana Street, Suite 300, Houston, TX 77002 are due on May 2 , 2019 on or before 11:00 AM CT. CMAR Interviews/Proposals are due on May 29 - May 30, 2019. All bid documents will be available at www.KIPP-Houston.org/CurrentBids. Late proposals will not be evaluated. KIPP reserves the right to reject any or all proposals or waive any or all irregularities.

DEADLINE TO APPLY FOR HURRICANE HARVEY GRANTS MAY 24

The Texas Historical Commission (THC) has launched its Hurricane Harvey Disaster Assistance Program to help historic resources impacted by Harvey, one of the worst weather disasters in U.S. history. The State of Texas was recently awarded more than \$12.3 million in federal grants from the National Parks Service's Hurricanes Harvey, Irma, and Maria Emergency Supplemental Historic Preservation Fund (HIM ESHPF).

Owners of historic resources in Texas damaged by the 2017 hurricane can apply for grant funding to supplement costs for projects involving recovery a nd repair of historic properties; survey and inventory of historic properties to determine National Register eligibility and degree of damage; or disaster readiness, including planning and historic preservation education.

"Preserving its historic resources has always been a top priority for Texas," said Mark Wolfe, executive director of the Texas Historical Commission. "We look forward to helping restore treasured properties and places across the state that were impacted by Harvey."

The THC is accepting grant applications now until 5 p.m., Friday, May 24. Applications will be considered at the THC's July 26 quarterly meeting in Paris, Texas.

Properties receiving grants must be listed in the National Register of Historic Places, or be eligible for listing and have a nomination accepted by the THC before final project costs are reimbursed. A cash match is not required.

The emergency grant program application guide is available on the THC's website at thc.texas.gov/harvey.

For more information, contact the THC's Architecture Division at 512-463-6094.

www.thc.texas.gov/harvey

NOTICE OF PUBLIC HEARING FOR THE EXCLUSION OF CERTAIN LANDS FROM KATY MANAGEMENT DISTRICT NO. 1

Notice is hereby given that Katy Management District No. 1 (the "District") will hold a public hearing on Wednesday, May 22, 2019, at 11:00 a.m., at the offices of the City of Katy, 901 Avenue G, Katy, Texas 77493, outside the boundaries of the District, for the following purpose:

CONDUCT HEARING ON EXCLUSION OF CERTAIN LANDS FROM KATY MANAGEMENT DISTRICT NO. 1

All interested property owners have the right to present petitions for exclusion of land or other property and offer evidence in support of the petitions and the right to contest the proposed exclusion based on either a petition or the board's own conclusion and to offer evidence in support of the contest.

BY ORDER OF THE BOARD OF DIRECTORS

/s/Donald P. Cox
President, Board of Directors

/s/Doyle Callender
Asst. Secretary, Board of Directors

SEALED PROPOSALS WILL BE RECEIVED BY PROCUREMENT SERVICES, PORT OF HOUSTON AUTHORITY EXECUTIVE OFFICE BUILDING, 111 EAST LOOP NORTH, HOUSTON, TEXAS 77029 UNTIL 11:00 A.M., ON MAY 22, 2019, FOR THE FOLLOWING: REQUEST FOR PROPOSALS FOR PROFESSIONAL SERVICES SUPPORTING THE NON-CONTAINERIZED (GENERAL) CARGO MARKET FORECAST & COMPETITIVENESS ASSESSMENT A PRELIMINARY MEETING WILL BE HELD FOR THIS PROCUREMENT AT EXECUTIVE OFFICE BUILDING 3RD FLOOR SOUTH CONFERENCE ROOM, 111 E. LOOP NORTH, HOUSTON, TEXAS 77029 ON MAY 13, 2019 AT 10:00 A.M. SO THAT PROSPECTIVE PROPOSERS MAY ASK QUESTIONS CONCERNING THE PROCUREMENT.

FIRMS INTERESTED IN SUBMITTING PROPOSALS FOR THIS PURCHASE MAY OBTAIN A COPY OF THE RFP FROM THE PORT OF HOUSTON AUTHORITY'S WEBSITE, <http://buyspeed.poha.com/bso>, WHERE VENDOR REGISTRATION AND "PROCUREMENT PACKAGE" DOWNLOAD INSTRUCTIONS ARE AVAILABLE.

The Houston Housing Authority (HHA), is soliciting sealed bids with the intent to establish a fixed price contract with the lowest responsive and responsible bidder to perform all the necessary construction-related work needed to rehabilitate the exterior of Oxford Place Apartments, in accordance with the requirements and terms and conditions specified in IFB 19-20 Exterior Repairs of Fulton Village Apartments.

Interested parties are highly encouraged (but not required), to attend a pre-bid conference scheduled for 10 A.M. CDT May 17, 2019, at Fulton Village Apartments, 3300 Eiser Street, Houston, Texas 77057.

Interested parties who wish to respond to this solicitation must submit the required documents in a sealed envelope by 4 P.M. CDT, June 5, 2019 Houston Housing Authority (HHA) Attn: Kevin M. Coleman, MS, C.P.M., Subject: IFB 19-20 Exterior Repairs of Fulton Village Apartments DO NOT OPEN 2640 Fountain View Drive Houston, Texas 77057.

IFB 19-20 can be obtained by going to the doing business with HHA section of HHA's website at www.housingforhouston.com, or by sending an e-mail to HHA's Procurement Dept. at Purchasing@housingforhouston.com with IFB 19-20 in the subject line.

A Fair and Equal Employment Opportunity Agency. For assistance: Individuals with disabilities may contact the 504/ADA Administrator at 713-260-0528, TTY 713-260-0574 or 504ADA@housingforhouston.com

The Houston Housing Authority (HHA), is soliciting sealed bids with the intent to establish a fixed price contract with the lowest responsive and responsible bidder to perform all the necessary construction-related work needed to rehabilitate the exterior of Oxford Place Apartments, in accordance with the requirements and terms and conditions specified in IFB 19-19 Exterior Repairs of Oxford Place Apartments.

Interested parties are highly encouraged (but not required), to attend a pre-bid conference scheduled for 10 A.M. CDT May 15, 2019, at Oxford Place Apartments, 605 Berry Road, Houston, Texas 77022.

Interested parties who wish to respond to this solicitation must submit the required documents in a sealed envelope by 4 P.M. CDT, June 5, 2019 Houston Housing Authority (HHA) Attn: Kevin M. Coleman, MS, C.P.M., Subject: IFB 19-19 Exterior Repairs of Oxford Place Apartments DO NOT OPEN 2640 Fountain View Drive Houston, Texas 77057.

IFB 19-19 can be obtained by going to the doing business with HHA section of HHA's website at www.housingforhouston.com, or by sending an e-mail to HHA's Procurement Dept. at Purchasing@housingforhouston.com with IFB 19-19 in the subject line.

A Fair and Equal Employment Opportunity Agency. For assistance: Individuals with disabilities may contact the 504/ADA Administrator at 713-260-0528, TTY 713-260-0574 or 504ADA@housingforhouston.com

"PUBLIC NOTIFICATION FOR FLOODWAY AND FLOODPLAIN REVISION - BIG GULCH IN THE VICINITY OF US 90"

Harris County, Texas, in accordance with the National Flood Insurance Program regulation 65.7(b)(1), hereby gives notice of intent to revise the Special Flood Hazard Area (SFHA) along a half-mile reach of BIG GULCH (F107-00-00) in the vicinity of US 90. Specifically, the Base (1% annual chance) Flood Elevation (BFE) will increase a maximum of 0.01 ft from immediately downstream of the US 90 eastbound frontage road to approximately 700 ft upstream of the US 90 westbound frontage road. This change is the result of improved mapping/modeling methods, specifically a revision to the effective hydraulic model for BIG GULCH. Maps and detailed analysis of the revisions can be reviewed at the Harris County Permit Office at 10555 Northwest Freeway, Suite 120, Houston, Texas 77092. Interested persons may call the Harris County Permit Office at (713) 274-3939 for additional information.

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States: Prices fixed on drugs

By Steve LeBlanc and Martin Crutsinger
ASSOCIATED PRESS

BOSTON — Attorneys general from more than 40 states are alleging that the nation's largest generic drug manufacturers conspired to artificially inflate and manipulate prices for more than 100 generic drugs, including treatments for diabetes, cancer and arthritis.

The lawsuit, filed in federal court in Connecticut on Friday, also names 15 senior executives responsible for sales, marketing and pricing.

Connecticut Attorney General William Tong, a Democrat, said investigators obtained evidence implicating 20 companies. "We have hard evidence that shows the generic drug industry perpetuated a multi-billion-dollar fraud on the American people," Tong said.

"We have emails, text messages, telephone records and former company insiders that we believe provide a multiyear conspiracy to fix prices and divide market share for huge numbers of generic drugs."

The investigation had uncovered a primary reason why the cost of health care, and specifically generic prescription drugs, has been so high, Tong said.

The surging prices of prescription drugs have drawn the attention of a number of politicians across the political spectrum from President Donald Trump to liberal Democratic presidential hopeful Sen. Elizabeth Warren of Massachusetts.

The lawsuit was the second that has been filed in the investigation. The first, filed in 2016, named 18 corporate defendants and two individual defendants. Two former drug company executives entered into settlement agreements and are cooperating with the attorneys general in the investigation.

A spokesman for one of the companies named in the lawsuit, Teva Pharmaceuticals USA, a wholly owned subsidiary of Israeli-based Teva Pharmaceuticals Industries, said Teva hasn't engaged in any conduct that would lead to civil or criminal liability.

"The allegations in this new complaint, and in the litigation more generally, are just that — allegations," Kelley Dougherty, a Teva vice president, said in a statement Saturday. "The company delivers high-quality medicines to patients around the world and is committed to complying with all applicable laws and regulations in doing so."

Investigators said the lawsuit account for billions of dollars of sales in the U.S. The lawsuit was filed by 43 states and Puerto Rico, with Connecticut taking the lead in the investigation.

The lawsuit says the companies sought to "significantly raise prices on as many drugs as possible." To accomplish this goal, the lawsuit says, Teva selected a core group of competitors with which it already had "very profitable collaborative relationships" and developed understandings to lead and follow each other's price increases.

The lawsuit is asking for a finding that the defendants' actions violated federal and state antitrust and consumer protection laws, and it is seeking a permanent injunction preventing the companies from continuing the conduct.

The lawsuit also seeks reimbursement of profits and damages to be paid to state agencies and consumers who were harmed.

Notice To Creditors

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*\$74.00 includes first 36 lines and 1 Affidavit of Publication
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NOTICE TO BIDDERS
The Texas Department of Criminal Justice (TDCJ) invites bids to "Replace Primary Distribution System" at the **Wynne Unit** located in **Huntsville, Texas**. A Pre-Bid Conference will be held at **2:00 P.M. on May 15, 2019** at the project site. For additional information contact the Contract Administrator **Michelle Chesnut** at (336) 437-7114 or **michelle.chesnut@tdcj.texas.gov**. Bid Documents can be purchased at a cost of \$60.00 (Sixty Dollars, non-refundable) per set, inclusive of mailing/delivery costs, or they may be viewed at various plan rooms. Payment checks for documents should be made payable to the Jacobs Engineering Group, Inc.

Allen Thayer, Inc.
Attn: **Tom M. Mayer, P.E.**
1999 Bryan Avenue, Suite 1200
Dallas, Texas 75201
Phone: (214) 553-9500
Email: **tom.mayer@jacobs.com**

NOTICE TO BIDDERS
The Texas Department of Criminal Justice (TDCJ) invites bids to "Install High Voltage Transformer" at the **Ferguson Unit** located in **Milbury, Texas**. A Pre-Bid Conference will be held at **10:00 A.M. on May 15, 2019** at the project site. For additional information contact the Contract Administrator **Michelle Chesnut** at (336) 437-7114 or **michelle.chesnut@tdcj.texas.gov**. Bid Documents can be purchased at a cost of \$60.00 (Sixty Dollars, non-refundable) per set, inclusive of mailing/delivery costs, or they may be viewed at various plan rooms. Payment checks for documents should be made payable to the Multi-Zollars, Inc.

Multi-Zollars, Inc.
Attn: **Larry Rogers**
390 Neal Street, Suite 300
Fort Worth, TX 76102
Phone: (817) 358-7034
Email: **larry@multi-zollars.com**

INVITATION FOR BID - Project No. CCM019-ENG (C-14) Sealed bids must be received by the Texas Highway Department not later than **3:00 P.M. Central Time, Tuesday, June 18, 2019** at Camp Mabey Building 37, Austin, Texas 78703 for the **Rosenberg Roadway Center Interior Firing Range Lead Asbestos Project**, located at 3000 Gulf Freeway, La Marque, Texas 77566. A Pre-Bid site visit will be held at **1:00 P.M. Tuesday, May 28, 2019**, at the La Marque Roadway Center, 3000 Gulf Freeway, La Marque, TX 77566. Required bid documents are available at <http://tceq.texas.gov/bids>.

INVITATION FOR BID - Project No. CCM019-ENG (C-15) Sealed bids must be received by the Texas Highway Department not later than **3:00 P.M. Central Time, Tuesday, June 18, 2019** at Camp Mabey Building 37, Austin, Texas 78703 for the **Rosenberg Roadway Center Interior Firing Range Lead Asbestos Project**, located at 3000 Wallace Wehring Road, Rosenberg, TX 77471. A Pre-Bid site visit will be held at **1:00 P.M. Wednesday, May 29, 2019**, at the Rosenberg Roadway Center, 2033 Wallace Wehring Road, Rosenberg, TX 77471. Required bid documents are available at <http://tceq.texas.gov/bids>.

INVITATION FOR BID - Project No. CCM019-ENG (C-16) Sealed bids must be received by the Texas Highway Department not later than **3:00 P.M. Central Time, Tuesday, June 18, 2019** at Camp Mabey Building 37, Austin, Texas 78703 for the **Ellington Roadway Center Interior Firing Range Lead Asbestos Project**, located at 10501 Briarley Avenue, Building 182, Houston, Texas 77034. A Pre-Bid site visit will be held at **1:00 P.M. Tuesday, May 28, 2019**, at the Ellington Roadway Center, 10501 Briarley Avenue, Building 182, Houston, TX 77034. Required bid documents are available at <http://tceq.texas.gov/bids>.

Sealed Bid Solicitation #A20-20 Houston-Galveston Area Council Cooperative Purchasing Program (All Types) Pre-Bid Conference: 6/19/19 @ 9am Public Opening: 6/19/19 @ 2pm Response Deadline: 6/19/19 @ 5pm Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-409-6033 or www.hgabuy.org for info.

Sealed Proposal Solicitation #HC12-19 Houston-Galveston Area Council Cooperative Purchasing Program (Marketing, Advertising & Promotional Services) Pre-Proposal Conference: 6/6/19 @ 9am Response Deadline: 6/19/19 @ 2pm Public Opening: 6/19/19 @ 2pm Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-993-4554 or www.hgabuy.org for info.

Sealed Bid Solicitation #F512-19 Houston-Galveston Area Council Cooperative Purchasing Program (Fire Service Apparatus (All Types)) Pre-Bid Conference: 7/24/19 @ 9am Public Opening: 7/24/19 @ 2pm Response Deadline: 7/24/19 @ 5pm Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-993-2466 or www.hgabuy.org for info.

LEGAL NOTICES
PUBLIC NOTICE
REQUEST FOR PROPOSALS FOR TEXAS CITY PARK & RECREATION ADMINISTRATION FACILITY CONSTRUCTION FOR THE GULF COAST CENTER. Public Notice is hereby given that the Gulf Coast Center of Texas City, Texas, is soliciting proposals for construction of a Park & Ride facility including parking lot, terminal facility, administration building and a Texas City Emergency Operations Center. The Gulf Coast Center will hold a non-mandatory Pre-Proposal Meeting on Thursday, May 16, 2019, 10:00 PM CDT, at the City of Texas City Hall Annex, 28 South Avenue North, Texas City, TX 77990. Bids will be available in electronic form at the following link: <https://gulfcoastcenter.org/news/connect>. Interested vendors shall submit the proposals to the Gulf Coast Center no later than 10:00 AM CDT on Monday, June 3, 2019. The proposals may be submitted by Certified or Registered U.S. Mail, or by hand to: **Eric J. Director of Fixed Assets and Purchasing Gulf Coast Center** 4205 C.J. Love Freeway Texas City, Texas 77991. Respondent bears the risk of late delivery. Si necesita información o otro idioma, póngase en contacto con Center Transil Travel at a cost of 1-800-264-3220 or 409-945-0802 o connect@gulfcoastcenter.org.

NOTICE TO BIDDERS
The Texas Department of Criminal Justice (TDCJ) invites bids to "Replace Leadline System" at the **Byrd Unit** located in **Huntsville, Texas**. A Pre-Bid Conference will be held at **2:00 P.M. on May 15, 2019** at the project site. For additional information contact the Contract Administrator **Michelle Chesnut** at (336) 437-7114 or **michelle.chesnut@tdcj.texas.gov**. Bid Documents can be purchased at a cost of \$60.00 (Sixty Dollars, non-refundable) per set, inclusive of mailing/delivery costs, or they may be viewed at various plan rooms. Payment checks for documents should be made payable to Stanley Consultants, Inc.

Stanley Consultants, Inc.
Attn: **Enamul Haq**
6155 Austin Center Blvd.
Austin, Texas 78731
Phone: (512) 473-3000
Email: **enamul@stanley.com**

Legal Notices

LEGAL NOTICE
By and through its Broker of Record, Customized Real Estate Services (CRES), a non-profit non-charitable service organization, we are soliciting Request for Proposal (RFP) #19-09 in search of a long-term lease for its community center located in the Gulfport Southshore Community Center, Texas. Specific Market Location: Rookin Area. The lease term shall be for a Lease Effective Date of approximately August 1, 2019 and a Lease Term of either one (1) year with two (2) options to renew for one (1) year each. Brokerage commissions to be included on all transactions will be paid by the selected Landlord upon lease execution. The RFP will be posted on the Bakerfile website at: <https://www.bakerfile.org/about/news>, on May 20, 2019. Interested parties can submit a proposal to lease@bakerfile.org.

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LEGAL NOTICES
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NOTICE TO BIDDERS
The Texas Department of Criminal Justice (TDCJ) invites bids to "Replace Primary Distribution System" at the **Wynne Unit** located in **Huntsville, Texas**. A Pre-Bid Conference will be held at **2:00 P.M. on May 15, 2019** at the project site. For additional information contact the Contract Administrator **Michelle Chesnut** at (336) 437-7114 or **michelle.chesnut@tdcj.texas.gov**. Bid Documents can be purchased at a cost of \$60.00 (Sixty Dollars, non-refundable) per set, inclusive of mailing/delivery costs, or they may be viewed at various plan rooms. Payment checks for documents should be made payable to the Jacobs Engineering Group, Inc.

Allen Thayer, Inc.
Attn: **Tom M. Mayer, P.E.**
1999 Bryan Avenue, Suite 1200
Dallas, Texas 75201
Phone: (214) 553-9500
Email: **tom.mayer@jacobs.com**

NOTICE TO BIDDERS
The Texas Department of Criminal Justice (TDCJ) invites bids to "Install High Voltage Transformer" at the **Ferguson Unit** located in **Milbury, Texas**. A Pre-Bid Conference will be held at **10:00 A.M. on May 15, 2019** at the project site. For additional information contact the Contract Administrator **Michelle Chesnut** at (336) 437-7114 or **michelle.chesnut@tdcj.texas.gov**. Bid Documents can be purchased at a cost of \$60.00 (Sixty Dollars, non-refundable) per set, inclusive of mailing/delivery costs, or they may be viewed at various plan rooms. Payment checks for documents should be made payable to the Multi-Zollars, Inc.

Multi-Zollars, Inc.
Attn: **Larry Rogers**
390 Neal Street, Suite 300
Fort Worth, TX 76102
Phone: (817) 358-7034
Email: **larry@multi-zollars.com**

INVITATION FOR BID - Project No. CCM019-ENG (C-14) Sealed bids must be received by the Texas Highway Department not later than **3:00 P.M. Central Time, Tuesday, June 18, 2019** at Camp Mabey Building 37, Austin, Texas 78703 for the **Rosenberg Roadway Center Interior Firing Range Lead Asbestos Project**, located at 3000 Gulf Freeway, La Marque, Texas 77566. A Pre-Bid site visit will be held at **1:00 P.M. Tuesday, May 28, 2019**, at the La Marque Roadway Center, 3000 Gulf Freeway, La Marque, TX 77566. Required bid documents are available at <http://tceq.texas.gov/bids>.

INVITATION FOR BID - Project No. CCM019-ENG (C-15) Sealed bids must be received by the Texas Highway Department not later than **3:00 P.M. Central Time, Tuesday, June 18, 2019** at Camp Mabey Building 37, Austin, Texas 78703 for the **Rosenberg Roadway Center Interior Firing Range Lead Asbestos Project**, located at 3000 Wallace Wehring Road, Rosenberg, TX 77471. A Pre-Bid site visit will be held at **1:00 P.M. Wednesday, May 29, 2019**, at the Rosenberg Roadway Center, 2033 Wallace Wehring Road, Rosenberg, TX 77471. Required bid documents are available at <http://tceq.texas.gov/bids>.

INVITATION FOR BID - Project No. CCM019-ENG (C-16) Sealed bids must be received by the Texas Highway Department not later than **3:00 P.M. Central Time, Tuesday, June 18, 2019** at Camp Mabey Building 37, Austin, Texas 78703 for the **Ellington Roadway Center Interior Firing Range Lead Asbestos Project**, located at 10501 Briarley Avenue, Building 182, Houston, Texas 77034. A Pre-Bid site visit will be held at **1:00 P.M. Tuesday, May 28, 2019**, at the Ellington Roadway Center, 10501 Briarley Avenue, Building 182, Houston, TX 77034. Required bid documents are available at <http://tceq.texas.gov/bids>.

Sealed Bid Solicitation #A20-20 Houston-Galveston Area Council Cooperative Purchasing Program (All Types) Pre-Bid Conference: 6/19/19 @ 9am Public Opening: 6/19/19 @ 2pm Response Deadline: 6/19/19 @ 5pm Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-409-6033 or www.hgabuy.org for info.

Sealed Proposal Solicitation #HC12-19 Houston-Galveston Area Council Cooperative Purchasing Program (Marketing, Advertising & Promotional Services) Pre-Proposal Conference: 6/6/19 @ 9am Response Deadline: 6/19/19 @ 2pm Public Opening: 6/19/19 @ 2pm Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-993-4554 or www.hgabuy.org for info.

Sealed Bid Solicitation #F512-19 Houston-Galveston Area Council Cooperative Purchasing Program (Fire Service Apparatus (All Types)) Pre-Bid Conference: 7/24/19 @ 9am Public Opening: 7/24/19 @ 2pm Response Deadline: 7/24/19 @ 5pm Per ADA, reasonable accommodation provided with 24 hour prior notice. 713-993-2466 or www.hgabuy.org for info.

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To place legal notices
email legals@chron.com or call 713.224.6868.

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CHRONICLE'S LEGAL NOTICE SECTION

Call 713-224-6868 for more information

Place Your Ad with Houston's
Leader Chronicle Classifieds
713-224-6868

☒ Pre- Bid/Proposal Conference ----- OR ----- ☐ Bid/RFP Opening

Invitation No. & Description:

FS12-19 Fire Service Apparatus (All Types)

Date:

6/5/19

Attendees acknowledge that no oral statement or commentary made by H-GAC staff at this function will be considered a statement of fact, nor binding on H-GAC in any way. Only the information provided in the published Invitation To Submit Competitive Bids/Proposals will be considered as having status or merit with regard to this procurement.

ATTENDEE NAME	COMPANY NAME	PHONE NO.
----- Please Print Legibly -----		
Donald M Rhodes	Sunbelt Fire	(251) 929-9563
Teresa Rhodes	Sunbelt Fire	(251) 929-9563
Justin Frost	BFT Fire Apparatus	817.781.8367
Stan Froelich	Alexis Fire Eq.	(309) 297-0024
Ed Miller	Chastain Fire	713 678 5007
Ed Beene	Daco Fire-Rosenbauer	817 256 5525
Doug Feldman	Rosenbauer	(916) 919-0062
MATT STOCKER	BOISE MOBILE EQUIP	208.338.1444
Darlene Taylor	Deep South Fire	281.546.6784
Kristi Scheet	Custom Fire Apparatus	715.294.2555
Michael Capus	HME Ahrens-Fox	616-450-7206
Jaime Palmer	HGAC	X 2466
Bill Burton	HGAC	X 2514
Stefani Huey	HGAC	X 2473
Brad Johnston	Precision Fire Apparatus	417-827-6544
Tammy Mettr	H-GAC	X 6663
Mifce Watts	Toyne	912-830-0451
T. Campbell	H-GAC	X 2553
Ronnie Barnes	H-GAC	X 6665

Please remember to leave us your business card.

Sign-In Sheet



6/5/19

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----- **Please Print Legibly** -----

Low Spz. / E. cre

201-813-5317

Siddons-Martine

281-442-6804

Please remember to leave us your business card.

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the
requester. Do not
send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Siddons Martin Emergency Group LLC

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC

☐ C Corporation

☐ S Corporation

☐ Partnership

☐ Trust/estate

☒ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► **S**

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) **5**

Exemption from FATCA reporting code (if any)

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
1362 E Richey Road

6 City, state, and ZIP code
Houston, TX 77073

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			-			-				
--	--	--	---	--	--	---	--	--	--	--

or

Employer identification number

2	7	-	4	3	3	3	5	9	0
---	---	---	---	---	---	---	---	---	---

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign
Here

Signature of
U.S. person ►

Denise Picon

Date ►

1/3/19

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.



CERTIFICATE OF LIABILITY INSURANCE

BOS 2022-01495489/1306
DATE (MM/DD/YYYY)
03/08/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Jacobs-Weber, Inc. P.O. Box 67 Yoakum, TX 77995	CONTACT NAME: Rose Smith	
	PHONE (A/C, No. Ext): 361-648-4209	FAX (A/C, No.): 361-293-3074
	E-MAIL ADDRESS: rsmith@jacobs-weber.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: The Hartford	
INSURED Siddons-Martin Emergency Group, LLC 1362 East Richey Road Houston, Texas 77073	INSURER B: The Hartford	
	INSURER C: Texas Mutual	
	INSURER D:	
	INSURER E:	
	INSURER F:	

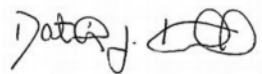
COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Includes Garage Operations GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	65 UUN QO0907	02/03/2019	02/03/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	65 UUN QO0907	02/03/2019	02/03/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ UM/UIM \$ 1,000,000
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	Y	Y	65 HHU QO0908	02/03/2019	02/03/2020	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below	Y	N/A	0001323028	04/05/2018	04/05/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Customers Autos/Stock Autos	Y	Y	65 UUN QO0907	02/03/2019	02/03/2020	\$18,000,000
A	Property In-Transit/Off-Premise	Y	Y	65 UUN QO0907			\$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER **CANCELLATION**

File Copy	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

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CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

Siddons Martin Emergency Group, LLC

2 ☐ Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

(Not applicable.)

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes

☐ No

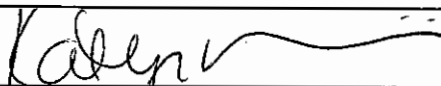
B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes

☐ No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 
Signature of vendor doing business with the governmental entity

05/06/2019
Date

CERTIFICATE OF INTERESTED PARTIES**FORM 1295**

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

**OFFICE USE ONLY
CERTIFICATION OF FILING**

Certificate Number:
2019-486869

Date Filed:
05/06/2019

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Siddons Martin Emergency Group, LLC
 Houston, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Houston-Galveston Area Council (H-GAC) Contractor

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

FS12-19
 Fire Apparatus (All Types)

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Patrick, Siddons	Houston, TX United States	X	
	Leon, Martin, Jr.	Houston, TX United States	X	

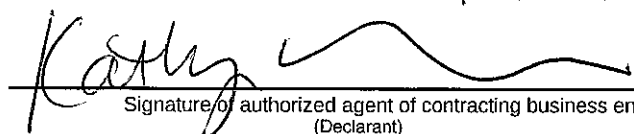
5 Check only if there is NO Interested Party.
☐
6 UNSWORN DECLARATION

My name is Kathryn A. Williams, and my date of birth is 05/03/1984.

My address is 1362 East Richey Road, Houston, TX, 77073, USA.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Harris County, State of Texas, on the 6 day of May, 20 19.
(month) (year)


 Signature of authorized agent of contracting business entity
 (Declarant)

CONTRACTOR CONTACT INFORMATION

ATTENTION Houston-Galveston Area Council (H-GAC) Contractor: The following information is needed to communicate with your company concerning contract matters which may arise. To expedite the process, we ask that you provide the information requested below. During the term of this contract, notify H-GAC in writing of any changes to this information by emailing updates to: cpcontractfax@h-gac.com

Section I

CONTRACTOR: <u>Siddons-Martin Emergency Group</u> Purchase Order Address: <u>1362 East Richey Road Houston, Texas 77073</u>	CONTRACT #: <u>FS12-19</u> Invoice Address: <u>1362 East Richey Road</u> <u>Houston, Texas 77073</u>
Contact Name: <u>Jeffrey A. Doran</u> Address: <u>1362 East Richey Road</u> <u>Houston Texas 77073</u> City <u>State</u> <u>Zip Code</u> Telephone No.: <u>1-800-784-6806</u> Fax No. # <u>281-442-0850</u> Email Address: <u>jdoran@siddons-martin.com</u>	Contact Name: <u>Connie Oubre</u> Address: <u>1362 East Richey Road</u> <u>Houston Texas 77073</u> City <u>State</u> <u>Zip Code</u> Telephone No. # <u>1-800-784-6806</u> Fax No. # <u>281-442-0850</u> Email Address: <u>coubre@siddons-martin.com</u>

Section II

CONTRACT INFORMATION:

Indicate the person (s) authorized to sign contracts, requests for contract price increases, or other contract-related documents. A copy of your corporate resolution may be acceptable for Section II.

Printed Name of Signatory: <u>Jeffrey A. Doran</u> Corporate Title: <u>G. M. - Sales Operations</u> Tel. No.: <u>1-800-784-6806</u> Fax No.: <u>281-442-0850</u> Email Address: <u>jdoran@siddons-martin.com</u>	Printed Name of Signatory: <u>Patrick Siddons</u> Corporate Title: <u>President</u> Tel. No.: <u>1-800-784-6806</u> Fax No.: <u>281-442-0850</u> Email Address: <u>pat.siddons@siddons-martin.com</u>
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Section III

SALES CONTACT INFORMATION

Person who End Users will contact for product information and pricing quotes

Contact Name: <u>Jeffrey A. Doran</u> Address: <u>1362 East Richey Road</u> <u>Street</u> Telephone No.: <u>1-800-784-6806</u> Mobile No. (optional) _____ Email Address: <u>jdoran@siddons-martin.com</u>	Title: <u>G. M. - Sales Operations</u> <u>Houston Texas 77073</u> City <u>State</u> <u>Zip</u> Fax No.: <u>281-442-0850</u>
---	---

FORM H - MARKETING PLAN			Invitation No.: FS12-19
Offeror Name:			Siddons-Martin Emergency Group, LLC.
<p>Bidder shall provide a written narrative explaining in some detail activities that will be undertaken to actively market and promote an H-GAC contract to local government and non-profit End Users.</p>			
			<p>Siddons-Martin Emergency Group promotes the use of all HGAC Contracts for our various products on multiple fronts. Our company is represented at every major show in Texas, Louisiana and New Mexico along with National Shows such as FDIC and Fire Rescue International. Some of the state shows we attend are as follows:</p> <p>Texas Municipal League Texas EMS Texas A & M Municipal Show Texas Fire Chiefs Multiple Law Enforcement Conferences Many regional Conferences and Area Schools Louisiana Chiefs and Louisiana Fire Fighters Show Regional Louisiana Conferences New Mexico EMS New Mexico Chiefs New Mexico Firefighters Conference</p> <p>We also use our website along with Social Media to promote the use of the HGAC Contracts.</p> <p>HGAC has been a very successful selling tool for us with all our products which we will continue to promote.</p>

House Bill 89 Verification Form

Prohibition on Contracts with Companies Boycotting Israel

The 85th Texas Legislature approved new legislation, effective Sept. 1, 2017, which amends Texas Local Government Code Section 1. Subtitle F, Title 10, Government Code by adding Chapter 2270 which states that a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it:

- 1) does not boycott Israel; and
- 2) will not boycott Israel during the term of the contract

Pursuant to Section 2270.001, Texas Government Code:

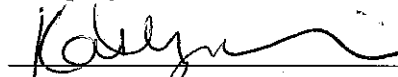
1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and
2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.

I, (authorized official) Kathryn A. Williams, do hereby depose and verify the truthfulness and accuracy of the contents of the statements submitted on this certification under the provisions of Subtitle F, Title 10, Government Code Chapter 2270 and that the company named below:

- 1) does not boycott Israel currently; and
- 2) will not boycott Israel during the term of the contract; and
- 3) is not currently listed on the State of Texas Comptroller's Companies that Boycott Israel List located at <https://comptroller.texas.gov/purchasing/publications/divestment.php>

Siddons Martin Emergency Group, LLC

Company Name



Signature of Authorized Official

Secretary

Title of Authorized Official

05/06/2019

Date

Siddons-Martin Emergency Group Sales

Our sales team is lead from the Houston office at 1362 East Richey Rd where Pat Siddons - President, Kirk Givler - V. P., Jeffrey Doran - Director of Order Management, Order Analysts Amanda Seabranh and Connie Oubre are officed. Many of our sales team will work out of the Houston office to prepare bids or meet with Senior Management. The sales team has grown tremendously over the past 3 years and is currently 30 strong with four additional employees working at our Appleton, Wisconsin Facility.

Most of the team works from their residence to better cover their respective territories along with the recent additions of 5 Regional Sales Managers. States served by Siddons-Martin are Louisiana, New Mexico, Nevada, Texas and Utah.

From the Pierce Sales Team perspective, the Sales force is made up of 26 Dealers covering the U. S. and Canada along with International and Government Sales Groups.

Pierce has manufacturing facilities in Appleton, Wisconsin (Headquarters) and Bradenton, and Clearwater Florida. Pierce is owned by Oshkosh Corporation located in Oshkosh, Wisconsin where they make many military products, concrete placement equipment and serve as the Engineering Lead to many of the division companies of Oshkosh. Oshkosh has a Global Logistics center in Appleton, Wisconsin which provides parts to all product manufacturing facilities and the dealer network.

The entire Pierce Dealer network strives to be full-service dealers offering everything from Sales, Service, Parts and many include body work at their own facilities. Pierce's dealer network is second to none in the Fire Apparatus Industry in sales, service and parts availability.

Siddons-Martin provides customer training on every unit sold to ensure the end users are familiar with the operations and safety features of every component. When the trainer is at the end user facility they provide information for the closest service facility including the Service Managers contact information and 24 hour service phone number.

Siddons-Martin Emergency Group Sales

Our sales team is lead from the Houston Corporate office at 1362 East Richey Rd where Pat Siddons - President, Kirk Givler - V. P., Jeffrey Doran - Director of Order Management, Order Analysts Amanda Seabranh and Connie Oubre are officed. Many of our sales team will work out of the Houston office to prepare bids or meet with Senior Management. The sales team has grown tremendously over the past 3 years and is currently 30 strong with four additional employees working at our Appleton, Wisconsin Facility.

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Siddons-Martin provides customer training on every unit sold to ensure the end users are familiar with the operations and safety features of every component. When the trainer is at the end user facility they provide information for the closest service facility including the Service Managers contact information and 24 hour service phone number.

Siddons-Martin Emergency Group Sales

Our sales team is lead from the Houston office at 1362 East Richey Rd where President Pat Siddons, V. P. – Kirk Givler, G. M. Sales Operations - Jeffrey Doran, Executive Assistant - Connie Oubre and Sales Support - Damian Romo are officed. Many of our sales team will work out of the Houston office to prepare bids or meet with Senior Management. The sales team has grown tremendously over the past 3 years and is currently 30 strong with two additional employees working at our Appleton, Wisconsin Facility.

Most of the team works from their residence to better cover their respective territories along with the recent additions of 5 Regional Sales Managers. States served by Siddons-Martin are Louisiana, New Mexico and Texas.

From the Pierce Sales Team perspective, the Sales force is made up of 28 Dealers covering the U. S. who all sell on the HGAC Contract. Since all the other dealers became educated on using HGAC they don't know how they sold without it.

Pierce has manufacturing facilities in Appleton, Wisconsin (Headquarters) and Bradenton, Florida. Pierce is owned by Oshkosh Corporation located in Oshkosh, Wisconsin where they make many military products, concrete placement equipment and serve as the Engineering Lead to many of the division companies of Oshkosh. Oshkosh has a Global Logistics center in Appleton, Wisconsin who provide parts to all product manufacturing facilities and the dealer network.

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Siddons-Martin provides customer training on every unit sold to ensure they are familiar with the operations and safety features of every component. When the trainer is at the end user facility they provide information for the closest service facility including the Service Managers contact information and 24 hour service phone number.

For Use In Responding To Competitive Bid And Proposal Invitations

Invin No.: FS12-19 Siddons-Martin Emergency Group

Title: Fire Service Apparatus (All Types)

This Sn contains the following **H-GAC FORMS**.

FORM	DESCRIPTION
Form A:	Offeror Identification and Authorized Signatory
Form B:	Historically Underutilized Business Enterprises
Form C:	Response Checklist
Form D:	Offered Items Pricing
Form E:	Published Options
Form G:	Special Statement of Warranty
Form H:	Marketing Plan
Form W-9	Request for Taxpayer Identification Number and Certification
Form CIQ	Conflict of Interest Questionnaire
Form 1295	Certificate of Interested Parties
HB 89	Prohibition on Contracts with Companies Boycotting Israel
CCI	Contractor Contact Information

These *FORMS* are hereby made available in electronic format. They should be copied to Offeror's computer completion and/or printout as required. The *FORMS* **may not** be changed or altered in any way, et as may be specified on the *FORM*.

ALL oleted *FORMS* must also be submitted electronically on electronic media (DVD, CD Rom, flash/tb drive), excepting of course for signatures. The printed "Original" of the response will be consid as the official copy in case of any discrepancy between the electronic version and the printed Origin

FORM OFFEROR IDENTIFICATION & AUTHORIZED SIGNATORY

NOT handwritten this Form. Information must be typed in.)

Invo Title: Fire Service Apparatus (All Types)

Offerompany: Siddons-Martin Emergency Group

(Legal name of business which will appear on contract, if awarded)

Or Status: ☐ Manufacturer ☒ Dealer/Distributor ☐ OtherResptype(1): ☒ Single Offeror Acting ☒ Multiple Offerors ☐ Acting Jointly

Contractor(2): Jeffrey A. Doran

Title: G. M. - Sales Operations

Mailindress(3): 1632 East Richey Road

Houston

Texas 77073

Street/PO Box

City

State & Zip

Phys&address: 1632 East Richey Road

Houston

Texas 77073

Street

City

State & Zip

Phone: 1-800-784-6806

Fax:

281-442-0850

E&address: jdorand@siddons-martin.com

Federa ID No.: 27-4333590

Web Page URL: www.siddons-martin.com

(1) Int Offering, all parties must submit a signed Form A. A contract will be offered to each.

(2) n who will sign final contract documents if an award is made.

(3) res to which final contract documents would be sent for signature.

Member Contact Information

Conterson(4): Jeffrey A. Doran

Title: G. M. - Sales Operations

Mail&address: 1362 East Richey Road

Houston

Texas 77073

Street/PO Box

City

State & Zip

Phys&address: 1362 East Richey Road

Houston

Texas 77073

Street

City

State & Zip

Tol Phone: 1-800-784-6806

Fax: 281-442-0850

E&address: jdorand@siddons-martin.com

(4) n who End Users will contact for product information and to get pricing quotes.

The Sorry below, on behalf of Offeror:

- Ackidges having thoroughly reviewed the Invitation;
- Attehaving the authority to sign this response and commit Offeror to honor all requirements;
- Makder penalty of perjury, all required Offeror Certifications as detailed in General Terms;
- Certat all information provided in this Response is true and correct.

gnature:

Title: G. M. - Sales Operations

Pd Name: Jeffrey A. Doran

Date:

7/19/2019

Invitation No.: FS12-19

FORM FOR HISTORICALLY UNDERUTILIZED BUSINESS ENTERPRISES

Procurement No.: FS12-19

Title Service Apparatus (All Types)

Offeror Iddons-Martin Emergency Group

Most, if not all of the Members of HGACBuy are subject to various requirements relative to purchasing goods and services from Historically Underutilized Business Enterprises (HUBs) (See Note 1). These requirements are promulgated by federal and state government authorities, and include measurable criteria such as 'percentage of total dollars spent directed to HUBs', 'number of HUB contracts used', 'HUB subcontractors employed by primary contractors', etc. These requirements are generally formalized in goal oriented programs.

HGACBuy is committed to promoting full and equal business opportunities for HUB contractors, and to assisting Cooperative Purchasing Program (COOP) Members in meeting mandated HUB goals. In that regard, Contractor shall make a good faith effort to use the services of Certified/Listed (See Note 2) HUBs whenever possible.

As part of good faith effort, Contractor agrees to work with and assist HGACBuy Members in meeting HUB targets and goals, as may be required by any rules, processes or programs they might have in place. Such assistance may include such things as compliance reporting requirements, provision of documentation, consideration of 'Certified/Listed' subcontractors, provision of documented evidence that an active participatory role for a HUB entity was considered in a procurement transaction, etc.

Note 1: There are many designations other than "HUB" used across the country within various jurisdictions. Examples include terms such as Disadvantaged Business Enterprise (DBE), Minority Owned Business Enterprise (MBE), Woman Owned Business Enterprise (WBE), Small Disadvantaged Business (SDB), Small, Woman or Minority-owned Business (SWAM), etc. Regardless of the formal designation, the overall objective of the relevant programs is basically the same, i.e. to insure that disadvantaged and underutilized members of the business community receive a fair share of public spending. The term HUB as used herein shall be understood to encompass all such programs/business enterprises, no matter what terminology is used by the Member.

Note 2: Terms "Certified" and "Listed" as used in conjunction with HUB programs relate to the process of HUB qualification review. Jurisdictions usually require that companies claiming HUB status be reviewed and confirmed as meeting certain minimum requirements to claim that status, and that the review and confirmation process be carried out by certain designated entities. They are then "Certified" or "Listed" by having their name included on an official listing published by the Certifying or Listing Authority.

Accepted / Agreed By:

Title: J. M. - Sales Operations

Date: 7/19/2019

HUB Status Of Offeror☐ Offer a HUB, as detailed below.☒ Offeror is not a HUB.

Designation

☐ HUB☐ DBE☐ MBE☐ WBE☐ Other

Certifying / Listing Authority(s):

Subcontracts

On a separate sheet, list any subcontractors that would be employed in providing products or services related to this procurement. Include subcontractor name, designation (HUB, DBE, etc.) and certifying/listing authority.

☐ Contractor List attached.☒ No Subcontractors will be used.

FORM RESPONSE CHECKLIST		Procurement No.: FS12-19
<p>== Fire Service Apparatus (All Types)</p> <p>Or: Siddons-Martin Emergency Group</p>		
<p>This <i>FOR</i> provided to help insure that all required Response elements have been completed and included, or certified and available upon request. Responses that do not comply with all requirements may be considered non-compl. Offeror's signatory must review each item below, and certify by initialing in the space to the right.</p>		
This Respondent:		Init.
1	An "nat" hard copy of the COMPLETE submission, including all required <i>FORMS</i> , plus one COMTE copy, each in a separate hard-sided 3-ring binder.	
2	A copy of the COMPLETE submission, including all required <i>FORMS</i> , in electronic format (CD, DVD or drive). Forms D & E are to be provided in an excel format.	
3	An orally signed Form A from the all entities who are party to this submission and who should be offered contract if this submission is successful. These entities should include the Apparatus Manufacturer, Franchised Texas Dealer and those dealers outside Texas who have current or past sales with the program (Note: All other sales outside Texas should be coordinated through the manufacturer when possible). In those cases where sales must go through a dealer due to franchise agreements, Form A's will be accepted from those dealers. For those only bidding conversions (i.e. brush trucks, light rescues), Form A's from in-state commercial chassis dealers for the underlying chassis being quoted should be provided.	
4	Form B, C, D, E, G, H, (EXCEL FORMAT), 1295, W-9, CIQ, HB89, CCI, A 1295, W-9, CIQ, HB89 CI form shall be provided from each entity that has submitted a Form A for this submission.	
5	The red list of References.	
6	Detail "Service Organization", including locations, hours, personnel and parts/service availability. (Appb hard goods only.)	
7	Complete Warranty Documentation for all Products offered.	
8	The manufacturer's latest Specification Documents detailing standard features, operating characteristics, etc., for all products offered. Note: Bidder shall supply a spec/quote sheet for each product bid on Form D . These sheets should detail what features are included in the price quoted on Form D .	
9	If the -Resident Reciprocal Bid Act applies, a copy of your state statute and a determination of the status of Texas bidders/proposers in your home state. If not applicable, indicate "N/A"	
10	If off-vehicle motor vehicles to be sold in Texas, copies of all current licenses as required by the Texas Motor Vehicle Commission.	
11	A Bioposal Bond , or Cashier's Check in the amount of \$3000 . (A percentage bond is NOT accep.)	n/a

ITEM BASFERING PRICES		Procurement No.	FS12-19
OffName:	Siddons-Martin Emergency Group		
Inv1 No.:	FS12-19 - Fire Service Apparatus (All Types)		
<p>Note: All pr-listed below are to be considered as base model/units for purposes of this Invitation and any subsequent contract. The Bidder shall determine which Products to bid and shall fill in a bid price in the appropriate cell. Bidder may then bid upgrades or downgrades to different product codes as options on Form E, withg equal to the differential amount between the base Product Item price and the upgrade or downgrade being offered. Bidders are to provide pricing for optid accessories as explained in Sections A and B, as well as specific apparatus variations as listed below:</p>			
1. Other availab/Chassis manufacturer choices for apparatus built on a commercial cab/chassis.			
2. Different av cab designs (2/4 Door/Tilt Cab etc.)			
3. Cab/Body sid structural metal choices (Galvanneal, Formed/Extruded Aluminum, Stainless Steel)			
4. Available re configurations (Single/Tandem/Tandem Front Steering/Triple Rear)			
5. Different flips and mounting locations (1250/1500/2500 GPM Pump/Rear and Mid-Mounted)			
6. Various bocfigurations (Walk-In/Non-Walk-In Body) for Rescue, Re-Hab, Hazmat, Mobile Command Centers			
7. Aerial Cate{Construction/Turntable Positions/Aerial Device Functions)			
IMPORT: Bidder MUST submit copies of the following with their bid:			
(1) A copy of articpating bidder/dealer's TxMVD dealer license identifying the make/brand of apparatus being bid.			
(2) <i>An origingned Form A from the all entities who are party to this submission and who should be offered a contract if this submission is successful. These entitiesl include the <u>Apparatus Manufacturer</u>, <u>Franchised Texas Dealer</u> and those dealers outside Texas who have current or past sales through the program (<u>All other sales outside Texas should be coordinated through the manufacturer when possible</u>). In those cases where sales must go through a dealer due to jse agreements, Form A's will be accepted from those dealers. For those only bidding conversions (i.e. brush trucks, light rescues), Form A's from in-state ocial chassis dealers for the underlying chassis make being quoted should be provided.</i>			
(3) A copy of ders and/or manufacturers's Texas Motor Vehicle Converter license (where applicable).			
Note: The e requirements must be met prior to any contracts being issued.			
ict e	Model & Description (Note: Bid only the base Item/Model on this Form . No changes/modifications to Form D descriptions will be accepted and will result in bid item being deemed non-compliant. Bid available options noted above on Form E)		Base Offered Price
U. OshKosh			

Redacted
 Pages 6 to 42 also
 redacted per
 Atlantic.

FORM	
FS12-1	
"Fire Service Apparatus (All Types)"	
This form completed by the MANUFACTURER and signed by one of its Corporate Officers. No agent signature shall be acceptable on this document.	
for the periods stated below, from the date of acceptance, ordinary wear and tear excepted:	
Component:	Warranty:
• Cab & C	One (1) year, parts & labor
• Chassis rails	Five (5) years, parts & labor
• Diesel E	Five (5) years, parts & labor
• Transmi	Five (5) years, parts & labor
• Fire Pum	One (1) year, parts & labor
• Fire Purl Gauge	One (1) year, parts & labor
• Water T	Twenty (20) years, parts & labor
• Apparatus	One (1) year, parts & labor Ten (10) years, rust/corrosion penetration Ten (10) years or 100,000 miles, structural warranty Three (3) years, paint
• Aerial D	Twenty (20) years, structural Two (2) years, hydraulic components One (1) year, parts and labor One (1) year, waterway
The Manufacturer's obligations under this warranty shall be specifically limited to replacing or repairing, as the Manufacturer may elect, any part or parts of such product which to	
Any part considered to be covered by the conditions of this warranty shall be returned, freight prepaid, to the Manufacturer's factory located at	
or to succocation as may be approved in advance by the Manufacturer. Replaced or repaired parts determined to be included within the warranty shall be F.O.B. to the End	
User's phcation. Freight and labor to reinstall parts shall be paid by the Manufacturer.	
The Manufacturer's warranty shall not apply to the following:	
<ul style="list-style-type: none">• We.• Nonstmenans and maintenance services.• Failing from the product being operated in a manner not in accordance with the operation manual or for a purpose not recommended by the Manufacturer.• Anyt which shall have been repaired, modified, or altered in any way so as to have been adversely affected the units stability or reliability.• Inceted to misuse, negligence, accident, or improper maintenance.• Lose or use of the product, inconvenience or other incidental expenses.	
Manufacturer's any trade accessory not specifically covered by a separate warranty.	
Nothing d in this warranty shall make the Manufacturer, liable beyond the express limitations hereof, for loss, injury, or damage of any kind to any person or entity resulting from anyr failure of the product (except as covered by Product liability insurance).	
WARA OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.	
MANURER:	
Corporate Signature:	
Printed Nd Title:	
WARADMINISTRATOR:	
Printed Nd Title:	
Date:	

Form H -etting		Invitation No.: FS12-19
Offeror Name:		Siddons-Martin Emergency Group
Bidder shvide a written narrative explaining in some detail activities that will be undertaken to actively market and promote an H-GAC contract to local govot and non-profit End Users.		
<p>Siddons-MEmergency Group promotes the use of all HGAC Contracts for our various products on multipts. Our company is represented at every major show in Texas, Louisiana and New Mexico aith National Shows such as FDIC and Fire Rescue International.</p> <p>Some of te shows we attend are as follows:</p> <p>Texas Mtl League</p> <p>Texas Elv</p> <p>Texas A dunicipal Show</p> <p>Texas Firfs</p> <p>Multiple hfforcement Conferences</p> <p>Many reg.onferences and Area Schools</p> <p>Louisiana and Louisiana Fire Fighters Show</p> <p>Regional ana Conferences</p> <p>New MexMS</p> <p>New Mexiefs</p> <p>New Mexefighters Conference</p> <p>We also uwebsite along with Social Media to promote the use of the HGAC Contracts.</p> <p>HGAC ha a very successful selling tool for us with all our products which we will continue to promote.</p>		

Service



Siddons-Martin
Emergency Group

www.Siddons-Martin.com

PROFESSIONAL, FACTORY TRAINED, EVT CERTIFIED TECHNICIANS

Unparalleled Service.

Siddons-Martin Emergency Group understands the critical tasks of getting your apparatus operational and back in service with the fastest turn-around possible. We start by listening to your needs, diagnosing the problem and getting the necessary parts on-time for repairs. Siddons-Martin is the factory authorized warranty service center for every brand we represent and can handle service and repair on every brand of emergency equipment.

Siddons-Martin service technicians are factory trained and ASE / EVT certified. Our technicians undergo continuous training and testing to ensure that the latest technology and innovation is applied to the service of your equipment. When you need prompt and reliable service, you can count on Siddons-Martin Emergency Group to support you.

Our Services

- *Pierce Sole-Source Authorized Warranty & Parts Provider*
- *Fully Insured & Bonded General & Product Liability*
- *Comprehensive Preventative Maintenance Programs to fit your needs*
- *EVT/ASE Certified Technicians*
- *OEM & After Market Parts*
- *Apparatus Maintenance Training Available*
- *Fire Pump & Plumbing Maintenance, Repair & Overhaul*
- *Semi-Annual & Annual Pumper & Support Preventive Maintenance*
- *Semi-Annual & Annual Aerial Inspection, Maintenance & Overhaul*
- *Complete Service History Documentation*
- *Generators Service & Repair*
- *Electrical: Multi-Plex & Standard 12V Systems*
- *Brake Systems: Inspections, Testing, & Repairs*
- *Road Tests: Engine, Transmission, & Driveline Inspections*
- *Computer Diagnostics*

Field Services

- *24 / 7 Emergency Calls*
- *21 Stocked Field Service Trucks*
- *9 Field Service Trailers*
- *On Scene or At Your Facilities*
- *Preventive Maintenance Services*
- *A/C Service & Repair*
- *Mobile Fire Pump Testing*

Our Service Facilities

We have 13 regional service centers across Texas, New Mexico and Louisiana equipped with mobile hydraulic lifts for complete and comprehensive vehicle inspections and repairs.

Fire Pump, Foam, and CAFS Testing & Maintenance

- All testing is performed by a certified EVT
- Testing provided at one of our service centers or your facilities.
- Foam Systems Calibration, Inspections, and Maintenance
- Fully documented test results provided for fire pump testing

Cutting-Edge Technology

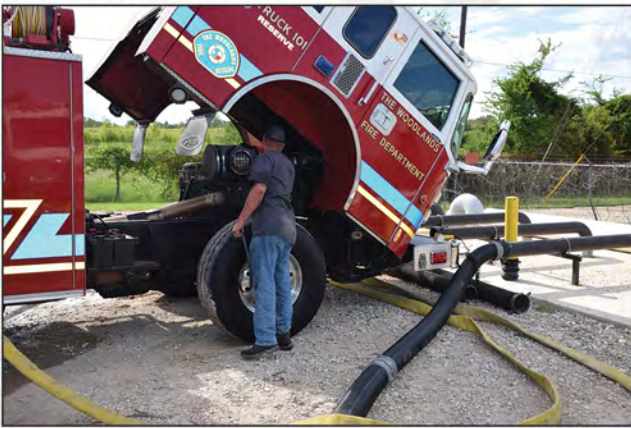
Pumper & Support Inspections

- Quarterly 90-Point Inspection & Maintenance
- Semi-Annual 120-Point Inspection & Maintenance
- Annual 140-Point Inspection & Maintenance



WWW.SIDDONS-MARTIN.COM





Aerial Waterway, Ladder, & Platform Inspections

- **Quarterly 160-Point Inspection & Maintenance**
- **Semi-Annual 190-Point Inspection & Maintenance**
- **Annual 210-Point Inspection & Maintenance**



Additional Inspection Services

- **Generators/Small Engines: 120/240V Inspection & Maintenance**
- **Electrical: Multi-Plex and Standard 12V Systems**
- **Aerial: Non-Destructive Testing & NFPA Third Party Inspections**
- **Brake Systems: Inspections, Testing, and Repairs**
- **Road Tests: Engine, Transmission, and Driveline Inspections**



Service Network

BOS 2022-01-19 p.506/1306

(800) 784-6806
TOLL FREE PARTS & SERVICE

(866) 792-0895
24/7 EMERGENCY SERVICE



• **Albuquerque, NM**
(505) 344-9041
4214 2nd St NW
Albuquerque, NM 87107

• **Brookshire, TX**
(281) 934-2200
2261 FM 359 S
Brookshire, TX 77423

• **Cedar Hill, TX**
(972) 576-1200
1419 High Meadows Ct
Cedar Hill, TX 75104

• **Corpus Christi, TX**
(361) 249-9355
2225 Saratoga
Corpus Christi, TX 78417

• **Denton, TX**
(940) 382-9600
3500 Shelby Lane
Denton, TX 76207

• **Harvey, LA**
(504) 340-6700
3200 Westbank Expwy, Ste A
Harvey, LA 70058

• **Houston, TX**
(281) 42-6806
14233 Interdrive West
Houston, TX 77032

• **Kirby, TX**
(210) 661-3913
5511 Binz-Englemann Rd
Kirby, TX 78219

• **La Marque, TX**
(409) 655-3005
4903 FM 1765
La Marque, TX 77568

• **Manor, TX**
(512) 272-8484
12717 Beltex Dr
Manor, TX 78653

• **Odessa, TX**
(432) 231-4570
2725 Golder Avenue
Odessa, TX 79764

• **Pharr, TX**
(956) 58-2735
104 W Utility Dr
Pharr, TX 77577

• **Port Arthur, TX**
(409) 736-9077
9645 Jade Avenue
Port Arthur, TX 77640

OEM Parts & Equipment

We stock a robust inventory of OEM parts for all makes of emergency vehicles. With electronics parts catalogs, drawings and illustration, you can expect the right parts the first time. Rely on our factory-trained, parts specialists to assist you and our computerized inventory of locally stocked parts means you'll get your order as soon as possible.

THE PARTS YOU WANT, WHEN YOU NEED THEM.

- ***Our \$2.3M in local on-hand inventory saves you time and gets you back in service***
- ***We offer convenient online catalogs and electronic part orders***
- ***We pledge same-day shipping of most parts ordered before 2PM***



PIERCE MANUFACTURING

- **500,000 sq. ft. facility**
- **\$14M of on-hand inventory**
- **PierceParts.com online catalogs, drawings, and illustrations**



WHEELED COACH / ROAD RESCUE

- **4 distribution centers, 245,000 sq. ft.**
- **\$36.4M of on-hand inventory**
- **85% of orders ship in 48 hours**
- **2-day ground shipping to continental U.S.**

Siddons-Martin Emergency Group understands the critical tasks of getting your apparatus operational and back in service with the fastest turn-around possible. We start by listening to your needs, diagnosing the problem and getting the necessary parts on-time for repairs. Siddons-Martin is the factory authorized warranty service center for every brand we represent and can handle service and repair on every brand of emergency equipment.

Siddons-Martin service technicians are factory trained and ASE / EVT certified. Our technicians undergo continuous training and testing to ensure that the latest technology and innovation is applied to the service of your equipment. When you need prompt, honest, and reliable service, you can count on Siddons-Martin Emergency Group to support you.

Please call us today to discuss how Siddons-Martin Emergency Group can serve your agency.



PERFORM. LIKE NO OTHER.™



Road Rescue®
In Service for Life™

December 10, 2021

Fire Chief Richie Constantino
Lake Monticello Fire Dept.
Lake Monticello, VA

Dear Chief, Constantino,

Atlantic Emergency Solutions, the Pierce authorized Sales and Service dealership in Virginia, is pleased to offer the Lake Monticello Fire Department our proposal on behalf of Pierce Manufacturing for a new 2023 Pierce Enforcer 100" Aerial Tower with T3 Rear Steer. We have thoughtfully tailored our proposal around the Department's requirements.

Pierce Manufacturing is North America's leader in the fire/rescue industry. Pierce has been building America's finest since 1917.

Currently we have six (6) factory trained service centers in Virginia with one (1) located in Charlottesville, VA to handle all of the specialized requirements for servicing your emergency apparatus. Mobile service vehicles and 24/7 Emergency Services are also available through our Charlottesville Service Center.

This will provide Fluvanna County with the most experienced, fastest responding, and the most cost-effective solution to keep your emergency units in service. No other dealership in the Commonwealth of Virginia has made a greater commitment to service.

Pierce Enforcer 100' Aerial Tower proposal # 759	\$1,680,905.00
Prepayment discount when \$1,375,071.00 is received within two weeks of execution of contract (includes P-Bond).	<u>-57,325.00</u>
Total purchase price:	\$1,623,580.00

***Pricing is valid until January 31, 2022 (PO or contract must be received by this date)**

As always, we remain at your disposal to answer any questions or provide further information.

Sincerely,

Kevin Sandridge
Vice President



5712 Hill Top Street
Crozet, Virginia 22932
(434) 953-5153 (Cell)

HGACBuy		CONTRACT PRICING WORKSHEET For MOTOR VEHICLES Only		Contract No.:	FS12-19	Date Prepared:	12/10/21
<p><i>This Worksheet is prepared by Contractor and given to End User. If a PO is issued, both documents MUST be faxed to H-GAC @ 713-993-4548. Therefore please type or print legibly.</i></p>							
Buying Agency:	County of Fluvanna, VA			Contractor:	Atlantic Emergency Solutions		
Contact Person:	Cyndi Toler			Prepared By:	Kevin Sandridge		
Phone:	434-591-1930 Ext 1124			Phone:	434-953-5153		
Fax:				Fax:			
Email:	ctoler@fluvannacounty.org			Email:	ksandridge@atlanticemergency.com		
Product Code:	FS19VA09	Description:	Pierce Arrow 100' Mid Mount Telescoping Ladder with Platform				
A. Product Item Base Unit Price Per Contractor's H-GAC Contract:							\$1,386,599.00
B. Published Options - Itemize below - Attach additional sheet(s) if necessary - Include Option Code in description if applicable.							
(Note: Published Options are options which were submitted and priced in Contractor's bid.)							
Description		Cost	Description		Cost		
			Subtotal From Additional Sheet(s):				\$287,192.00
			Subtotal B:				\$287,192.00
C. Unpublished Options - Itemize below / attach additional sheet(s) if necessary							
Description		Cost	Description		Cost		
			Subtotal From Additional Sheet(s):				-\$9,886.00
			Subtotal C:				-\$9,886.00
Check: Total cost of Unpublished Options (C) cannot exceed 25% of the total of the Base Unit Price plus Published Options (A+B).							For this transaction the percentage is:
							-0.59%
D. Total Cost Before Any Applicable Trade-In / Other Allowances / Discounts (A+B+C)							
Quantity Ordered:	1	X Subtotal of A + B + C:	1663905	=	Subtotal D:	\$1,663,905.00	
E. H-GAC Order Processing Charge (Amount Per Current Policy)						Subtotal E:	\$2,000.00
F. Trade-Ins / Other Allowances / Special Discounts / Freight / Installation							
Description		Cost	Description		Cost		
Prepayment Discount		-\$57,325.00	Discount				
Delivery to Fluvanna County		\$3,000.00					
Three (3) factory trips for four (4) department personel		\$12,000.00			Subtotal F:		-\$42,325.00
Delivery Date:		18 months	G. Total Purchase Price (D+E+F):				\$1,623,580.00

Pulse Number	Qty	Description	Published Options	Unpublished Options
111	1	T3 Tandem Suspension	\$22,356.00	
126	1	Safety Bands (pair)	\$1,104.00	
127	1	Mud Flaps	\$635.00	
134	1	Air inlet-outlet	\$759.00	
136	1	12 or 120 volt air compressor	\$1,945.00	
137	1	Brake fittings compression type	\$1,507.00	
144	1	Cummins X12 to X15	\$23,314.00	
145	1	Cummins x15 565 to 600 hp	\$7,762.00	
150	1	EVS 4000 TO 4500 PR	\$11,843.00	
151	1	Aggressive Down shift	\$150.00	
153	1	Exhaust Extension Plymo or Nederman	\$696.00	
166	1	Linex Bumper Coating	\$479.00	
173	1	Stainless Door Jamb Scuffplates	\$756.00	
174	1	Mounting plate on engine tunnel	\$529.00	
175	1	Electric Windows	\$2,195.00	
179	1	Safety System	\$10,601.00	
180	1	Driver Safety Seat	\$968.00	
181	4	SCBA Safety Seat	\$3,840.00	
186	2	EMS Compartment in Cab	\$5,594.00	
187	1	EMS Compartment w outside access (each)	\$2,968.00	
189	1	Cab step 2" larger mid and bottom	\$1,233.00	
190	1	Handrail with LED Lighting Cab	\$604.00	
192	1	Cab Windows Factory Tint	\$528.00	
208	6	Spare 12 volt power (each)	\$876.00	
133	1	Collision Mitigation	\$2,904.00	
222	1	Camera System, Sides and rear to mux	\$4,228.00	
229	1	Camera Stabilizer without lazer	\$4,336.00	
232	1	Intercom System (up to 6 position)	\$3,379.00	
234	5	Intercom Headset - Wired	\$2,790.00	
215	1	install Customer radio	\$993.00	
237	1	IOTA Charger	\$1,242.00	
245	1	Auto-eject 20 amp	\$567.00	
249	1	Batteries 6 total	\$1,114.00	
252	1	430 amp Delco alternator	\$4,101.00	
254	1	LED body perimeter additional	\$2,284.00	
255	1	LED Headlights	\$2,081.00	
260	1	12 volt LED Hi-Viz Brow Full single	\$5,467.00	
262	5	12 volt-Hi Viz LED (per light)	\$11,460.00	
266	1	Tail lighting LED Upgrade	\$1,548.00	
296	1	LED Compartment Lighting base upgrade lighting	\$1,974.00	
310	9	Adjustable Compartment shelves	\$1,890.00	
316	1	Adjustable slide-out tray	\$760.00	
315	3	Toolboard in Slide-out tray	\$3,855.00	
314	1	Slide-out floor tray	\$883.00	
320	5	Vertical Partition	\$1,400.00	
326	1	SCBA Cylinder storage in fender panel double (each)	\$943.00	
327	1	SCBA Cylinder storage in fender panel triple (each)	\$1,006.00	
331	4	Add Dura Surf (per each)	\$104.00	
365	2	Add 1" Cargo Netting to cross/speedlay (2)	\$884.00	
390	1	Airhorn at activation pump panel	\$193.00	
422	1	Q2B Siren	\$4,322.00	
438	1	Hydraulic 6 KW	\$19,883.00	
459	1	Electric Cord Reel with 200' of 10/3	\$2,859.00	
461	6	Electrical Receptacle duplex (per each) 15 or 20 amp	\$1,884.00	
473	1	AC Power to Tip	\$7,330.00	

[illegible]

	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	#N/A	\$0.00	
	Base Bid	\$1,386,599.00	
	Published Options	\$287,192.00	
	Total Published Options	\$1,673,791.00	
	Unpublished Options	\$9,886.00	-0.59%
	Total Options w/o HGAC Fee	\$1,663,905.00	

F. Airport Rescue Fire-Fighting Vehicles		2021 Updated Pricing
FS19UF01	Oshkosh Striker 4x4, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (375/750 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (1500 gal.), Foam Tank Capacity (210 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$834,809.00
FS19UF02	Oshkosh Striker 6x6, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (3000 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$898,242.00
FS19UF03	Oshkosh Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQA, Single Stage Centrifugal, 1950 gpm at 240 psi)	\$1,048,535.00
FS19UF04	Oshkosh New Generation Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi), dual engine driveline	\$1,215,945.00
FS19UF05	Oshkosh Stinger Class 2 ARFF vehicle; 2-Door Ford 4x4 F550 Cab/chassis, 2 Passenger Seating, Bumper Turret, one (1) twin agent handline, Water Tank Capacity (300 gal.), Foam Tank Capacity (40 gal.), Dry Chemical 500 pounds.	\$353,488.00
FS19UF06	Oshkosh H-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 50,000 GVWR, Single Axle	\$355,483.00
FS19UF07	Oshkosh HT-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 55,000 GVWR, Single Axle	\$410,225.00
FS19UF08	Oshkosh P-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 51,000 GVWR, Single Axle	\$312,991.00
V. Pierce		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19VA01	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$896,731.00
FS19VA02	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$931,959.00
FS19VA03	Pierce Enforcer Chassis 4-Door 75' Aluminum Rear Mounted Telescoping Ladder, Formed Aluminum Body	\$881,793.00
FS19VA04	Pierce Arrow Chassis 4-Door 100' Aluminum Rear Mount Aerial, Aluminum Body, Tandem Axle	\$1,181,318.00
FS19VA05	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Rear-Mounted Telescoping Ladder	\$995,504.00
FS19VA06	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 107' Rear-Mounted Telescoping Ladder	\$1,043,437.00
FS19VA07	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 110' Rear-Mounted Telescoping Platform	\$1,095,017.00
FS19VA08	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 105' Rear-Mounted Telescoping Ladder (500#)	\$1,044,283.00
FS19VA09	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	\$1,386,599.00
FS19VA10	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Rear-Mounted Telescoping Ladder with Platform (750#)	\$1,315,704.00
FS19VA11	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Tractor Drawn - Mid-Mounted Telescoping Ladder (#500)	\$1,327,786.00

B. Wildland Fire Apparatus (Brush Fire)		
FS19VB01	Pierce Brush Fire Apparatus, Ford F450, Formed Aluminum Utility Body	\$145,605.00
FS19VB02	Pierce Brush Fire Apparatus, Ford F-550 Mini Pumper 500 gpm, 300 tank	\$225,803.00
FS19VB03	Freightliner 4-Door 4 x 4 Wildland, 500 water, 1000 gpm Pump	\$381,906.00
C. Pumper Fire Apparatus		
FS19VC01	M2 Freightliner, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$277,201.00
FS19VC02	IHC, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$286,400.00
FS19VC03	KW, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$280,129.00
FS19VC04	Peterbilt, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$289,319.00
FS19VC05	Pierce Saber 4- Door Full Tilt Aluminum Cab, Ford Engine, Aluminum Body, 1250 gpm, mid-mounted Pump	\$424,457.00
FS19VC06	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$478,284.00
FS19VC07	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$530,667.00
FS19VC08	Pierce Velocity, 4- Door Full Tilt Cab, Aluminum Long Body, 1250 gpm mid-mounted Pump	\$606,647.00
FS19VC09	Pierce Dash CF, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, PUC Body Pumper	\$674,946.00
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19VD01	Ford F-550 4- Door, 12 'Non-Walk-in Formed Aluminum Body	\$161,755.00
FS19VD02	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$218,441.00
FS19VD03	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$220,384.00
FS19VD04	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$213,947.00
FS19VD05	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$225,380.00
FS19VD06	Pierce Saber FR, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Encore Body 18.5'	\$415,912.00
FS19VD07	Pierce Enforcer 4-Door, Aluminum Cab, Single Axle, Formed Aluminum Body, Non Walk-in HDR Body	\$535,557.00
FS19VD08	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Non-Walk-in HDR Body	\$639,536.00
FS19VD09	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$314,977.00
FS19VD10	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$317,620.00
FS19VD11	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$312,502.00
FS19VD12	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$319,978.00
FS19VD13	Pierce Enforcer 4-Door, Full Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-in HDR Body	\$641,716.00
FS19VD14	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in HDR Body	\$738,751.00

FS19VD15	Pierce Velocity 2-Door, Aluminum Cab, Tandem Axle, Combination Formed Aluminum Body	\$783,656.00
FS19VD16	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in Communications Body	\$814,594.00
E. Pumper/Tankers & Tankers		
FS19VE01	Freightliner 2 Door, Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,692.00
FS19VE02	IHC 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$292,562.00
FS19VE03	Kenworth 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,900.00
FS19VE04	Peterbilt 2dr Single Axle Tanker, Aluminum w/2000 water & 500 pump	\$318,265.00
FS19VE05	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted	\$533,395.00
FS19VE06	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted	\$626,487.00
FS19VE07	Freightliner 2dr, Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$319,685.00
FS19VE08	IHC 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$332,494.00
FS19VE09	Kenworth 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$308,869.00
FS19VE10	Peterbilt 2dr Tandem Axle Tanker, Aluminum w/3000 water & 500 pump	\$320,587.00
FS19VE11	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$531,620.00
FS19VE12	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$646,141.00
FS19VE13	Pierce Velocity, 4-Door Aluminum Cab, Tandem Axle, Aluminum Pumper/Tanker 2000 Gallon Body, 1500 GPM Pump	\$660,849.00

FORM E - PUBLISHED OPTIONS		Procurement	FS12-19
Offeror Name:			
Notes: (Important)	<p>1) Bid each Option on a single separate line. Bidder is responsible to identify each item with a specific code or part number.</p> <p>2) Use a single Form E for ALL items. Add/Insert additional lines as necessary.</p> <p>3) Completely describe each option, including manufacturer's code or part numbers as appropriate. Each item listed MUST have a unique code or part number.</p> <p>4) Options which replace standard equipment on a base bid Item on Form D should be priced net of any credit due for the replaced item.</p> <p>5) Options which are shown as upgrades/downgrades of a base bid item on Form D should be priced at the differential amount between the base bid item and the option.</p> <p>6) You encouraged to offer specific manufacturer's catalogs (eg. Whelan, Fed Signal, etc.) as options, with 'List Less' or 'Cost Plus' percentages for pricing. Copy of catalog should be supplied w/bid.</p>		
Note: Bidder must identify each option bid with an identifying Code or Part No. that should be referenced on all Contract Pricing Worksheets			
Code or Part No.	Option Description	2021 Pricing	
OSK-1	110 volt auxiliary air compressor with auto-eject shore power connection	\$2,353.00	
OSK-2	110 volt engine preheater with auto-eject shore power connection	\$610.00	
OSK-3	Battery charger with auto-eject shore power connection	\$835.00	
OSK-4	Air inlet at rear or on either side of cab with auto-eject connection	\$424.00	
OSK-5	Air outlet on either side of cab with 50' of hose and a tire gauge	\$166.00	
OSK-6	Air hose reel in upper compartment with 150' of 1/2" hose	\$3,107.00	
OSK-7	Alternating flashing feature for headlights "wig wag"	\$173.00	
OSK-8	Two driving and two fog lights	\$413.00	
OSK-9	LED ground lighting	\$552.00	
OSK-10	Monitoring and Data Acquisition System [MADAS]	\$8,544.00	
OSK-11	Two defroster fans in cab	\$143.00	
OSK-12	Additional seat (3 seats are standard)	\$999.00	
OSK-13	Upgrade to Smartdock hands' free SCBA bracket for one crew seat	\$547.00	
OSK-14	Add roof hatch access step in cab	\$776.00	
OSK-15	High output dual air conditioning	\$5,894.00	
OSK-16	Streamlight brand rechargeable flashlights in cab - qty 2	\$495.00	
OSK-17	Streamlight brand rechargeable flashlights in cab - qty 4	\$989.00	
OSK-18	Medical storage compartment in cab	\$2,066.00	
OSK-19	Power strip in cab with shore power provisions	\$757.00	
OSK-20	Ladders with fixed mounting on roof - Duo Safety 900A-24 and Little Giant Model 26	\$2,614.00	
OSK-21	Height adjustable roll-out shelf in lower storage compartment	\$797.00	
OSK-22	Height adjustable fixed shelf in lower storage compartment	\$690.00	
OSK-23	Slide out, tilt down tray in an upper compartment	\$1,150.00	
OSK-24	Stowable step for upper compartment access	\$1,488.00	
OSK-25	Storage for two spare SCBA cylinders in the cab	\$783.00	
OSK-26	Driver and turret operator foot switches for siren and air horns	\$537.00	
OSK-27	Rear vision camera system including a rear facing color camera mounted at the top rear of the vehicle	\$2,982.00	
OSK-28	Forward Looking Infrared (FLIR) camera with pan and tilt	\$19,358.00	
OSK-29	Digital recorder with forward facing camera	\$2,425.00	
OSK-30	Continuous duty cycle central lubrication system	\$6,751.00	
OSK-31	Spare tire and wheel	\$3,723.00	
OSK-32	Central tire inflation/deflation system for 4x4 vehicle	\$27,170.00	
OSK-33	Central tire inflation/deflation system for 6x6 vehicle	\$32,606.00	

OSK-34	Central tire inflation/deflation system for 8x8 vehicle	\$38,038.00
OSK-35	Beadlocks for 4x4 vehicle including spare	\$2,656.00
OSK-36	Beadlocks for 6x6 vehicle including spare	\$3,985.00
OSK-37	Beadlocks for 8x8 vehicle including spare	\$5,311.00
OSK-38	Beadlock press	\$1,241.00
OSK-39	Bronze water pump housing in place of standard cast iron housing	\$10,475.00
OSK-40	Water/foam hose reel with 150' of 1.25" hose and 95 gpm nozzle in a lower compartment	\$9,087.00
OSK-41	Swing-out feature for hose reel	\$638.00
OSK-42	Limited structural panel on the left side - no suction connections	\$3,381.00
OSK-43	Structural panel with one 2-1/2" suction inlet, one 5" suction inlet and a priming pump on the LH side	\$5,407.00
OSK-44	Structural panel with one 2-1/2" suction inlet, one 5" suction inlet and a priming pump on the LH side with "Fill from Draft" provisions	\$6,031.00
OSK-45	One 2-1/2" foam / water producing discharge outlet with a bleeder valve on each side - 2 total	\$2,722.00
OSK-46	Two 2-1/2" foam / water producing discharge outlets with bleeder valves on each side - 4 total	\$5,026.00
OSK-47	Water tank shut-off	\$2,504.00
OSK-48	One 2-1/2" and 4-1/2" water tank fill connection on right hand side	\$1,996.00
OSK-49	550 lb. dry chemical system with fixed dual agent hosereel holding 100' of 1" twinned hose and a Hydro-Chem type nozzle in a lower compartment. Includes agent vessel and propellant system with system indicators in cab	\$28,106.00
OSK-50	Spare nitrogen cylinder for dry chemical system.	\$1,470.00
OSK-51	Foam transfer pump - electric	\$9,421.00
OSK-52	Foam transfer pump - pneumatic	\$4,409.00
OSK-53	Electronic foam proportioning system in place of standard fixed rate, around the pump foam proportioning system	\$20,893.00
OSK-54	375/750 gpm high volume, dual rate bumper turret in place of standard 300 gpm bumper turret - 4x4 only	\$5,870.00
OSK-55	375/750 gpm high volume, dual rate, low-attack type bumper turret in place of standard 300 gpm bumper turret - 4x4 only	\$24,895.00
OSK-56	625/1250 gpm high volume bumper turret in place of standard 300 gpm bumper turret - 6x6 and 8x8 only	\$5,870.00
OSK-57	625/1250 gpm high volume, low attack bumper turret in place of standard 300 gpm bumper turret - 6x6 and 8x8 only	\$24,895.00
OSK-58	Hydro-Chem type direct injection foam/water/dry chemical nozzle option added for any dual rate roof or bumper turret	\$6,361.00
OSK-59	Exterior mounted water and foam tank level lights each side	\$613.00
OSK-60	Compartment mounted water and foam tank level lights each side	\$409.00
OSK-61	One HID light on roof turret	\$518.00
OSK-62	One HID light on bumper turret	\$648.00
OSK-63	One LED spotlight on roof turret	\$692.00
OSK-64	One LED spotlight on bumper turret	\$858.00
OSK-65	Snozzle 50' High Reach Extendable Turret (HRET) with piercing nozzle in place of standard roof turret *(Available on Oshkosh 4x4, 6x6 and 8x8 chassis)	\$222,934.00
OSK-66	Snozzle 65' High Reach Extendable Turret (HRET) with piercing nozzle in place of standard roof turret. *(Only available on Striker 6x6, 8x8 vehicle)	\$265,072.00
OSK-67	One HID light on Snozzle boom end	\$648.00
OSK-68	One LED light on Snozzle boom end	\$858.00
OSK-69	Forward Looking Infrared (FLIR) camera on Snozzle boom end	\$18,542.00
OSK-70	Color video camera on Snozzle boom end	\$2,385.00
OSK-71	Undertruck nozzles	\$2,766.00

OSK-72	Winterization system for vehicle's firefighting compartments	\$12,397.00
OSK-73	460 lb. Halotron clean agent system with fixed hosereel holding 150' of 1" hose and a Halotron nozzle in an upper compartment. Includes agent vessel and propellant system with system indicators in cab.	\$30,099.00
OSK-74	Spare argon cylinder for Halotron I system.	\$1,417.00
OSK-75	10 Kw Onan hydraulic generator.	\$16,311.00
OSK-76	Two 110 volt 750 watt sidelights above windshield (Requires generator)	\$1,165.00
OSK-77	Two 110 volt LED sidelights above windshield (Requires generator)	\$4,043.00
OSK-78	Two 110 volt 1000 watt pneumatic telescoping sidelights on each side - four total (Requires generator)	\$8,472.00
OSK-79	Two 110 volt LED manually telescoping sidelights on each side - four total (Requires generator)	\$12,367.00
OSK-80	Two cab mounted HID worklights - 24VDC	\$965.00
OSK-81	Two cab mounted LED worklights - 24 VDC	\$1,144.00
OSK-82	Two HID worklights per side four total - 24VDC	\$1,635.00
OSK-83	Two LED worklights per side four total - 24VDC	\$2,138.00
OSK-84	Two HID worklights at rear - 24VDC	\$814.00
OSK-85	Two LED worklights at rear - 24VDC	\$1,068.00
OSK-86	110 volt electric cable reel in an upper compartment with 200' of 12/3 SO safety yellow cord. (Requires generator)	\$3,928.00
OSK-87	Two 110 volt duplex (straight/twist) receptacles on each side of truck in a lower compartment. (Requires generator)	\$378.00
OSK-88	Four red LED mini light bars in place of standard red LED beacons on roof	\$4,211.00
OSK-89	Four premium red LED mini light bars in place of standard red LED beacons on roof	\$8,230.00
OSK-90	Lower perimeter red LED warning light system with two front facing, two rear facing and three lights per side in place of standard warning lights	\$714.00
OSK-91	Premium lower perimeter red LED warning light system with two front facing, two rear facing and three lights per side	\$2,086.00
OSK-92	Lower perimeter emergency warning switch to disable lower emergency lights when needed	\$173.00
OSK-93	Eco EFP Foam Testing System (EFP Proportioner)	\$11,097.00
OSK-94	Eco EFP Foam Testing System (Poppet Proportioner)	\$24,412.00
H1	Lubrication data plate	\$50.00
H2	Pintle hook at rear	\$156.00
H4	Aluminum tool box frame mounted	\$1,533.00
H5	Auto lube system for chassis only	\$4,791.00
H7	Coolant heater 1500 watt block type	\$448.00
H8	Scania DC13 500hp drive engine lieu of 350hp	\$10,847.00
H9	Engine oil pan heater (includes both engines, if applicable)	\$182.00
H11	Side access drain valves for engine fluids (includes engine oil, coolant & hydraulic oil on both engines, if applicable)	\$450.00
H15	29,000 LB front axle capacity in lieu of 27,000 LB capacity	\$3,122.00
H16	26,000 LB rear axle capacity with All Steer in lieu of 23,000 LB non AS	\$24,295.00
H17	Shock absorbers for one axle	\$837.00
H18	Spare tire mounted on rim	\$2,495.00
H19	Air conditioning	\$7,996.00
H21	Deluge system for cab	\$1,656.00
H22	5lb fire extinguisher in cab	\$195.00
H23	Radio in cab - AM/FM/Weather/CD	\$517.00
H24	Premium heated hi back seat or driver	\$165.00
H26	Heated wiper blades front	\$1,258.00
H27	Side window wipers unheated	\$769.00
H28	Side window wipers heated	\$1,032.00

H29	Cab mounted defroster fans	\$251.00
H31	Rear view back up camera	\$641.00
H32	Amber plow lights on cab light bar	\$346.00
H33	HID lights - one pair - on cab light bar	\$866.00
BL-DEB	Standard "Dual Engine Blower" snow blower package - 550 hp auxiliary engine	\$337,267.00
BL-SEB	Standard "Single Engine Blower" snow blower package	\$322,124.00
BL-RB	Standard "Road Blower" snow blower package - 550 hp auxiliary engine	\$472,220.00
BL1	670hp blower engine in lieu of standard 550	\$11,027.00
BL2	Aux engine oil pan heater	\$179.00
BL4	Spot cast chute - inc. 29K front and ballast bumper	\$16,157.00
BL5	Truck loading chute - inc. 29K front and ballast bumper	\$37,483.00
BL6	High speed blower system - variable torque ribbon motors (dedicated blower)	\$17,500.00
BL7	Hydraulic relief block	\$1,642.00
BL8	Add 18' broom head for multipurpose snow chassis	\$141,378.00
BR-XF	Standard front mount broom package - 350 hp auxiliary engine	\$308,993.00
BR1	Broom aux engine 500hp lieu of 350hp base	\$3,729.00
BR2	20 foot head in lieu of 18' head base	\$15,057.00
BR3	22 foot head in lieu of 18' head base	\$20,235.00
BR4	50/50 wire poly in lieu of all poly base	\$920.00
BR5	All wire in lieu of all poly base	\$1,125.00
BR8	Broom quick disconnect hoses	\$7,603.00
BR10	Marker lights on broom	\$728.00
BR11	Vibrator on broom head	\$2,637.00
BR12	Snow shed hood 18 foot length	\$8,895.00
BR13	Snow shed hood 20 foot length	\$9,361.00
BR14	Snow shed hood 22 foot length	\$9,743.00
HT1	Single side fuel fill	\$1,453.00
HT4	26,000 LB rear axle capacity with All Steer in lieu of 23,000 LB non AS	\$39,216.00
HT5	Rear tandem 46K LB capacity in lieu of single axle 23K	\$20,373.00
HT6	Rear tandem 46K LB capacity with All Steer in lieu of single axle 23K	\$71,167.00
HT7	500hp drive engine on HT lieu of base standard 350hp drive engine	\$3,729.00
HT8	Air conditioning	\$11,798.00
HT9	Cab deluge	\$2,994.00
HT10	Radio in cab - AM/FM/Weather/CD	\$1,052.00
HT11	Premium heated hi back seat or driver	\$781.00
HT13	Heated wiper blades front	\$1,163.00
HT14	Side window wipers unheated	\$1,177.00
HT15	Side window wipers heated	\$2,105.00
HT16	Cab mounted defroster fans	\$298.00
HT18	Rear view back up camera	\$3,062.00
HT19	Amber plow lights on cab light bar	\$409.00
HT20	HID lights - one pair - on cab light bar	\$1,079.00
HT21	Oshkosh XT towed broom 18' width, all poly, 350 HP aux	\$400,429.00
HT22	500 HP aux engine in lieu of 385 HP base	\$3,812.00
HT23	20 foot head in lieu of 18' head base	\$15,389.00
HT24	22 foot head in lieu of 18' head base	\$20,682.00
HT25	50/50 wire poly lieu of all poly base	\$3,812.00
HT26	All wire in lieu of all poly base	\$3,912.00
HT27	Broom aux engine oil pan heater	\$387.00

HT28	Broom aux engine block heater	\$397.00
HT30	Marker lights on broom	\$745.00
HT31	Vibrator on broom head	\$2,695.00
HT32	Snow shed hood 18 foot length	\$11,543.00
HT33	Snow shed hood 20 foot length	\$12,659.00
HT34	Snow shed hood 22 foot length	\$13,000.00
HT35	20' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$54,892.00
HT36	22' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$56,196.00
HT37	24' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$57,400.00
P1	6x6 chassis in lieu of 4x4, 51,000 pounds GVWR, 175" CT	\$14,160.00
P2	Engine hp upgrade package	\$4,876.00
P3	Engine brake	\$4,890.00
P4	75 gallon fuel tank lieu of 50 gallon std	\$547.00
P5	5-speed tranmission in lieu of 4-speed	\$519.00
P8	26,000 LB rear axle capacity in lieu of 23,000 base	\$7,223.00
P9	30,000 LB rear axle capacity in lieu of 23,000 base	\$16,605.00
P11	26,000 LB rear axle capacity with All Steer in lieu of 23,000 base	\$31,998.00
P12	46,000 LB tandem rear axle capacity with All Steer in lieu of base	\$33,577.00
P13	Air suspension cab	\$1,304.00
P14	Heated front wipers	\$503.00
P15	Heated front windshield	\$3,557.00
P16	Side window wipers	\$918.00
P17	Power side windows	\$872.00
P18	Air conditioning	\$3,757.00
P19	Radio in cab - AM/FM/Weather/CD	\$999.00
P20	High idle and cruise control	\$683.00
P21	Alternator upgrade	\$1,171.00
P22	Trailer electrical system	\$366.00
P25	10-12 yd dump body (painted steel), 18' flared plow with hands free DIN hitch, central hydraulics (4x4 chassis)	\$100,779.00
P26	V-box 14' Stainless Steel Spreader, twin spinner discs, 18' Flared Plow with hands free DIN hitch, 800 gallow de-icing tanks/pre-wet, central hydraulics, tarp system (Must select 6x6 Chassis above)	\$218,822.00
101	Add Frame liner Commercial	\$1,137.00
102	Add Frame Liner Custom	\$1,902.00
103	Aerial Frame liner	\$4,840.00
104	Galvanized Frame structure	\$3,390.00
105	upgrade to 22,800# front axle	\$2,280.00
106	upgrade to 27,000# rear axle	\$2,295.00
107	upgrade to 31,000# rear	\$5,475.00
108	upgrade rear single axle to 33,500	\$5,124.00
109	TAK-4 Suspension	\$17,788.00
110	T3 Single Suspension	\$13,559.00
111	T3 Tandem Suspension	\$22,356.00
112	Change to Air Ride Suspension, Single	\$3,075.00
113	Change to Air Ride Suspension, Tandem	\$7,182.00
114	Change to Dynalastic Suspension	\$5,066.00
115	4 x 4 Option Commercial	\$27,458.00
116	4 x 4 Option Custom	\$25,768.00
117	Tire Chains - Rear Axle	\$4,580.00

118	Auto Lube, 22 point	\$5,708.00
119	Auto Lube Lincoln 34 Point	\$14,258.00
120	Aluminum Wheels Commercial (Split Rear)	\$1,013.00
121	Credit Custom Aluminum Wheels, front	-\$2,166.00
122	Credit Aluminum Wheels, Rear Single Axle	-\$3,901.00
123	Credit Aluminum Wheels Tandem Axle	-\$4,977.00
124	Spare Steel Wheel and Mounted tire	\$2,488.00
125	Electronic Tire Pressure Management	\$1,548.00
126	Safety Bands (pair)	\$1,104.00
127	Mud Flaps	\$635.00
128	Wheel Chocks and Mounts	\$1,013.00
129	Disc Brakes Front	\$1,307.00
130	Disc Brakes, Rear, Single	\$848.00
131	Disc Brakes, Rear, Tandem (per)	\$1,689.00
132	ABS upgrade to ESC/ABS/ATC	\$6,533.00
133	Collision Mitigation	\$2,904.00
134	Air inlet-outlet	\$759.00
135	Additional Air Tanks	\$404.00
136	12 or 120 volt air compressor	\$1,945.00
137	Brake fittings compression type	\$1,507.00
138	Cummins ISB 360 to ISL 330	\$3,161.00
139	Paccar 330 to 380	\$1,483.00
140	Cummins L9 400hp to 450hp L9	\$2,205.00
141	Cummins L9 450hp to Detroit DD13 470 hp	\$21,166.00
142	Detroit DD13 470 to 525	\$5,020.00
143	Cummins 450 to x12	\$26,163.00
144	Cummins X12 to X15	\$23,314.00
145	Cummins x15 565 to 600 hp	\$7,762.00
146	Emergency Shutdown for Engine, Air w/ reset	\$1,455.00
147	1000 Watt Immersion Heater	\$625.00
148	Exhaust brake to Engine Brake Commercial	\$1,619.00
149	EVS 3000 TO 4000	\$10,130.00
150	EVS 4000 TO 4500 PR	\$11,843.00
151	Aggressive Down shift	\$150.00
152	Telma Retarder, Single Axle	\$15,895.00
153	Exhaust Extension Plymo or Nederman	\$696.00
154	Magnetic Grabber	\$1,041.00
155	Exhaust Diffuser - Care	\$696.00
156	Increase DEF Capacity	\$536.00
157	75 gallon fuel tank	\$1,251.00
158	Steering with controls	\$1,627.00
159	Add Extended Bumper	\$2,448.00
160	Add 26" Extended underslung Bumper	\$5,574.00
161	Bumper tray with cover	\$1,015.00
162	Bumper Sight Rod	\$574.00
163	Bumper compartment for Winch	\$1,817.00
164	Bumper Equipment Tray with cover	\$2,658.00
165	Bumper warning light recess	\$957.00
166	Linex Bumper Coating	\$479.00
167	Mirrors - change to Bus style cab corner	\$3,277.00
168	Mirrors - change to door mount bus style	\$2,247.00
169	Mirrors - change to One-Eleven style	\$2,414.00

170	Raised roof, custom cab	\$2,516.00
171	84" Extended Cab	\$5,724.00
172	Full height Cab doors - Raised Roof	\$2,384.00
173	Stainless Door Jamb Scuffplates	\$756.00
174	Mounting plate on engine tunnel	\$529.00
175	Electric Windows	\$2,195.00
176	Electric Door locks	\$1,215.00
177	110 Volt cab A/C	\$2,414.00
178	Danhard Style A/C	\$6,831.00
179	Safety System	\$10,601.00
180	Driver Safety Seat	\$968.00
181	SCBA Safety Seat	\$960.00
182	Bostrom Officer SCBA	\$1,788.00
183	Bostrom 2 F-Facing Crew	\$2,618.00
184	3 Seat to Crew (Commercial)	\$2,315.00
185	Clean Cab base option	\$1,619.00
186	EMS Compartment in Cab	\$2,797.00
187	EMS Compartment w outside access (each)	\$2,968.00
188	Upgrade SCBA Bracket to Hands Free	\$804.00
189	Cab step 2" larger mid and bottom	\$1,233.00
190	Handrail with LED Lighting Cab	\$604.00
191	Full height Cab doors - Raised Roof	\$2,009.00
192	Cab Windows Factory Tint	\$528.00
193	Comercial step upgrade package	\$1,383.00
194	Upgrade Freightliner M2-106 to M2-112	\$43,296.00
195	Upgrade International 2 door to 4 door	\$11,510.00
196	Upgrade to extended cab	\$4,825.00
197	Upgrade to Freightliner 2 door to 4 door	\$8,584.00
198	Upgrade Saber to Enforcer	\$9,422.00
199	Upgrade Enforcer to Impel	\$2,500.00
200	Upgrade Enforcer to Arrow	\$44,981.00
201	Upgrade Enforcer to Velocity	\$48,801.00
202	Upgrade Arrow to Velocity	\$13,689.00
203	Upgrade Arrow to Quantum	\$18,433.00
204	Upgrade Arrow to Dash CF	\$7,668.00
205	Velocity to Quantum	\$14,612.00
206	Upgrade Velocity to Dash CF	\$3,847.00
207	Remote Control Spot Lights	\$1,367.00
208	Spare 12 volt power (each)	\$146.00
209	Radio with Weatherband	\$1,122.00
210	Additional MUX Screen	\$3,000.00
211	GPS Navigation and preplan capable	\$816.00
212	install Customer MDT with power wiring	\$1,091.00
213	Install Customer Antenna	\$63.00
214	Install Customer GPS	\$399.00
215	install Customer radio	\$993.00
216	install customer Knox	\$190.00
217	install customer drug vault	\$458.00
218	Medi-Kool mk18	\$5,724.00
219	2 Person Command Center Configuration	\$14,190.00
220	Roll Alert System	\$4,093.00
221	Camera System Rear only	\$1,140.00

222	Camera System, Sides and rear to mux	\$4,228.00
223	Camera System, Sides and rear to monitor	\$2,246.00
224	Camera System with DVR	\$3,206.00
225	Camera System interior cab and exterior body	\$8,347.00
226	Camera System Fotokite modem portable	\$45,584.00
227	Camera System Fotokite Compartment mounted	\$48,645.00
227m	Camera System Fotokite w modem Compartment mounted	\$50,800.00
228	Camera body to weatherprof panel monitor	\$1,537.00
229	Camera Stabilizer without lazer	\$4,336.00
230	Camera, Stabilizer Placement with Command Zone Display with Laser	\$6,177.00
231	Intercom System (BASIC)	\$2,624.00
232	Intercom System (up to 6 position)	\$3,379.00
233	Intercom Wireless System	\$5,323.00
234	Intercom Headset - Wired	\$558.00
235	Intercom Headset - wireless	\$1,069.00
236	Idle Reduction Technology	\$4,227.00
237	IOTA Charger	\$1,242.00
238	Blue Sea 40 amp	\$1,795.00
239	Dual Pro Charger	\$909.00
240	Kussmaul Charger	\$1,915.00
241	Kussmaul Pump plus	\$2,791.00
242	Progressive p2180 (per unit)	\$1,893.00
243	Newmar Charger	\$1,633.00
244	Auto-eject 15 amp	\$541.00
245	Auto-eject 20 amp	\$567.00
246	Auto-eject 30 amp	\$1,283.00
247	Transfer switch	\$658.00
248	Sub Feed Box	\$225.00
249	Batteries 6 total	\$1,114.00
250	320 amp to 360	\$2,171.00
251	430 Amp Niehoff alternator	\$4,796.00
252	430 amp Delco alternator	\$4,101.00
253	LED cab lighting	\$1,020.00
254	LED body perimeter additional	\$2,284.00
255	LED Headlights	\$2,081.00
256	12 volt LED Scene - A	\$1,371.00
257	12 volt LED Scene - B	\$1,564.00
258	12 volt LED Flood Brow light A	\$2,102.00
259	12 volt LED Flood Brow light B	\$3,428.00
260	12 volt LED Hi-Viz Brow Full single	\$5,467.00
261	12 volt LED Hi-Viz Brow Double Lights	\$3,099.00
262	12 volt-Hi Viz LED (per light)	\$2,292.00
263	12 volt LED Flood Recessed or surface (per light) A	\$1,306.00
264	12 volt LED Flood Recessed or surface (per light) B	\$1,942.00
265	12 volt LED Flood Pole light (per light)	\$2,080.00
266	Tail lighting LED Upgrade	\$1,548.00
267	Tail Board Upgrade Package	\$1,903.00
268	Tanker Hose bed Package	\$4,859.00
269	Tanker folding tank storage manual	\$3,717.00
270	Tanker folding tank storage electric	\$10,232.00
271	Upgrade Tanker Step Package	\$1,861.00

272	Flush back body option	\$1,284.00
273	Rear step package with wrap bumper	\$2,825.00
274	Add Vinyl Cover for Crosslay Hose Bed	\$492.00
275	Hose Bed Cover, Aluminum	\$6,137.00
276	Hose Bed Cover, Vinyl	\$690.00
277	Hose Bed Cover, Roll-up	\$8,453.00
278	Additional Hosebed Divider	\$559.00
279	NY Hose Bed	\$3,013.00
280	PUC Body Configuration	\$13,629.00
281	Aerial body full depth per side	\$6,395.00
282	Pumper Body to Galvaneal	-\$2,779.00
283	Pumper Body to Stainless	\$11,250.00
284	Aerial Aluminum to stainless body	\$9,795.00
285	Long Pumper body	\$1,859.00
286	Compartment door locks (each)	\$83.00
287	PUC Flip-out steps	\$1,003.00
288	Catwalk-Hatch Compartment, Each	\$3,764.00
289	Underbody Compartments, each	\$2,788.00
290	Add Right High Side Compartments	\$4,107.00
291	Add Electric / Hydraulic Ladder Rack	\$11,294.00
292	Full Height - Depth Compartments	\$6,073.00
293	Ladder Storage next to tank	\$5,077.00
294	Winch 12,000#	\$6,009.00
295	Winch 9000#	\$3,396.00
296	LED Compartment Lighting base upgrade lighting	\$1,974.00
297	LED Compartment Lighting premium	\$3,375.00
298	Increase Booster Tank to: 1000 Gallons	\$993.00
299	Increase Booster Tank to: 1250 Gallons	\$4,174.00
300	Increase Booster Tank to: 1500 Gallons	\$6,920.00
301	2.5" Direct Tank Fill to Main Intake	\$4,740.00
302	Rear Direct tank fill electric	\$5,352.00
303	Direct Tank Fill Manual	\$1,411.00
304	manual rear dump with 90	\$4,564.00
305	air-electric rear dump	\$3,939.00
306	air-electric side dump with extender (each)	\$8,836.00
307	trough - hard suction (each)	\$1,736.00
308	hard suction hose (each)	\$1,297.00
309	Mate Flex in Enclosed Compartments Per Shelf	\$134.00
310	Adjustable Compartment shelves	\$210.00
311	Slide-out tool board	\$1,302.00
312	Swing-out tool board	\$1,932.00
313	Slide-out tool board in tray	\$1,269.00
314	Slide-out floor tray	\$883.00
315	Toolboard in Slide-out tray	\$1,285.00
316	Adjustable slide-out tray	\$760.00
317	Tilt-out adjustable tray	\$738.00
318	PacTrac in compartment	\$985.00
319	PegBoard in compartment	\$584.00
320	Vertical Partition	\$280.00
321	Horizontal Partition	\$311.00
322	3 Drawer C-Tech 24 wide	\$989.00
323	3 Drawer C-Tech 36 wide	\$2,118.00

324	4 Drawer C-Tech 48 wide	\$3,082.00
325	SCBA Cylinder storage in fender panel single (each)	\$715.00
326	SCBA Cylinder storage in fender panel double (each)	\$943.00
327	SCBA Cylinder storage in fender panel triple (each)	\$1,006.00
328	SCBA Storage in fender panel	\$1,166.00
329	Extinguisher Compartment	\$702.00
330	SCBA Storage Bins (each)	\$170.00
331	Add Dura Surf (per each)	\$26.00
332	Electric Cord Reel Compartment	\$577.00
333	750 GPM Pump to 1000 GPM Pump	\$2,314.00
334	Increase Pump from 1250 to 1500 gpm	\$2,812.00
335	Increase Pump from 1500 to 1750 gpm	\$3,577.00
336	Increase Pump from 1500 to 2000 gpm	\$4,179.00
337	add pump anodes (pair)	\$380.00
338	Add Mechanical Seal to Pump	\$926.00
339	Flow Meters, each	\$1,954.00
340	MIV Valves Electric with manual back-up (each)	\$7,522.00
341	Manual Ball Intake Valve	\$2,797.00
342	add 2.5" suction inlet	\$1,320.00
343	1.5" discharge front bumper	\$2,368.00
344	2.5" Discharge front bumper	\$3,274.00
345	Preconnect 1.5" with 2.0" plumbing - Speed or cross	\$2,542.00
346	Preconnect 2.5 or 3" plumbing - Speed or Cross	\$3,603.00
347	Add Front Suction Inlet 4-6"	\$7,603.00
348	Add Rear Suction Inlet	\$5,669.00
349	1.5" discharge	\$1,527.00
350	2.5" Discharge	\$1,896.00
351	3" Discharge	\$2,805.00
352	Add Large Diameter Rear Discharge	\$5,894.00
353	Add Large Diameter Side Discharge	\$6,015.00
354	add electric valve deluge plumbing	\$5,510.00
355	Dual voltage water heater with tanker	\$4,770.00
356	Extenda-gun 12"	\$4,279.00
357	Extenda-gun 18"	\$4,477.00
358	Electric Extenda Gun	\$6,671.00
359	Electric Deluge riser	\$7,405.00
360	Electric Deluge with foam by-pass	\$10,008.00
361	Wireless remote monitor	\$12,364.00
362	Provide (2) Speedlays IPO Crosslay with Rollers	\$5,905.00
363	Provide (2) Speedlays w/ Tray's IPO Crosslay with Rollers	\$8,134.00
364	Add Hinged-Type Aluminum Cover to Crosslay (per set of 2)	\$730.00
365	Add 1" Cargo Netting to cross/speedlay (2)	\$442.00
366	Crosslay roll-up door enclosure	\$2,814.00
367	Poly Tray additional	\$575.00
368	Hose Reel, Rear Compartment Mounted w/ 150' Hose	\$3,804.00
369	Hose Reel, above pump w/ 150' Hose	\$3,505.00
370	Hose Reel, Under Cab w/ 100' Hose	\$9,584.00
371	Akron 3096-95 gpm Single Agent System	\$6,114.00
372	Akron 3096-95 gpm Dual Agent System	\$7,616.00
373	Elkhart 240-95 Single Agent	\$6,465.00
374	Elkhart 240-95 Dual Agent	\$7,969.00
375	Foam Pro 1600 Single Agent to (3) Discharges	\$9,716.00

376	Foam Pro 2001 Dual Agent to (3) Discharges	\$1,896.00
377	Foam Pro 2002 Dual Agent to (3) Discharges	\$21,985.00
378	Pierce Husky 3, Single Agent (3) discharges	\$10,732.00
379	Pierce Husky 12 Single Agent (5) discharge	\$19,201.00
380	Pierce Husky 12 Dual Agent (5) Discharge	\$22,834.00
381	Pierce Husky 300 Industrial Foam System	\$112,135.00
382	Foam Cell 20 Gallons	\$1,644.00
383	Foam Cell 40 Gallons	\$2,050.00
384	Foam Cell 50 Gallons	\$2,732.00
385	Foam system by-pass to deluge or aerial	\$4,821.00
386	Foam Cell 300 Gallons	\$3,670.00
387	Pierce Hercules CAFS to (5) Discharges	\$31,888.00
388	Pump Panel Enclosure	\$3,930.00
389	Cold Climate Pump Package	\$9,734.00
390	Airhorn at activation pump panel	\$193.00
391	Add Top Pump Control	\$8,844.00
392	Tank Level LED Group	\$1,434.00
393	Tank level LED (Individual lights)	\$2,977.00
394	LED Backlite Gauges each	\$108.00
395	D-TEC	\$1,208.00
396	Will-Burt 7-30 Mast with Nycoil	\$13,498.00
397	Will-Burt 7-42 Mast with Nycoil	\$19,577.00
398	4 Channel Flash drive DVR	\$2,720.00
399	120 volt Body A/C, roof mounted with heat	\$2,531.00
400	2 person Command Center	\$14,605.00
401	Fire Pump 250 gpm	\$32,442.00
402	Haz-Mat Upgrade	\$23,190.00
403	LED Emergency Light Package	\$13,071.00
404	Upgrade to HDR Body	\$47,564.00
405	HDR Stainless Body	\$11,299.00
406	Water Tank - Rescue	\$11,848.00
407	Communications Center, 2 Desk with Conference	\$265,353.00
408	LED Interior Lighting	\$4,761.00
409	Tool Drawer(each)	\$1,302.00
410	Airbag Rack (each)	\$195.00
411	Rack, Plywood (10)	\$1,105.00
412	120 v Refrigerator 23 cu ft.	\$2,803.00
413	Vertical Exhaust in Compartment	\$799.00
414	Slide-out Module up to 132" each	\$19,259.00
415	Leveling System	\$10,242.00
416	Awning	\$3,940.00
417	Electric Awning	\$8,135.00
418	Quic-Ladder Access Ladder	\$2,239.00
419	Air Horns with 2 foot switches	\$170.00
420	Additional Speaker	\$676.00
421	Howler	\$1,179.00
422	Q2B Siren	\$4,322.00
423	Chrome Bell with manual pull string	\$1,785.00
424	GTT Emitter Roof/remote mounted	\$5,211.00
425	Roto Ray Emergency Light	\$2,881.00
426	Mini Lightbar over crew cab Doors	\$4,459.00
427	3 Mini LED Light over each side cab door	\$1,396.00

428	Traffic Directing light bar "A"	\$1,610.00
429	Traffic Directing light bar "B"	\$2,544.00
430	Dual Traffic Advisor Lights	\$2,552.00
431	Inverter	\$3,178.00
432	Diesel 7.5 KW	\$15,966.00
433	Diesel 10 KW Generator w/ Monitor Package	\$19,748.00
434	Diesel 20 KW water cooled	\$24,767.00
435	Gas EM400 3.5	\$6,305.00
436	Gas 5.5 KW	\$7,922.00
437	Hydraulic 3.6 kw	\$13,023.00
438	Hydraulic 6 KW	\$19,883.00
439	Hydraulic 8 KW	\$22,671.00
440	Hydraulic 10 KW	\$23,486.00
441	Hydraulic 15 KW	\$36,202.00
442	Hydraulic 30 KW	\$45,477.00
443	PTO Drive 15 KW	\$18,256.00
444	PTO Drive 25 kw	\$19,688.00
445	PTO Drive 40 Kw	\$23,918.00
446	500 Watt Tripod Flood Light	\$2,152.00
447	750 Watt Flood Light w/ pole	\$2,279.00
448	1000 Watt Flood Light w/pole	\$2,376.00
449	1500 Watt Flood Light - recessed	\$2,378.00
450	120 volt LED visor light	\$1,802.00
451	750 Watt Visor light	\$1,877.00
452	120 volt 150 watt LED w/ pole	\$2,742.00
453	120 volt 150 watt LED recessed/flush mount	\$2,215.00
454	120 volt 150 watt LED Pedestal	\$2,848.00
455	Light Tower 9000 watt	\$24,935.00
456	Light Tower 6000 watt	\$21,881.00
457	Light Tower 3000 Watt	\$18,215.00
458	Light Tower 12 volt 4 - Lights	\$14,100.00
459	Electric Cord Reel with 200' of 10/3	\$2,859.00
460	Electric Cord Reel with 200' of 10/3 in Front Bumper	\$3,215.00
461	Electrical Receptacle duplex (per each) 15 or 20 amp	\$314.00
462	Electrical Receptacle 30 amp (per each)	\$384.00
463	Cascade - 6 - 6000 PSI UN	\$16,553.00
464	Breathing air compressor	\$81,424.00
465	Breathing air booster pump	\$2,830.00
466	Breathing air fill-frag station	\$9,957.00
467	High Pressure Breathing Air Reel (200' hose)	\$3,478.00
468	Tool air reel with 150' hose	\$2,744.00
469	Hydraulic Reel, 100' x .25" Hose	\$6,509.00
470	Hydraulics package (2 reels with 100' hoses and 2 connector 12' hoses	\$15,069.00
471	Hannay reel with 100' Core Tech hose	\$8,506.00
472	Rescue Bulkhead fittings	\$2,007.00
473	AC Power to Tip	\$7,330.00
474	Full Depth & Full Height Compartments	\$6,800.00
475	Quick lock waterway	\$5,562.00
476	Provide Breathing Air to Tip	\$14,044.00
477	Add PUC pump, tank and crosslay to Tiller	\$97,386.00
478	Provide Super Duty 100' Aerial Ladder, In Addition to Base Price	\$108,790.00
479	Pumper Style Body for Single Axle 75'	-\$10,144.00

480	Remote Tip Controls, Ladder	\$6,715.00
481	Aerial Control Wireless MUX Aerials	\$10,133.00
482	Lyfe Brackets 3 in 1	\$1,820.00
483	LED Emergency Light Package Upgrade	\$9,502.00
484	Two (2) Monitors with Platforms	\$23,239.00
485	Single VUM Monitor Valve	\$2,449.00
486	2- VUM Manual Monitor Valves	\$5,571.00
487	Stokes Brackets behind Boom	\$903.00
488	Enclosed Stokes Box	\$2,028.00
489	Collision Avoidance	\$7,776.00
490	Aerial warning lighting A	\$4,804.00
491	Aerial Warning Lighting B	\$5,143.00
492	LED Rung Lighting	\$4,671.00
493	High Flow Waterway	\$8,447.00
494	12 Volt LED Tracking/tip lights	\$3,391.00
495	Two-tone Cab paint	\$2,341.00
496	Undercoating, Cab & Body, Ziebart	\$1,227.00
497	E-Coat Under body Chassis	\$1,912.00
498	Corrosion Prevention Treatment, ECK, Dissimilar Metal	\$2,172.00
499	Painted Grill	\$1,306.00
500	Pump Panel Drawing	\$1,316.00
501	50' Snozzle - P-50	\$221,886.00
502	65' Snozzle HS-2 65'	\$243,618.00
503	Graphics upgrade 1	\$1,973.00
504	Graphics Upgrade 2	\$2,960.00
505	Graphics Upgrade 3	\$3,948.00
506	Graphics Upgraded 4	\$4,934.00
507	Extended Chassis Warranty (per year)	\$5,016.00
508	Extended Body Warranty (per year)	\$6,499.00
509	Emergency Equipment Upfitting	
510	Responder Lighting Package	\$3,773.00
511	Squad Package	\$6,532.00
512	Commander Package	\$8,859.00
513	Arrestor Package	\$11,036.00
514	Director Package	\$13,619.00
515	Lieutenant Package	\$20,294.00
516	Chief's Package	\$25,333.00
517	Executive Package	\$25,714.00
518	Whelen Lighting and parts (Red 19 or PL 19.1)	43% Off List
519	Havis (HS 6/19)	32% Off List
520	ProGard (ProGard 2019 Catalog)	25% Off list
521	Minor P. M.	\$1,271.00
522	Major P. M.	\$2,084.00
523	Major P. M. w/ Transend	\$2,511.00
524	Aerial Maintenance	\$1,861.00
525	ARFF Unit Annual Inspection	\$1,804.00
526	ARFF Minor Service	\$2,621.00
527	ARFF Major Service	\$3,670.00
528	HRET Upgrade - Attackmaster 3	\$20,446.00
529	HRET Upgrade - Attackmaster 4	\$26,737.00
530	Foam System Maintenance Husky or similar (in shop)	\$1,358.00
531	Foam Testing ARFF	\$813.00

532	CAFS Service	\$1,358.00
533	Annual Pump Test (in shop)	\$446.00
534	Quantum Step Maintenance	\$393.00
535	Wheels off brake inspection - Single	\$315.00
536	Wheels off brake inspection - Tandem	\$524.00
537	A/C System Service	\$917.00
538	Power steering Flush	\$624.00
539	TAK4 Inspection	\$603.00
540	Husky/CAFS/Foam Service	\$1,504.00
541	Aerial Testing	\$1,835.00
542	Labor Rate, per hour	\$139.00
543	Each 150' Lengths of Utility Rope	\$222.00
544	150' life safety rope, at least 1/2" (12 mm) diameter meeting NFPA	\$289.00
545	150' Life Safety Rope, at least 5/8" (16 mm) diameter meeting NFPA	\$318.00
546	2.5 Gallon Water Extinguisher	\$183.00
547	Hose 1.75" x 50 Double Jacket with 1.50" couplings	\$230.00
548	Hose 2.50" x 50' Double Jacket with 2.50" Couplings	\$273.00
549	Hose 3.0" x 50' Double Jacket with 2.5" Couplings	\$340.00
550	4.00" x 100' Rubber Lined Hose	\$725.00
551	5.00" x 100' Rubber Lined Hose	\$798.00
552	Additional 10' Folding Ladder	\$579.00
553	Additional 14' Roof with Hooks	\$707.00
554	Air Bags - 56 Ton System	\$8,454.00
555	Thermal Imager Camera with charger	\$15,573.00
556	Combination Spanner Wrench with Bracket	\$183.00
557	Complete SCBA	\$9,961.00
558	Deck Gun with Tips, Manual	\$4,894.00
559	Deck Gun with Tips, Electric	\$9,567.00
560	1.5" Nozzle with shut-off	\$1,587.00
561	2.5" Nozzle with shut-off	\$1,766.00
562	Portable Monitor 2.5" Inlet	\$6,264.00
563	Each Approved Portable Fire Extinguisher: ABC	\$220.00
564	Each Approved Portable Fire Extinguisher: CO2	\$283.00
565	Each Hydrant Wrench Set	\$220.00
566	Each Portable Hand Light w/ Mounting Brackets	\$145.00
567	Each Scoop Shovel	\$105.00
568	First Aid Kit, 24 units, Fire Department Assortment	\$318.00
569	Little Giant Ladder	\$670.00
570	One Assorted Tool Box	\$556.00
571	One Hose Roller	\$406.00
572	One Pair of Bolt Cutters 24"	\$273.00
573	Cut-off Circular Saw	\$2,669.00
574	Chain Saw	\$2,268.00
575	Piston Intake	\$2,097.00
576	Rescue Tools - Power Unit, (2) Rams, Cutter, Spreader, Hoses	\$41,940.00
577	Silent Witness	\$1,446.00
578	Spare SCBA Bottles	\$1,573.00
579	Thermal Imager Camera System	\$35,596.00
580	Hose Clamp	\$651.00
581	Axe, Pick	\$145.00
582	Axe, Flat	\$139.00
583	PPV Fan, Gas	\$2,726.00

584	PPV Electric Fan	\$5,452.00
585	Poly mounts for tools, Rescue Equipment	\$1,296.00
586	380 Camera 8003040	\$9,832.00
587	380 Camera 8003030	\$11,631.00
588	Poly Console Box	\$1,944.00
589	Small poly console box	\$1,296.00
590	Pumper Custom Poly Mount Package	\$7,452.00
591	Aerial Custom Poly Mount Package	\$9,936.00
592	Rescue Custom Poly Mount Package	\$13,338.00
593	Engine Tunnel Custom Poly Console	\$1,728.00



Option List

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12/11/2021

Customer: Fluvanna County, VA
Representative Sandridge, Kevin
Organization: Atlantic Emergency Solutions, Inc
Requirements Manager:
Description: Lake Monticello VFD Ascendant Tower
Body: Aerial, 100AAT, Alum Body
Chassis: Enforcer Chassis, 100AAT

Bid Number: 759
Job Number:
Number of Units: 1
Bid Date: 06/01/2021
Stock Number:
Price Level: 40 (Current: 40)
Lane:

Line	Option	Type	Option Description	Qty
1	0769372		Boiler Plates, 100AAT Fire Department/Customer - Lake Monticello Volunteer Fire Department. Operating/In conjunction W-Service Center - Operating Miles - 25 Miles Number of Fire Dept/Municipalities - 25 Bidder/Sales Organization - Atlantic Emergency Solutions Delivery - Delivery representative Dealership/Sales Organization, Service - Atlantic Emergency Solutions	1
2	0018180		Single Source Compliance, Aerials	1
3	0584456		Manufacture Location, Appleton, Wisconsin	1
4	0584452		RFP Location: Appleton, Wisconsin	1
5	0588609		Vehicle Destination, US	1
6	0610784		Comply NFPA 1901 Changes Effective Jan 1, 2016, With Exceptions	1
7	0533351		Quint Fire Apparatus	1
8	0588612		Vehicle Certification, Aerial w/Pump	1
9	0681278		Agency, Apparatus Certification, Aerial w/Pump, U.L.	1
10	0536644		Customer Service Website	1
11	0620362		Consortium, HGAC	1
12	0537375		Unit of Measure, US Gallons	1
13	0529326		Bid Bond, 10%, Pierce Built Chassis	1
14	0050066		Performance Bond, 100% Req'd (Statement by Rep) **	1
15	0000007		Approval Drawing	1
16	0670758		Drawing, Compartment Layout, Aerial	1
17	0076695		Electrical Diagrams, (1) Paper Copy & (1) CD copy	1
18	0729149		Enforcer Chassis, 100AAT	1
19	0021007		Maximum Overall Height Size - 11' - .5"	1
20	0000110		Wheelbase Wheelbase - 271.00"	1
21	0000070		GVW Rating GVW rating - 76,640 lb	1
22	0729280		Frame Rails, 13.38 x 3.50 x .375, Enforcer	1
23	0756544		Frame Liner, Internal "C" 12.50" x 3.00" x .25", Full Length, 57"Q, 100AAT	1
24	0790821		Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Enforcer (425 Tires)	1
25	0090914		Suspension, Front TAK-4, 24,000 lb, DLX/Qtm/AXT/Vel/Enf	1
26	0087572		Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	1
27	0000322		Oil Seals, Front Axle	1
28	0899289		Tires, Front, Goodyear, Armor MAX MSA, 425/65R22.50, 20 ply, Fire Service Load	1
29	0752585		Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Dura-Black, Hub Pilot	1
30	0726771	SP	Axle, Rear, Oshkosh TAK-4 T3, 52,640 lb, Rear Steer, 2 Axle, 100AAT, ENF	1
31	0544244		Top Speed of Vehicle, 60 MPH	1
32	0639311	SP	Suspen, Rear, Oshkosh TAK-4, Independent, 52,640 lb	1
33	0000485		Oil Seals, Rear Axle	1
34	0596433		Switch, Rocker, Differential Lock, IPOS, MUX	1
35	0618521		Driver Controlled Differential Locks, Both Axles, Oshkosh TAK-4 IRS/T3 Tandem	1
36	0614549	SP	Pump, Thru-Pump, Oshkosh TAK-4, T3 Rear Steer	1
37	0639314		Tires, Rear, Goodyear, G296 MSA, 445/65R22.5, 20 ply,(AWS/IRS),TandemFS Load Rat	1
38	0693622		Wheels, Rear, 22.50" x 13.00", Steel, Hub Pilot, Tandem, AWS/IRS	1
39	0568081		Tire Balancing, Counteract Beads	1

Line	Option	Type	Option Description	Qty
40	0620569		Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Tandem Axle	1
			Qty, Tire Pressure Ind - 6	
41	0099183		Bands, Wheel Safety Bands, Tyron, Custom Chassis	1
			Location - Front Axle	
			Qty, Wheel Safety Band - 01	
42	0032044		Mud Flap, Full Width, Rear, No Logo	1
43	0002045		Mud Flap, Front and Rear, Pierce Logo	1
44	0646362		Chocks, Wheel, Worden HWGY- SB, Super Gripper	1
			Qty, Pair - 01	
45	0646364		Mounting Brackets, Chocks, Worden Safety, Model U815T	1
			Location, Wheel chock - Left side rear tire, rearward.	
			Qty, Pair - 01	
46	0010674		ABS/ATC Wabco Brake System, Tandem rear axle	1
47	0030185		Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	1
48	0581433		Brakes, Bendix, Cam, Rear, 16.50 x 7.00"	1
49	0020784		Air Compressor, Brake, Cummins/Wabco 18.7 CFM	1
50	0637583		Brake Reservoirs, 6,408 Cubic Inch Minimum Capacity, Saber FR/Enforcer	1
51	0790412		Air Dryer, Wabco System Saver 1200 IWT, Heated, SFR/Enf	1
52	0678701		Brake Lines, Nylon, Special Color	1
53	0551974		Inlet/Outlet, Air, w/Disconnect Fitting, Recessed	1
			Location, Air Coupling(s) - aa) DS Cab Corner	
			Qty, Air Coupling (s) - 1	
54	0690889		All Wheel Lockup (Aerial/Tanker Chassis), Aerial Master Activation	1
55	0014773		Compressor, Air, Gast 5HCD-10-M550X, 120V Brake Sys	1
			Location - Ceiling of the DS rear facing EMS compartment	
56	0660232		Drain, Remote Air Tank, Single Valve, All tanks, Location	1
			Location - Below the rubrail of compartment LS4 rear of stabilizer pad.	
57	0612549		Fittings, Compression Type, Entire Apparatus, Tandem Rear Axle	1
58	0728018	SP	Engine, Cummins X15, 605 hp, 1850 lb-ft, W/OBD, EPA 2021, Enforcer	1
59	0730808		Filters, Remote Mounted, Oil, Fuel, X15, VEL/AXT/Enf	1
60	0740990	SP	High Idle w/Electronic Engine, Auto On, 5 Minute Delay, Custom	1
61	0687994		Engine Brake, Jacobs Compression Brake, Cummins Engine	1
			Switch, Engine Brake - e) ISC/ISM/ISL9/ISX Hi Med Lo	
62	0644227		Clutch, Fan, Air Actuated, Saber FR/Enforcer	1
63	0654065		Clamps, Coolant Hose, Constant Torque, Excludes Engine	1
64	0640477		Air Intake, Metal Screen, Saber FR/Enforcer	1
65	0794743		Exhaust System, 5", X12/X15, MX13, Engine, Horizontal, Right Side	1
66	0690480		Exhaust, Modified for Plymovent System, 7.00" Diffuser, Flush W/ Rubrail, CARE	1
67	0788765		Radiator, Saber FR/Enforcer	1
68	0001090		Cooling Hoses, Rubber	1
69	0770792		Fuel Tank, 65 Gallon, Left Side Fill, Common Air Bottle Door	1
			Finish - Polished	
70	0001129		Lines, Fuel	1
71	0618791		DEF Tank, 4.5 Gallon, DS Fill, Forward of Axle, Common Air Bottle Door	1
72	0723716		Fuel Priming Pump, Electronic, Automatic, Cummins, No Swt Req'd	1
73	0582243		Shutoff Valves, Fuel Line @ Primary Filter, Cummins	1
74	0553019		Cooler, Engine Fuel, Imp/Vel, AXT/Qtm/Sab/DCF/SFR/Enf	1
75	0772543	SP	Fuel/Water Separator, Racor Inline, 2 Shutoff Valves	1
76	0642533		Trans, Allison 5th Gen, 4500 EVS P, w/Prognostics, Imp/Vel/DCF/Enf	1
77	0644809		Transmission, Shifter, 6-Spd, Push Button, 4500 EVS, 4+2 Mode, AXT/Qtm/DCF/Enf	1
			Trans, ratio - 4500 EVS, 6Spd	
78	0684459		Transmission Oil Cooler, Modine, External	1
79	0522824		Mode, Downshift, Aggressive downshift to 3rd, w/engine brake, 6 speed	1
80	0630574		Informational, Transmission Program, Shift To Neutral w/Prk Brk	1
81	0559012		Program, Transmission, Shift To Neutral, With Prk Brk	1
82	0565656		Fluid, 4000/4500 Series Transmission, TranSynd synthetic, IPOS, Custom	1
83	0001375		Driveline, Spicer 1810	1
84	0669988		Steering, Sheppard M110 w/Tilt, TAK-4, Eaton Pump, w/Cooler	1
85	0605356		Steering Wheel, 4 Spoke without Controls, Saber FR/Enforcer	1
86	0690274		Logo/Emblem, on Dash	1
			Text, Row (1) One - Lake Monticello	

Line	Option	Type	Option Description	Qty
86			Text, Row (2) Two - Vol. Fire Dept.	
			Text, Row (3) Three - .	
87	0725710		Bumper, 15" Extended, Alum, Painted, Integrated, 100AAT, Enforcer	1
88	0778092		Lift & Tow Package, Enforcer	1
89	0748896	SP	Tow Eyes, Painted Black, Below, 100AAT	1
90	0698960		Coating, Top Flange, Front Bumper, Outside Exterior, Line-X Coating, Black	1
91	0625650		Cab, Enforcer, 7000	1
92	0727969		Engine Tunnel, X15, Enforcer	1
93	0610508		Rear Wall, Interior, Adjustable Seating, Not Available	1
94	0632103		Rear Wall, Exterior, Cab, Saber FR/Enforcer	1
			Material, Exterior Rear Wall - Aluminum Treadplate Full Coverage	
95	0728890		Cab Lift, Elec/Hyd, Manual Override, Stabilizer Interlock, Enforcer 100AAT	1
96	0695930		Grille, Bright Finished, Front of Cab, Dash CF/Enforcer	1
97	0648912		Scuffplates, S/S At Cab Door Jambs and Handrails	1
			Material Trim/Scuffplate - c) S/S, Polished	
98	0647989		Trim, S/S Band, Across Cab Face, Arrow XT/Dash CF/Saber/Enforcer	1
			Material Trim/Scuffplate - e) S/S, Patterned	
99	0015440		No Chrome Molding, On side of cab	1
100	0521669		Mirrors, Retractable, West Coast Style, Htd/Rmt, w/Htd/Rmt Convex	1
101	0617152		Mirror, 10.5", Blind Spot Convex (Grote Brand) @ PS Cab Roof Corner	1
102	0648171		Door, Half-Height, Saber FR/Enforcer 4-Door Cab, Level Roof	1
			Key Model, Cab Doors - 751	
			Cab, Exterior Door Handle, Finish - 4-Door, Chrome/Black	
103	0655543		Door Panel, Brushed Stainless Steel, Saber/Enforcer 4-Door Cab	1
104	0630636		Controls, Electric Roll-Up Windows, 4dr, 4 Driver Controls, Saber FR/Enforcer	1
105	0762273	SP	Steps, 4-Door Cab, Dual, 2" Larger Bottom Step, Saber FR/Enforcer	1
			Light, Step, Additional - P25 LED	
			Step Well Material - Aluminum Treadplate	
106	0770200		Handrail, Exterior, Hansen, Knurled, Alum, LED Backlit, 4-Door Cab	1
			Color, Handrail Light - White	
			Control, Handrail Light - Parking Brake and Cab/Crew Cab Doors Open	
107	0784422		Step, Folding, Cab, Signature 4, LED	3
			Location, Additional Step - PS back of cab	
			Qty, - 03	
108	0892638		Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 6lts	1
			Color, Trim - Chrome Housing	
109	0583698		Fenders, S/S on cab, Extra Wide, Saber/Enf	1
110	0697329		Handrail, Extra - 21-30" Long	1
			Location - PS rear of cab- location TBD	
			Qty, - 1	
111	0042105		No Windows, Side of Crew Cab	1
112	0786279		Window Tint, Crew Cab Door, Right Side, Privacy Dark Gray	1
113	0786290		Window Tint, Crew Cab Door, Left Side, Privacy Dark Gray	1
114	0898687		Compt, Saddle, Transverse Crew Cab, Dbl Pan, Rec Tube, 70" SFR/Enf	1
			Light, Short Transverse Compt - Amdor, White, Hinged Side	
			Louvers - no louvers	
			Scuffplate, Material/Finish - S/S, Brushed	
			Finish, Exterior Cab Compt - D/A Finish	
			Door, Cab Exterior Cabinet - Double Pan, (2), Non-Locking	
			Door, Exterior Stop - 2-Web Strap	
			Door, Cab Interior Cabinet - Lap, Drop, (2) Lever, Non-Locking	
			Location, Recess Floor - Each	
115	0655880		Tubes, (4) Pike Pole, (2) Each Side, Storage, Transverse Compartment	1
			Pike Pole Make and Model - 6' NY Roof Hook	
116	0604171		Scuffplate, Brushed S/S, Bottom of Door Frame, Each	2
			Qty, - 02	
			location - Both auxiliary crew cab compartment	
117	0017525	SP	Roof, Aluminum Treadplate, Crew Cab Only	1
118	0644019		Holder, Cup, 4" Diameter x 4" High x 1" Slit on Side, Matting, Alum, Each	2
			Location - Mount at final	
			Qty, - 02	
119	0894089		Dash, Heavy Duty Metal, Enforcer	1
			Material Finish, Metal Dash - Black	

Line	Option	Type	Option Description	Qty
120	0607217		Mounting Provisions, 3/16" Alum, Full Engine Tunnel, Saber FR/Enforcer	1
			Mounting Provision Spacing - .75"	
			Material Finish, Cab Interior - Painted	
121	0750824		Cab Interior, Vinyl Headliner, Saber FR/Enforcer, CARE	1
			Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Black	
			Engine Tunnel Cover - Black Endure Vinyl	
			Cab Interior Rear Wall Material - Painted Aluminum	
122	0753903		Cab Interior, Paint Color, Saber FR/Enforcer	1
			Color, Cab Interior Paint - b) black	
123	0052100		Floor, Rubber Padded, Cab & Crew Cab, Saber/Enforcer	1
124	0722038		HVAC, Enforcer, w/X15, CARE	1
			Paint Color, A/C Condenser - Painted White #10	
			HVAC System, Filter Access - Tool Free Panel	
			Auxiliary Cab Heater - Both	
			HVAC System, Control Loc. - Panel Position #12	
			Plenum Cover Material - Metal, Painted	
125	0002120		Fan, Window Defrost, Driver's Side, One (1)	1
126	0012121		Fan, Window Defrost, Passenger's Side, One (1)	1
127	0639675		Sun Visor, Smoked Lexan, AXT, Imp/Vel, Saber FR/Enforcer	1
			Sun Visor Retention - Thumb Latch	
128	0634328		Grab Handles, Driver and Officer Door Posts, Saber FR/Enforcer	1
129	0583938		Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3" LED, Trim	1
			Qty, - 01	
130	0631830		Fluid Check Access, Saber FR/Enforcer, Arrow XT	1
131	0002508		Map Box, 3 Bin/30 deg Slant, Custom Chassis	1
			Qty, - 1	
			Location, Map Box/Straps - Final Inspection	
132	0583042		Side Roll and Frontal Impact Protection	1
133	0622618		Seating Capacity, 5 Seats	1
134	0636955		Seat, Driver, Pierce PSV, Air Ride, High Back, Safety, Saber FR/Enforcer	1
135	0636942		Seat, Officer, Pierce PSV, Fixed, SCBA, Safety, Saber FR/Enforcer	1
136	0620420		Radio Compartment, Below Non-Air Ride Seat, Saber FR/Enforcer	1
137	0768250		Cabinet, Rear Facing, LS, 26.75 W x 40.25 H x 23 D, Ext Acc Only, SFR/Enf	1
			Light, Short Cabinet - Amdor, Exterior, White, Left Side	
			Scuffplate, Material/Finish - S/S, Brushed	
			Material Finish, Shelf - Painted - Cab Interior	
			Shelf/Tray, Cabinet - (1) Shelf, Adjustable, 1.25" Up-Turned Lip	
			Door, Cab Exterior Cabinet - Double Pan, Non-Locking	
			Door, Exterior Stop - Stay Arm	
			Louvers, Cabinet - 0-No Louvers	
138	0102783		Not Required, Seat, Rr Facing C/C, Center	1
139	0630150		Seat, Rear Facing C/C, PS Outboard, Pierce PSV, SCBA, 17" Btm, Safety, SFR/Enf	1
140	0753631	SP	Cabinet, Forward Facing, LS, 22 W x 40 H x 16.25 D, Roll, SFR/Enf	1
			Light, Short Cabinet - Amdor, Interior, Red, Right Side and Amdor, Interior, Red, Left Side	
			Material Finish, Shelf - Painted - Cab Interior	
			Shelf/Tray, Cabinet - (1) Shelf, Adjustable, 1.25" Up-Turned Lip	
			Door, Cab Interior Cabinet - Rollup, Amdor, Anodized, Non-Locking	
			Louvers, Cabinet - 0-No Louvers	
141	0604650		Seat, Forward Facing C/C, Center, (2) Pierce PSV, SCBA, 17" Btm, Safety, SFR/Enf	1
142	0892664	SP	Cabinet, Forward Facing, RS, 22 W x 40 H x 16.25 D, Roll, SFR/Enf	1
			Light, Short Cabinet - Amdor, Interior, Red, Right Side and Amdor, Interior, Red, Left Side	
			Material Finish, Shelf - Painted - Cab Interior	
			Shelf/Tray, Cabinet - (1) Shelf, Adjustable, 1.25" Up-Turned Lip	
			Door, Cab Interior Cabinet - Rollup, Amdor, Anodized, Non-Locking	
			Louvers, Cabinet - 0-No Louvers	
143	0547484		Pac Trac, Rear Wall, EMS Compt, Location Feature	2
			Location - Each FF EMS compartment	
			Qty, - 02	
144	0766467		Upholstery, Seats In Cab, All Vinyl, Seats Inc, CARE	5
			Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Black	
			Qty, - 05	

Line	Option	Type	Option Description	Qty
145	0543991		Bracket, Air Bottle, Hands-Free II, Cab Seats	4
			Qty, - 04	
146	0603866		Seat Belt, Dual Retractor, ReadyReach, Saber FR/Enforcer	1
			Seat Belt Color - Red	
147	0602464		Helmet Storage, Provided by Fire Department, NFPA 2016	1
148	0647647		Lights, Dome, FRP Dual LED 4 Lts	1
			Color, Dome Lt - Red & White	
			Color, Dome Lt Bzl - Black	
			Control, Dome Lt White - Door Switches and Lens Switch	
			Control, Dome Lt Color - Lens Switch	
149	0602622		Portable Hand Light, Provided by Fire Department, Quint NFPA 2016 Classification	1
150	0622803		Cab Instruments, Black Gauges, Black Bezels, Enforcer MUX	1
			Emergency Switching - Individual Switches	
151	0509511		Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	1
152	0543751		Light, Do Not Move Apparatus	1
			Alarm, Do Not Move Truck - Steady Alarm	
153	0743386		Messages, Open Dr/DNMT, Color Dsply, 100AAT	1
154	0611683		Switching, Cab Instrument Lower Console & Overhead, Membrane, Enforcer WiFi	1
			MUX	
155	0784544		Wiper Control, 2-Speed with Intermittent, Wired to Prk Brk, Sw Pnl 9, Enf MUX	1
156	0731813		Hour Meter, Aerial, Included in Information Centers, ASL, AAT, ASP	1
157	0002615		Switch, Aerial 12V Master	1
158	0770696	SP	Aerial PTO Activated with Aerial Master Sw	1
159	0797189		Wiring, Spare, 4.8 A 12V DC, USB Termination Blue Sea 1045 1st	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Location - Officers Dash	
160	0559859		Wiring, Spare, 60A 12V DC, 12 Circuit Fuse Block, Blue Sea 5026	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Location - behind the officer's seat.	
161	0548004		Wiring, Spare, 15 A 12V DC 1st	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Wire termination - 15 amp power point plug	
			Location, Spare Wiring - Officer Dash	
162	0585914		Wiring, Spare, 20 A 12V DC, 6 Circuit Fuse Block, Blue Sea 5025 1st	3
			Qty, - 03	
			12vdc power from - Battery direct	
			Location - One each in the top of the DS rear facing crew cab compartment and one each in the two outboard FF crew cab compartments.	
163	0615386		Vehicle Information Center, 7" Color Display, Touchscreen, MUX	1
			System Of Measurement - US Customary	
164	0734857		Collision Mitigation, HAAS Alert (R2V), HA5	1
			Subscription, HAAS R2V - R2V - 5 Year Data Plan Subscription	
165	0606247		Vehicle Data Recorder w/CZ Display Seat Belt Monitor	1
166	0734176		Intercom, David Clark, 5-Pos, 2-Radio, D, O, 3obC, 3805	1
			Location, Intercom, C Cab - 3) 2 forward and 1 rear facing	
167	0637058		David Clark Universal Radio Interfaces Included with Single/Dual System	1
			Location, Radio Interface - Officer Seat	
168	0589947		Headset, David Clark, H3432 Over The Head, Flex Mic, Push On Push Off	5
			Qty, - 05	
			Location - Driver, Officer, PS rear facing and center FF seating positions.	
169	0681408		Hangers For Headsets, NFPA, Each	5
			Qty, - 05	
			Location, Headset Hangers - Driver Seat, Officer Seat, DS Inbrd, Fwrd	
			Fcng Seat, PS Inbrd, Fwrd Fcng Seat and PS Outbrd, Rear Fcng Seat	
170	0698805		Bracket, Johnny Ray, Heavy Duty Swivel, 14 lb. Rating	1
			Location - mount at post paint	
171	0736417		Install Customer Provided Two-Way Radio(s), Single Remote Head	1
			Location - Behind the officer's seat	
			Qty, - 01	
			Fill in Blank - TBD	

Line	Option	Type	Option Description	Qty
172	0687904		Antenna Mount, Custom Chassis, Cable Routed to Behind Officer Seat	1
			Location - Antenna routed behind officers seat	
			Qty, - 01	
173	0696439		Antenna Mount, Custom Chassis, Cable Routed to Instrument Panel Area	2
			Qty, - 02	
			Location, Antenna Mount - Right Side	
174	0537041		Camera, Safety Vision, Driver Mux, Multiple Cameras	1
			Location, Camera, Safety Vision - 3 Cameras, Auto Switch	
			Camera System Audio - Not Provided	
175	0615112		Pierce Command Zone, Advanced Electronics & Control System, Enforcer, WiFi	1
176	0733539		Electrical System, Enf MUX ESP	1
177	0079211		Batteries, (6) Exide Grp 31, 950 CCA each, Threaded Stud	1
178	0008621		Battery System, Single Start, All Custom Chassis	1
179	0002698		Battery Compartment, Saber/Enforcer	1
180	0531315		Charger, Sngl Sys, IOTA, DSL-75, 75 Amp, Kussmaul 091-94-12 Ind, Qtm/Enf/SFR	1
181	0779452		Location, Charger, Cab EMS Compt, Back Wall	1
			Location - DS rear facing EMS compartment.	
182	0531403		Location, Bat Chrg Ind, Driver's Seat with Bracket	1
183	0782026		Shoreline, 20A 120V, Blue Sea Sure Eject 7851	1
			Qty, - 01	
			Connection, Shoreline - Battery Charger, 120V Air Compressor and shoreline receptacles.	
			Color, Cover, BI Sea Inlet - Red	
184	0026800		Shoreline Location	1
			Location, Shoreline(s) - DS Cab, Frt Corner	
185	0647728		Alternator, 430 amp, Delco Remy 55SI	1
186	0698237		Override Switch, Prk Brk Interlock for Windshield Wipers	1
			Location - Panel # 7 bottom right location in panel.	
187	0092582		Load Manager/Sequencer, MUX	1
			Enable/Disable Hi-Idle - e)High Idle enable	
188	0783153		Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	1
			Color, Headlight Bez - Chrome Bezel	
189	0625953		Light, Directional, WIn 600 Cmb, Cab Crn, Wrp Bzl Out HD Lts, Enf, Sab FR	1
			Color, Lens, LED's - m)match LED's	
190	0620054		Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	1
191	0735474		Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts, Saber FR/Enforcer	1
			Light Guard - No Guards	
192	0625210		Lights, Directional, Cab Front Side, Truck-Lite 19036Y LED, AXT/Enf	1
193	0563675		Lights, Clearance/Marker/ID, Rear, Truck-Lite 33050R LED 7Lts	1
194	0602938		Light, Marker End Outline, Rubber Arm, LED Marker Lamp, Rear Body	1
			Qty, Lights, Pair - 1	
195	0564683		Lights, Tail, WIn M6BTT* Red LED Stop/Tail & M6T* Amber LED Dir Arw For Hsg	1
			Color, Lens - Colored	
196	0561471		Lights, Backup, WIn M6BUW, LED, For Tail Lt Housing	1
197	0664481		Bracket, License Plate & Light, P25 LED	1
198	0556842		Bezels, WIn, (2) M6 Chrome Pierce, For mtg (4) WIn M6 lights	1
199	0681444		Instruction, Order of Tail Lt Instl, Stop, Dir, BU, Warn	1
200	0589905		Alarm, Back-up Warning, PRECO 1040	1
201	0557569		Light, Additional, P25 LED, White	6
			Location, Lights - Three (3) lights each side of cab roof to illuminate treadplate walking surface	
			Qty, - 06	
			Control, Light - i) park brake	
202	0769420		Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 4Dr	1
203	0769564		Lights, Perimeter Pump House, Amdor AY-LB-12HW020 LED 1lt	1
204	0763190		Lights, Perimeter Body, Amdor AY-LB-12HW012 LED 3lts	1
			Control, Perimeter Lts - DS Switch Panel, Parking Brake Applied, DS Dir Lt to DS Side Lts, 10 Sec Del and PS Dir Lt to PS Side Lts, 10 Sec Del	
205	0769570		Lights, Perimeter, Amdor AY-LB-12HW020 20" LED, Brkt	8
			Qty, Lights - 08	

Line	Option	Type	Option Description	Qty
205			Location, Additional Perimeter Lights - Under Compt LS1, 1lt, Under Compt RS1, 1lt, Under Compt RS2, 1lt, Under Compt LS4, 1lt, Under Compt RS4, 1lt, Under Compt LS2, 1lt, Under Compt LS5, 1lt and Under Compt RS5, 1lt	
206	0748973		Light, Roof Mt, Wln S72M**, 72" Cnt Feature, Mkr Lts Not Activated Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab Sw Panel DS and Cab Sw Panel PS LED Module Type - 4 White Spot	1
207	0776357		Light, Visor, Wln, 12V P*H2* Pioneer, Cnt Feature, 1st Qty, - 01 Location, driver's/passenger's/center - Centered Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab Sw Panel DS and Cab Sw Panel PS Scene Light Optics - Flood/Spot	1
208	0748796		Lights, Wln, S44M** 44" 12VDC LED, RS Cab Location - PS cab roof between cab and crew cab doors mounted outboard. Qty, - 01 Control, Light - Mkr Lt Not Connected Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab and Crew Cab Dr Sw, PS and PS Flood Lts LED Module Type - 2 Red Warning	1
209	0748797		Lights, Wln, S44M** 44" 12VDC LED, LS Cab Location - DS cab roof between cab and crew cab doors mounted outboard. Qty, - 01 Control, Light - Mkr Lt Not Connected Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab and Crew Cab Dr Sw, DS and DS Flood Lts LED Module Type - 2 Red Warning	1
210	0748793		Lights, Wln, S44M** 44" 12VDC, RS Body Location - PS catwalk Qty, - 01 Control, Light - Mkr Lt Not Connected Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS LED Module Type - 2 Red Warning	1
211	0748795		Lights, Wln, S44M** 44" 12VDC, LS Body Location - DS Catwalk Qty, - 01 Control, Light - Mkr Lt Not Connected Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS LED Module Type - 2 Red Warning	1
212	0731738		Lights, Wln, S30M** 30" 12VDC, Rear Body ID Lts Not Con Location - Mount above the B1 door on 4-way bracket Qty, - 01 Color, Wln Lt Housing - White Paint Control, Scene Lts - Cab Sw Panel DS and Body Switch, DS Rear SS LED Module Type - 2 White Spot	1
213	0766802		Not Required, Deck Lights, Other Hose Bed & Rear Lighting, 100AAT	1
214	0729276		Lights, Hose Bed, Front/Rear, Light Strips, AAT Control, Hose Bed Lts - Cup Switch At Rear SS	1
215	0645677		Lights, Not Required, Rear Work, Alt. 12 Volt Lights At Rear Body	1
216	0892702		Lights, Walk Surf, Amdor AY-LB-12HW020, P25 LED, 100AAT Color, Trim - Chrome Housing	1
217	0771870		Aerial, 100AAT, Alum Body	1
218	0554271		Body Skirt Height, 20"	1
219	0769002		Tank, Water, 300 Gallon, Poly, 100AAT	1
220	0751917		Overflow, 3.00" Water Tank, Poly	1
221	0028107		Not Required, Foam Cell Modification	1
222	0769016		Hose Bed, Alum, Right Side, 100AAT	1
223	0723546		DA Finished Hose Bed/Cargo Area	1

Line	Option	Type	Option Description	Qty
224	0555137		Hose Bed Capacity 800' of 5.00", 100AAT, 100' RMAP	1
225	0748063		Hose Restraint, Front Vinyl/Treadplate, 1" Heavy Nylon Web Rear, 100AAT	1
			Color, Vinyl Cover - c) black	
226	0003512		Running Boards, Ascendant, PAL	1
227	0735582		Turntable Steps, Swing-Down, Left Side, 100AAT	1
			Step, Flip - No Flip Step	
			Body Handrail Finish - knurled aluminum	
			Step Surface, Turntable - Punched Grip	
228	0554001		Lights, Step (3), P25 LED, Swing Down Access Steps, One Side	1
229	0690023		Wall, Rear, Smooth Aluminum	1
230	0074515		Tow Eyes (2), 100AAT, Ascendant Single Axle, 75' HAL	1
231	0769019		Construction, Compt, Alum, 100AAT	1
232	0750953		Compt, Left Side, Roll/Lift, 100AAT	1
			Latch, Door, Access - SouthCo C2 chrome raised, pair	
233	0750952		Compt, Right Side, Roll/Lift, 100AAT	1
234	0766172		Doors, ROM Series IV Rollup/Lap, Aluminum, Side Compartments	7
			Qty, Door Accessory - 07	
			Color, Roll-up Door - ROM Series IV Painted to Match Lower Body	
			Latch, Roll-up Door - Non-Locking Liftbar	
235	0556162		Not Req'd, Compt Blister in Front of Rear Axle	1
236	0740006		Bumper, Rear, 3", Counterweight, Steel, Full 45 Degree Angled Corners, 100AAT	1
237	0618491	SP	Prototype, Compartment Door(s), Door Tab, Unpainted	1
238	0731558		Pull Strap for Liftup Doors	4
			Qty, Door Accessory - 04	
			Location, Door Accessory - LS3& RS3- two straps equally spaced on each door.	
			Color, Strap - Black	
			Length, Pull Strap - 14.00"	
239	0659353		Lights, Compt, Amdor AY-9220 LED, Dual Lt Strip	9
			Qty, - 09	
240	0562348		Fasteners, Mechanical, Strip Lighting In Compartments	1
241	0667426		Lights, Compt, Amdor, AY-9220-42, LED, 41.61", Additional	2
			Location, Lights - Mounted horizontally in compartments LS3 & RS3	
			Qty, - 02	
242	0687145		Shelf Tracks, Recessed, PUC/3rd Generation	1
243	0600289		Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations, Aerial	9
			Qty, Shelf - 09	
			Material Finish, Shelf - Brushed	
			Location, Shelves/Trays, Predefined - RS1-Centered, RS5-Centered, RS1-Upper Third, RS2-Upper Third Left of Partition, RS2-Lower Third Left of Partition, LS1-Centered, LS2-Centered, LS2-Upper Third and LS1-Upper Third	
244	0589413		Tray, 250 lb Slide-out, 2" Sides - Adj. Height, Max Width/Depth	1
			Location - LS4	
			Qty, Tray (slide-out) - 01	
			Material Finish, Tray - Brushed	
245	0647772		Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides, 3G	4
			Qty, - 04	
			location - LS2 and three (3) trays forward of partition in RS2 with tool boards mounted in the tray.	
			Material - D/A Finish	
246	0590939		Toolboard, Alum, .188", Peg Board, Added to Slide-Out Tray	3
			location - Floor mounted trays forward of partition in RS2	
			Qty - 3	
			Hole Diameter, Pegboard/Toolboard - .281" diameter	
			Finish, Pegboard/Toolboard - Brushed Finish	
247	0726447		Partition, Vertical Compt, Adjustable	4
			Qty, Partition - 04	
			Location - Two (2) partitions in LS3 and two (2) partitions in RS4	
248	0726457		Partition, Vertical Compt, Predefined Locations	1
			Qty, Partition - 01	
			Location, Partition/Toolboard, Predefined - RS2- 24.00" From Forward	
			Door Frame	
			Material Finish, Partition - Brushed	

Line	Option	Type	Option Description	Qty
249	0539811		Box, Poly Tool	3
			Location - Compartment RS2 rear of vertical partion	
			Qty, Comp. Accessory - 03	
			Color - 1) black	
			Length - 24.00"	
			Width - 12.00"	
			Depth - 12.00"	
250	0013202		Strap, Nylon w/Velcro	1
			Location - LS2 - Mid Height from partition to rear door opening.	
			Qty, - 01	
251	0061917		Rub Rail, Aluminum Extruded, 3.12", Side of Body	1
252	0769018		Fender Crowns, Rear, S/S, w/Removable Fender Liner, Aerial, 3rd Gen, Two Pair	1
253	0519849		Not Required, Hose, Hard Suction	1
254	0621021		Handrails, Side Pump Panels, Per Print, Hansen Knurled Alum Tubing, LED Backlit	1
			Switch, Handrail Light Control - Park Brake	
			Color, Light, Hansen Handrail - White	
255	0765324		Compt, Air Bottle/Extinguisher,Between Tandems,Three (3),w/Straps,100AAT,Bolt-In	2
			Qty, Air Bottle Comp - 2	
			Location, driver's/passenger's/center - 1LS & 1RS	
			Door Finish, Fender Compt - Polished	
			Latch, Air Bottle Compt - Flush Lift & Turn, Pair	
			Insert, Air Bottle Compt - Rubber Matting	
			Door Type - lift up with pneumatic spring	
256	0657522		Compt, Air Bottle, Triple, Fender Panel	1
			Qty, Air Bottle Comp - 1	
			Door Finish, Fender Compt - Polished	
			Location, Fender Compt - Triple - RS Rear	
			Latch, Air Bottle Compt - Southco C2 Chrome Raised	
			Insert, Air Bottle Compt - Dura-Surf Lining	
257	0747880		Compt, Air Bottle, Single w/ DEF, Common Triple Door, Fender Panel, Bolt-In	1
			Qty, Air Bottle Comp - 1	
			Door Finish, Fender Compt - Polished	
			Location, Fender Compt - Single - LS Fwd	
			Latch, Air Bottle Compt - Southco C2 Chrome Raised	
			Insert, Air Bottle Compt - Dura-Surf Lining	
258	0737158	SP	Compt, Air Bottle, Single, Fender Panel, Bolt-In, Triangular Door	1
			Qty, Air Bottle Comp - 1	
			Door Finish, Fender Compt - Polished	
			Location, Fender Compt - Single - RS Fwd	
			Latch, Air Bottle Compt - Southco C2 Chrome Raised	
			Insert, Air Bottle Compt - Dura-Surf Lining	
259	0750559		Compt, Air Bottle, Dbl, in Fender Panel, Alum, Common Fuel Door, 100AAT	1
			Qty, Air Bottle Comp - 1	
			Door Finish, Fender Compt - Polished	
			Location, Fender Compt - Single - LS Rear - Fuel Fill Combo - Triangular	
		Dr	Latch, Air Bottle Compt - Southco C2 Chrome Raised	
			Insert, Air Bottle Compt - Dura-Surf Lining	
260	0768635		Ladder, 35' Duo-Safety 1200A 2-Sect	2
			Qty, - 02	
261	0010406		Ladder, 28' Duo-Safety 1200A 2-Section	2
			Qty, - 02	
			Location, Extension Ladder - torque box	
262	0595251		Ladder, 16' Duo-Safety 875-DR Roof, Hooks Both Ends	2
			Qty, - 02	
263	0652466		Ladder, 20' Duo-Safety 875-DR Roof	1
			Qty, - 01	
264	0024233		Not Required, Attic Extension Ladder	1
265	0768634		Ladder, 10' Duo-Safety Folding, 585A	1
			Qty, - 01	
			Location, Folding Ladder Aerial - torque box	
266	0762824		Ladders Stored in Torque Box, Generator Storage, Gortite Roll, 100AAT	1
			Color, Roll-up Door, Gortite - Painted to Match Lower Body	
			Latch, Roll-up Door, Gortite - Non-Locking, Rear	

Line	Option	Type	Option Description	Qty	BOS 2022-01-19 p.540/1306
267	0764117		Lights, Torque Box Ladder Storage, Amdor AY-9220-32, 2 Lts, 100AAT	1	
268	0658169		Ladders, Nested, Left Side Ground Ladder Storage	1	
269	0658170		Ladders, Nested, Right Side Ground Ladder Storage	1	
270	0788575		Pike Pole, 12' Fire Hooks Unlimited, NY Roof Hook, Fiberglass, RH-12, Pry End	2	
			Qty, - 02		
271	0567897		Pike Pole, 8' Fire Hooks Unlimited, New York Roof Hook, Steel, Pry End, RH-8	2	
			Qty, - 02		
			Location - Torque Box		
272	0549137		Not Required, Pike Pole, 6'	1	
273	0014343		Not Required, Pike Pole, 3'	1	
274	0024892		Pike Pole, 6' Fire Hooks Unlimited, New York Roof Hook, Steel, Pry End, RH-6	3	
			Qty, - 03		
			location, pike pole - Transverse cab storage compartment.		
275	0063392		Pike Pole, 10' Fire Hooks Unlimited, New York Roof Hook, Steel, RH-10, Pry End	1	
			Qty, - 01		
276	0770572		Pike Pole Tubes, in Torque Box/Ladder Storage, Alum, Special Notch, NY Style	4	
			Qty, - 04		
277	0743861		Modify Pike Pole Storage, Torque Box/Ladder Storage, Special Spacing	1	
278	0765390		Pump House, Side Control, 42", 100AAT, Control Zone	1	
279	0767048		Pump House Structure	1	
280	0767622		Pump, Waterous, S100, 2000 GPM, Single Stage, 100' AAT	1	
281	0504116		Seal, Mechanical, Waterous, w/S100 Pump	1	
282	0559768		Trans, Pump, Waterous C20, S100 Pump Only	1	
283	0635600		Pumping Mode, Stationary Only	1	
284	0605126		Pump Shift, Air Mnl Override, Split Shaft, Interlocked, Waterous	1	
285	0003148		Transmission Lock-up, EVS	1	
286	0004547		Auxiliary Cooling System	1	
287	0014486		Not Required, Transfer Valve, Stage Pump	1	
288	0746508		Valve(s), Relief Intake, Trident Air Max, Control Location	1	
			Qty - 1		
			Pressure Setting - 150 psig		
			Intake Relief Valve Control - Behind Right Side Pump Panel		
289	0692045		Controller, Pressure, FRC, Pump Boss, PBA400	1	
290	0072153		Primer, Trident, Air Prime, Air Operated	1	
291	0780364		Manuals, Pump, (2) Total, Electronic Copies	1	
292	0602492		Plumbing, Stainless Steel and Hose, Single Stage Pump, 100AAT	1	
293	0089437		Plumbing Without Foam System	1	
294	0751029		Inlets, 6.00", (1) Left Side, (1) Right Side, 1500-2000 GPM Pump, 100AAT	1	
295	0602448		Cap, Main Pump Inlet, Provided by Fire Department, NFPA 2016	1	
296	0084610		Valves, Akron 8000 series- All	1	
297	0016158		Valve, Inlet(s) Recessed, Side Cntrl, "Control Zone"	1	
			Qty, Inlets - 1		
298	0004700		Control, Inlet, at Valve	1	
299	0004660		Inlet (1), Left Side, 2.50"	1	
300	0029147		Not Required, Inlet, Right Side	1	
301	0563738		Valve, .75" Bleeder, Aux. Side Inlet, Swing Handle	1	
302	0767284		Tank to Pump, (1) 3.00" Valve, 3.00" Plumbing, 100AAT	1	
303	0004905		Outlet, Tank Fill, 1.50"	1	
304	0062133		Control, Outlets, Manual, Pierce HW if applicable	1	
305	0004940		Outlet, Left Side, 2.50"	2	
			Qty, Discharges - 02		
306	0005091		Elbow, Left Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1	
307	0004945		Outlet, Right Side, 2.50"	1	
			Qty, Discharges - 01		
308	0025091		Elbow, Right Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1	
309	0767613		Outlet, 4" w/4" Right, Sm Handwheel, 100AAT	1	
			Valve, Brand - Akron		
310	0005094		Elbow, Large Dia Outlet, 30 Deg, 4.00" FNST x 4.00" Storz	1	
311	0092572		Not Required, Outlet, Front	1	
312	0752096		Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Vinyl Covered Cable	1	
313	0563739		Valve, 0.75" Bleeder, Discharges, Swing Handle	1	

Line	Option	Type	Option Description	Qty
314	0005080		Reducer, 2.50" FNST x 1.50" MNST, w/Cap	3
			Qty, Adapter for Outlets - 03	
			Location, Adapter(s) - (2) DS and (1) PS 2.5" Panel Discharges	
315	0029106		Not Required, Deluge Outlet	1
316	0767110		Waterway Outlet & Control, 4" Akron, Sm HW, 100AAT	1
317	0723726		Speedlay Module Not Required	1
318	0722432		Hose Restraint Not Required, No Speedlay Module	1
319	0723395		Speedlays, Not Required	1
320	0723394		Speedlays, Not Required	1
321	0762299		Crosslays Sngl Sheet Unpainted, (1+) 1.50" Std.Cap, w/Poly Tray, 100AAT	2
			Qty, Crosslays - 2	
322	0029196		Not Required, 2.50" Crosslay	1
323	0625777		Hose Rest, Crosslays, 2" Nylon Web, Seat Belt Buckle in Corner, Tether, Sides	2
			Qty, - 02	
324	0044333		Not Required, Foam System	1
325	0012126		Not Required, CAF Compressor	1
326	0552517		Not Required, Refill, Foam Tank	1
327	0042573		Not Required, Foam System Demonstration	1
328	0045465		Not Required, Foam Tanks	1
329	0091110		Not Required, Foam Tank Drain	1
330	0091112		Not Required, Foam Tank #2 Drain	1
331	0746444		Approval Dwg, Color And Label Tags Only	1
332	0032479		Pump Panel Configuration, Control Zone	1
333	0747651		Step, Slide-Out/Fold-Out, Pump Operator Platform, 100AAT	1
334	0667186		Light, Slide-Out Pump Operator Step, On Scene Solutions Access LED, Short Step	1
335	0629252		Material, Pump Panels, Side Control Black Vinyl	1
			Material Finish, Pump Panel, Side Control - Black Vinyl	
			Material, Pump Panel, Side Control - Aluminum	
336	0723264		Panel, Pump Access - Right Side Only, 100AAT	1
			Latch, Pump Panel Access, Side Mount - Flush Lift and Turn, Chrome, AAT	
337	0583824		Light, Pump Compt, WIn 3SC0CDCR LED White	1
			Qty, - 01	
338	0505599		Gauges, Engine - Pump Panel, Included with FRC Pump Boss Control	1
339	0005601		Throttle, Engine, Incl'd w/Press Controller	1
340	0739224		Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle, Green	1
341	0549333		Indicators, Engine, Included with Pressure Controller	1
342	0745568		Indicator Light, Pump Panel, Ok To Pump, Green	1
343	0553643		Control, Air Horn at Pmp Pnl, Red Switch	1
344	0005689		Gauges, 4.50" Master, Class 1, 30"-0-600psi	1
345	0005714		Gauge, 2.50" Pressure, Class 1, 0-400psi	1
346	0607159		Gauge, Water Level, FRC, WLA 300-A00, TankVision Pro	1
347	0006774		Not Required, Foam Level Gauge	1
348	0593126		Light Shield, S/S DS & PS, 100AAT, Std LED	1
349	0761601		Air Horns, (2) Grover, In Bumper, 100AAT	1
350	0606833		Location, Air Horns, Bumper, Each Side, Inside Frame (Pos #3 & #5)	1
351	0757092		Control, Air Horn, Multi Select	1
352	0757081		Control, Air Horn, Ft Sw, LS	1
353	0723391		Control, Air Horn, Chrome Push Button Sw, RS	1
354	0533071		Siren, WIn 295SLSC1, 100 or 200 Watt, w/Plug-in/Detachable Microphone Cord	1
355	0692039		Location, Electronic Siren, Center Console	1
356	0076156		Control, Elec Siren, Head Only	1
357	0601306		Speaker, (1) WIn, SA315P, w/Pierce Polished Stainless Steel Grille, 100 watt	1
			Connection, Speaker - siren head	
358	0601565		Location, Speaker, Frt Bumper, Recessed, Center (Pos 4)	1
359	0895310		Siren, Federal Q2B	1
			Finish, Q2B Siren - Chrome	
360	0006095		Siren, Mechanical, Mounted Above Deckplate	1
			Location, Siren, Mech - a) Left	
361	0748305		Control, Mech Siren, Multi Select	1
362	0748279		Control Mech Siren, Push Button Sw, RS	1
363	0748282		Control Mech Siren, Ft Sw LS	1

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.542/1306
364	0736164		Sw, Siren Brake, Momentary, LS Overhead Sw Pnl	1
365	0736165		Sw, Siren Brake, Momentary, RS Overhead Sw Pnl	1
366	0657536		Programming, Wln Electronic Siren, Warble & Whoop Tones	1
367	0746353		Not Required, Warning Lights Intensity	1
368	0761730	SP	Lightbar, Wln, Freedom IV, Rota-Bm, 81", R_RRRRwwRRRR_R	1
Filter, Whl Freedom Ltbrs - No Filters				
369	0734071		Lights, Front Zone, Wln M6** M6** M6** M6** LED, Q Bzl, 4lts	1
Color, Lens, LED's - Colored				
Color, Lt DS Frnt Outside - Left Red				
Color, Lt PS Frnt Outside - Right Red				
Color, Lt DS Front Inside - Left White				
Color, Lt PS Front Inside - Right White				
Color, Q Bezel and Trim - Polished Chrome				
370	0564433		Light, Front, Wln Dominator Plus DP8 30.36", 8-Red, Upper Grl Mt	1
371	0747228		Lights, Side Zone Lower, Wln M6**, M6**, M6**, 6Lts	1
Location, Lights Front Side - b)each side bumper				
Color, Lens, LED's - Colored				
Location, Lights Mid Side - Rearward of Crew Cab Doors				
Location, Lights Rear Side - Between Tandem				
Color, Trim - Chrome Trim				
Color, Lt Side Front, DS - Red				
Color, Lt Side Front, PS - Red				
Color, Lt Side Mid DS - Red				
Color, Lt Side Mid PS - Red				
Color, Lt Side Rear PS - Red				
Color, Lt Side Rear DS - Red				
372	0680983		Lights, Door Interior Flash, 4 Dr Cab, Weldon 8401-0000-20 LED Strip Light Ovr W	1
373	0672937		Lights, Side, Wln WIONSMC* LED, Chrome Flange, Mounted In Rub Rail, 1st	4
Location, Lights - Mounted in the rub rail centered beneath LS2, LS4, RS2 and RS4				
Qty, - 04				
Color, Lights, Warning - gla) red				
Control, Light - b) side warning				
374	0564654		Lights, Rear Zone Lower, Wln M6* LED, Colored Lens, For Tail Light Housing	1
Color, Lt DS Rear - r) DS Rear Lt Red				
Color, Lt PS Rear - r) PS Rear Lt Red				
375	0750350		Lights, Rear, Wln M6# LED, Split Color, Clear Lens 1st	2
Location - one each side, high on rear body bulkheads				
Qty, - 02				
Control, Light - a) rear upper warning				
Color, Lt Rear Splt - Red out Amber in				
Color, Trim - Chrome Trim				
376	0088745		Light, Rear Zone Up, Wln L31HRFN LED Beacon, Red LED	1
Color, Dome, Rear Warning - b)both domes red				
377	0006551		Not Required, Lights, Rear Upper Zone Blocking	1
378	0765223		Bracket, 5" Ledge, Over Rear Compt Door	1
Material, Bracket - Aluminum Treadplate				
379	0006646		Electrical System, 120/240VAC, General Design	1
380	0762803		Generator, Harrison 6kW MID6.0, Hydraulic, Hotshift PTO, 100AAT	1
Generator Interlocks - Parking Brake				
Location, Gen Info Panel - near breaker box				
381	0762825		Location, Hydraulic Generator in B1 Rear Compartment, 100AAT	1
382	0016752		Starting Sw, Truck Engine Powered Gen, Cab Sw Pnl	1
383	0071054		Remote Start, Hydraulic Generator, PTO and Field - SAME SWITCH	1
Location, Remote Start - y) Cab/PP/TT				
384	0016740		Not Required, Fuel System	1
385	0016767		Not Required, Oil Drain Extension, Generator	1
386	0732903		Circuit Breaker Panel w/Generator 100AAT	1
Location, Circuit Breaker Panel - LS2, Left Wall High				
387	0501864		Drain, Generator Hydraulic Fluid, 1 Bottom Valve	1
388	0532927		Guard, Generator Breaker Panel	1
Location - Mount over the breaker panel in RS4				
389	0016771		Not Required, Routing Exhaust, Generator	1

Line	Option	Type	Option Description	Qty
390	0722816	SP	Reel, Elect Cable, Hannay, ELFCR1624-10-11-6, (3) Wire 100AAT Location, Cord Reel - Locate behind rear wall of LS2 in hosebed. Qty, - 01 Reel Guide - a) Nylatron guide Finish, Reel - Painted Gray	1
391	0006827		Cord, Electric, 12/3 Yellow, 3 Wire Lengths of Elect Cord - 1 Feet of Yellow Cord - c)150 Connection, Cord - Hubbell 20A 120V Twst Lock	1
392	0506739	SP	Enclosure, Reel, Feed Through Rear Wall of Compt. Location - Cord reel behind LS2 Qty, - 1	1
393	0723790	SP	Light, Amdor AY-LB-12HR012, 12" Red, Inside Reel Enclosure Location - Install within the reel enclosure, directly over the reel guide to assist when stowing the cable. Qty, - 01 Control, Light - i) park brake	1
394	0780392		Receptacle Strip, 15A 120V 7-Place 90 Deg, FEL99089, Protect Metal Housing, Int Qty, - 02 Location 1 - One mounted in the top of each FF crew cab compartments. AC Power Source - Shoreline	2
395	0779722		Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st, Interior Body Qty, - 04 Location 1 - TBD AC Power Source - Shoreline Cover, Receptacle - Interior SS Wall plate	4
396	0519934		Not Required, Brand, Hydraulic Tool System	1
397	0649753		Not Required, PTO Driven Hydraulic Tool System	1
398	0771866		Aerial, Ascendant 100' Aerial Tower	1
399	0680821		Boom Panel, Pair Paint Color, Predefined - #10 white	1
400	0526890		Not Required, Indicator, Extension	1
401	0688232		Rung Covers, Aerial Device Rung Cover Color - Safety Yellow	1
402	0678539		Brackets Only, Roof/Wall Ladder, Aerial Fly Section Finish - Painted, Aerial Device Color Roof Ladder, Make/Model - 16' Duo-Safety 875-DR	1
403	0728982		Box, Saw Storage, w/Cover, Base Section Above Boom Panel, 100AAT, Door Sw Qty, - 01 Finish - Painted, Aerial Device Color Latch, Door, Storage - "D" Handle Latch Location, Aerial Device - left side Louvers - louvers	1
404	0678641		Brackets Only, Pike Pole, Aerial Fly Section Qty, - 01 Pike Pole Make/Model - Fire Hooks Unlimited 10' New York Roof Hook	1
405	0728167	SP	Box, Lyfe Bracket Stg, w/Covr, RS Base Section Above Boom Pnl, w/Door Switch, 100AAT Finish - Painted, Aerial Device Color Latch, Door, Storage - "D" Handle Latch Louvers - no louvers	1
406	0766887		Brackets, Stokes Storage, Base Section Above Boom Panel, 100AAT Qty, - 01 Finish - Painted, Aerial Device Color Location, Aerial Device - right side	1
407	0770598		Basket, 100AAT	1
408	0765470		Rubber Bumper, Perimeter of Basket, 100AAT	1
409	0677439		Box, Hose Storage, Platform Qty, - 01 Latch, Door, Storage - Rubber Draw Latch Location, Aerial Basket - right Cover - cover Hose Size, Hosebox - 50' of 2.50"	1
410	0766894		Lights, Turntable Walkway, P25, On Scene, LED, 100AAT	1

Line	Option	Type	Option Description	Qty
411	0767535		Light, Turntable Console, TecNiq E-10, LED	1
412	0732762		Basket Heat Shields, 100AAT	1
413	0766953		Control Stations, 100AAT	1
414	0751349		Lights, Basket Interior, Amdor AY-LB-12HW020-0, 20" 100AAT	1
415	0771862		Stabilizers, 100AAT, Three Sets	1
416	0729051		Stabilizer Pan and Trim Material	1
			Stabilizer Panels - polished stainless steel	
			Stabilizer Trim - polished stainless steel	
417	0746173		Door, Stabilizer Control Box, Aerial MUX, 100AAT	1
			Latch, Door, Storage - Southco C2 Chrome Raised	
			Hinge Location - Inboard	
			Door, Material & Finish, Stabilizer - Brushed Stainless Steel	
418	0615058		Stabilizer Placement, Cameras w/Command Zone Color Display, 1 Set	1
419	0591153	SP	Pads, Stabilizers, Composite, Additional Ship Loose, No Brackets, Pair	2
			Qty, - 02	
420	0771218		Hydraulic System, 100AAT	1
421	0767932		Swivels, w/Encoder, 36, 100AAT	1
422	0767931		Electrical System, 100AAT	1
423	0783178		Lights, Tip, WIn MPB* LED, Front of Basket 2lts	1
			Color, WIn Lt Housing - Black Paint	
424	0752453		Lights, Tracking, WIn MPB* LED, 100AAT 2lts	1
			Color, WIn Lt Housing - Black Paint	
			Scene Lt Optics LH Base - L Flood	
			Scene Lt Optics RH Base - R Spot	
425	0743431		Basket Access, w/ Flip Down Step, Lift Bar Latch, 100AAT	1
			Finish, Step Well - aluminum treadplate	
426	0554330		Lights, Step (4), P25, Ladder Style Access Steps, Both Sides A Mstr	1
427	0749120		Lighting, Rung, LED, TecNiq, 5 Section, Base, Low, Cent, Upper, Fly, 100AAT	1
			Control, Aerial Rung Lighting - Aerial Master	
			Color, Lt Aerial Fly Sect - Blue	
			Color, Lt Aerial Base Sect - Red	
			Color, Lt Aerial Lower Mid Sect - Red	
			Color, Lt Aerial Upper Mid Sect - Blue	
			Color, Lt Aerial Mid Sect - White	
428	0653817		Light, Locator, WIn VTX609*, Flashing LED, at Tip, PAL/PAP, 2lts	1
			Color, Light - f) blue	
429	0749072		Review Required, Rung Lighting 100AAT	1
430	0540746		Lights, Stabilizer Warn (2) Sets, WIn M6* LED, Colored Lens	1
			Color, Lt Rr Stabilzr Pan - r) Pan Light Red	
			Color, Lt Fr Stabilzr Pan - r) Pan Light Red	
431	0068703		Lights, Grote Supernova LED, Stabilizer Beam, (1) Set	1
432	0762387		Lights, Stabilizer Scene, (3) sets, Amdor AY-LB-12HW012, 100AAT	1
433	0766878		120 Volt To Tip, 2-20 Amp L5-20 TL, 100AAT	1
434	0764733		Light, WIn P*P*A**, 120 Volt Under Steps, Bail Brkt, 100AAT, 1st	4
			Qty, - 04	
			Location, Sw, Arl AC Lts - M)2 Pos	
			Color, WIn Lt Housing - Black Paint	
			Lighthouse, WIn AC - PCP2AFS, Flood/Spot	
			Location, Lts Under 100'AAT Steps - LS Under Step Centered (US2), LS	
			Under Corner Step Center (US5), RS Under Corner Step Center (US11) and	
			RS Under Step Center (US14)	
435	0016925		Intercom, 3-Way Atkinson (PAP)	1
436	0759274	SP	Breathing Air to Tip, (1) 6000 PSI ASME, 100AAT	1
			Refill Hose - no refill hose	
			Breathing Air Fitting - Foster	
			Breathing Air Mask Box - mask box platform rubber draw latch	
437	0024742		Not Required, Mask, Breathing Air To Tip	1
438	0759661		Breathing Air To Turntable w/o Mask, 100AAT	1
439	0727507	SP	Guard, Breathing Air Gauges, 100AAT	1
440	0767396		Aerial Pedestal, 100AAT	1
441	0766834		Lyfe Brackets, 3-In-1, Used w/Duo-Safety 875 Ladders ONLY, 100AAT	1
442	0767149		Turntable Access, ManSaver Bar, Yellow	1
443	0769514		Waterway, 100AAT	1

Line	Option	Type	Option Description	Qty	BOS 2022-01-19 p.545/1306
444	0730399		Valves, (2) TFT VUM (Valve Under Monitor), Manual	1	
445	0764417		Monitors, (2), TFT Monsoon, Y4-MP1A-P-01 Manual and Y4-EP1A-P Elec, (Use w/VUM)	1	
			Nozzle, Monitor 1, PAP - TFT YST-4NN Tips		
			Nozzle, Monitor 2, PAP - TFT M-ERP2000 Electric 2000 gpm		
446	0086971		Flowmeter, Waterway, MUX, PAP	1	
447	0009364		Inlet, 5.00", S/S, w/ Pump, Right Side, 100AAT	1	
448	0092870		Adapter, Aerial Inlet, 5" FNST x 4" Storz w/Cap	1	
			Qty, - 1		
449	0047901		Not Required, Tools, Aerial, PAL/PAP	1	
450	0559491		Manuals and Training, 3 Consecutive Days, Platform	1	
451	0007150		Bag of Nuts and Bolts	1	
			Qty, Bag Nuts and Bolts - 1		
452	0602497		NFPA Required Loose Equipment, Quint, NFPA 2016, Provided by Fire Department	1	
453	0602397		Soft Suction Hose, Provided by Fire Department, Quint NFPA 2016 Classification	1	
454	0027023		No Strainer Required	1	
455	0602534		Extinguisher, Dry Chemical, Quint NFPA 2016, Provided by Fire Department	1	
456	0602352		Extinguisher, 2.5 Gal. Pressurized Water, Quint, NFPA 2016, Provided by Fire Dept	1	
457	0007482		Not Required, Crowbars	1	
458	0007484		Not Required, Claw Tools	1	
459	0602883		Axe, Flathead, Quint NFPA 2016, Provided by Fire Department	1	
460	0602670		Axe, Pickhead, Quint NFPA 2016, Provided by Fire Department	1	
461	0007494		Not Required, Sledgehammers	1	
462	0741569		Paint Process / Environmental Requirements, Appleton	1	
463	0709566		Paint, Two-Tone Color, Enforcer	1	
			Paint Color, Upper Area, Predefined - #10 White		
			Shield, Cab - Standard Shield		
			Paint Color, Lower Area, Predefined - #103 Lime Yellow		
			Paint Break, Cab - Standard Two-Tone Cab Break		
464	0709845		Paint, Single Color, Body	1	
			Paint, Body - Match Lower Cab		
465	0646901		Paint Chassis Frame Assy, With Liner, E-Coat, Standard	1	
			Paint Color, Frame Assembly, Predefined - Gloss Black		
466	0693797		No Paint Required, Aluminum Front Wheels	1	
467	0693795		Paint, Rear Wheels, Tandem Axle	1	
			Paint, Wheels - Black #101		
468	0733739		Paint, Axle Hubs	1	
			Paint, Axle Hub - Lower Job Color		
469	0581434		Transit Coating, Carwell, Corrosion Protection, Including Underside	1	
470	0007234		Compartment, Unpainted, D/A Finished	1	
471	0792638		Aerial Platform Paint	1	
			Paint Color, Aerial Device - Black 101		
			Paint Color, Turntable - Black 101		
			Paint Color, Boom Support - black 101		
			Paint Color, Cylinders - black 101		
			Paint Color, Aerial Torque Box - black 101 paint		
			Paint Color, Aerial Stabilizers - black 101		
			Paint Color, Aerial Basket - black 101		
			Paint Color, Aerial Rotation Motor - Black		
			Paint Color, Aerial Control Console - black 101		
472	0544129		Reflective Band, 1"-6"-1"	1	
			Color, Reflect Band - A - a) white		
			Color, Reflect Band - B - l) white		
			Color, Reflect Band - C - w) white		
473	0077356		Reflective, Cab Face, Below the S/S Trim Band	1	
474	0583454		Stripe, Chevron, Rear, Diamond Grade, Aerial	1	
			Color, Rear Chevron DG - fluorescent yellow green		
475	0598747		Stripe, Reflective/Diamond Grade, Chevron Stripes, Two (2) Stabilizers	1	
			Color, Reflect Band - A - p) fluorescent yellow green diamond grade		
			Color, Reflect Chev - A - r) red diamond grade		
			Size, Stripe - a) 4.00"		
476	0528008	SP	Basket Reflective Stripe, 1"-4"-1", Stripe	1	
			Color, Reflect Band - A - a) white		

Line	Option	Type	Option Description	Qty
476			Color, Reflect Band - B - l) white	
			Color, Reflect Band - C - w) white	
477	0027341		Jog, In Reflective Stripe, Single or Multiple	1
			Qty, - 1	
478	0027461		Stripe, Color Outline, Vinyl on Reflective Band	1
			Qty, - 1	
479	0671878		Color, Vinyl Stripe - 5) Vivid Blue	
			Stripe, Reflective, Slide Out Tray, Front and Sides, DOT Red/White Style	3
			Location - All slide out trays	
			Qty, - 03	
480	0670030		Stripe, Reflective, Toolboard, DOT Red/White Style	2
			Location - All swing out and slide out tool boards	
			Qty, - 02	
481	0552453		Stripe, Reflective, Chevron, Cab and Crew Cab Doors Interior, Diamond Grade	1
			Color, Reflect Band - A - p) fluorescent yellow green diamond grade	
			Size, Chevron Striping - 04	
			Color, Reflect Chev - A - r) red diamond grade	
482	0680371		Stripe, Gold Leaf, Two-Tone Paint Break with Shield, IPO Chrome Molding	1
483	0010197		Stripe, Gold Leaf, Side of Cab, Over Fender Only	1
484	0027372		Lettering Specifications, (GOLD STAR Process)	1
485	0686440		Lettering, Gold Leaf, 3.00", (1-20)	1
			Outline, Lettering - Outline and Shade	
486	0680416		Stripe, Gold Leaf, Side of Body, Over Fender Only, Tandem Axle	1
487	0686202		Lettering, Gold Leaf, 10.00", Each	4
			Qty, Lettering - 04	
			Outline, Lettering - Outline and Shade	
488	0686227		Lettering, Gold Leaf, 6.00", (1-20)	1
			Outline, Lettering - Outline and Shade	
489	0686256		Lettering, Gold Leaf, 4.00", Each	12
			Qty, Lettering - 12	
			Outline, Lettering - Outline and Shade	
490	0685978		Lettering, Reflective, 18.00", Each	3
			Qty, Lettering - 03	
			Outline, Lettering - Outline and Shade	
491	0685993		Lettering, Reflective, 10.00", Each	6
			Qty, Lettering - 06	
			Outline, Lettering - Outline and Double Shade	
492	0686018		Lettering, Reflective, 5.00", Each	8
			Qty, Lettering - 08	
			Outline, Lettering - Outline and Shade	
493	0685979		Lettering, Reflective, 16.00", Each	2
			Qty, Lettering - 02	
			Outline, Lettering - Outline and Shade	
494	0017279		Emblem, Corner Scroll, Gold leaf, Each	8
			Qty, - 08	
			Location, Emblem - Boom panels	
495	0017273		Emblem, Maltese Cross, Gold Leaf, 12"-14", Pair	1
			Qty, - 01	
			Location, Emblem - Basket	
496	0022652		Emblem, Maltese Cross, Gold Leaf, 15"-17", Pair	1
			Qty, - 01	
			Location, Emblem - Cab doors	
497	0666386		Emblem, Flag, Generic, Each	2
			Qty, - 02	
			Location, Emblem - Cab area	
			Size, Flag - 15" - 17"	
498	0766493		Emblem, American Flag Muted w/Thin Red Line, Ptd Cab Grille, All Custom	1
			Chassis	
499	0772003		Manual, Fire Apparatus Parts, USB Flash Drive, Custom	1
			Qty, - 01	
500	0772037		Manual, Chassis Service, USB Flash Drive, Custom	1
			Qty, - 01	
501	0773381		Manual, Chassis Operation, (1) USB Flash Drive, Custom	1
502	0030008		Warranty, Basic, 1 Year, Apparatus, WA0008	1

Line	Option	Type	Option Description	Qty
503	0696698		Warranty, Engine, Cummins, 5 Year, WA0181	1
504	0684953		Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	1
505	0596017		Warranty, Frame, 50 Year, Custom Chassis, WA0013	1
506	0595698		Warranty, Axle, 3 Year, TAK-4, WA0050	1
507	0644874		Warranty, Axle, 3 Year, TAK-4, IRS, WA0249	1
508	0652758		Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	1
509	0019914		Warranty, Structure, 10 Year, Custom Cab, WA0012	1
510	0744240		Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	1
511	0524627		Warranty, Electronics, 5 Year, MUX, WA0014	1
512	0708760		Warranty, Not Applicable, LED Strip Lights	1
513	0046369		Warranty, 5-year EVS Transmission, Standard Custom, WA0187	1
514	0685945		Warranty, Transmission Cooler, WA0216	1
515	0688798		Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	1
516	0596025		Warranty, Structure, 10 Year, Body, WA0009	1
517	0681118		Warranty, ROM, Roll-up Door, 7 Year, WA0206	1
518	0734463		Warranty, Pump, Waterous, 7 Year Parts, WA0382	1
519	0648675		Warranty, 10 Year S/S Pumbing, WA0035	1
520	0641372		Warranty, Foam System, Not Available	1
521	0006999		Warranty, Structure, 20 Year, Aerial Device, WA0052	1
522	0687388		Warranty, Swivels, 5 Year, Aerial Device, WA0197	1
523	0685727		Warranty, Hydraulic System and Components, 3 Year/5 Year, WA0200	1
524	0687327		Warranty, Waterway, 10 Year, Aerial Device, WA0198	1
525	0595860		Warranty, Paint, 4 Year, Aerial Device, Pro-Rated, WA0047	1
526	0553455		Warranty, Electronics, 5 Year, MUX, WA0014	1
527	0725636		Warranty, Harrison Generator, 2 Year	1
528	0595820		Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	1
529	0595421		Warranty, Goldstar, 3 Year, Apparatus, WA0018	1
530	0683627		Certification, Vehicle Stability, CD0156	1
531	0892659		Certification, Engine Installation, Enf, Cummins X15, 2021	1
532	0686786		Certification, Power Steering, CD0098	1
533	0631980		Certification, Cab Integrity, Saber FR/Enforcer, CD0130	1
534	0631973		Certification, Cab Door Durability, Saber FR/Enforcer, CD0137	1
535	0631978		Certification, Windshield Wiper Durability, Saber FR/Enforcer, CD0132	1
536	0631974		Certification, Electric Window Durability, Saber FR/Enforcer, CD0133	1
537	0631977		Certification, Seat Belt Anchors and Mounting, Saber FR/Enforcer, CD0134	1
538	0735949		Certification, Cab HVAC System Performance, SFR/Enf, CD0165/CD0167/CD0174/CD0175	1
539	0545073		Amp Draw Report, NFPA Current Edition	1
540	0002758		Amp Draw, NFPA/ULC Radio Allowance	1
541	0799248		Appleton/Florida BTO	1
542	0000053		Ascendant Tower	1
543	0000012		PIERCE CHASSIS	1
544	0004713		ENGINE, OTHER	1
545	0046396		EVS 4000 Series TRANSMISSION	1
546	0020011		WATEROUS PUMP	1
547	0020009		POLY TANK	1
548	0028047		NO FOAM SYSTEM	1
549	0020006		SIDE CONTROL	1
550	0020007		AKRON VALVES	1
551	0020015		ABS SYSTEM	1
552	0658751		PUMPER BASE	1

Atlantic Emergency Solutions is pleased to submit a proposal to Lake Monticello Volunteer Fire Department. for a **Pierce® 100' Heavy Duty Aerial Tower** per your request for quotation. The following paragraphs will describe in detail the apparatus, construction methods, and equipment proposed. This proposal will indicate size, type, model and make of components parts and equipment, providing proof of compliance with each and every item (except where noted) in the departments advertised specifications.

PIERCE MANUFACTURING was founded in 1913. Since then we have been building bodies with one philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work which is reflected in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 75 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 62,500 apparatus, including more than 33,900 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 870,000 total square feet of floor space situated on approximately 105 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land.

Our beliefs in high ethical standards are carried through in all of our commitments and to everyone with whom we do business. Honesty, Integrity, Accountability and Citizenship are global tenets by which we all live and work. Consequently, we neither engage in, nor have we ever been convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

Pierce has only one brand of fire apparatus "Pierce", ensuring you are receiving top of the line product that meets your specification.

In accordance with the current edition of NFPA 1901 standards, this proposal will specify whether the fire department, manufacturer, or apparatus dealership will provide required loose equipment.

Images and illustrative material in this proposal are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.

GENERAL DESIGN AND CONSTRUCTION

To control quality, ensure compatibility, and provide a single source for service and warranty, the custom cab, chassis, pump module and body will be entirely designed, assembled/welded and painted in Pierce owned manufacturing facilities. This includes, but not limited to the cab weldment, the pumphouse module assembly, the chassis assembly, the body and the electrical system.

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American welding Society B2.1-2000 requirements for structural welding of sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American

Welding Society standards A5.20-E70T1. Furthermore, all employees classified as welders are tested and certified to meet the American welding Society codes upon hire and every three (3) years thereafter. Pierce also employs an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal.

In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to insure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

To demonstrate the quality of our products and services, a list of at least twenty five (25) fire departments/municipalities that have purchased vehicles for a second time is provided.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty. A qualified delivery representative shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered.

MANUAL AND SERVICE INFORMATION

At time of delivery, complete operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery Pierce will also provide one (1) 39-minute, professionally produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, pump operation, aerial operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle. The apparatus will meet NFPA 1901 acceleration and braking requirements.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Atlantic Emergency Solutions by operating a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in

Pierce fire apparatus. The service facility will be located within twenty five (25) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operators manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24 hour 7 day a week toll free hot line, four (4) on staff EVTs, and offers hands-on repair and maintenance training classes multiple times a year.

LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

INSURANCE PROVIDED BY BIDDER

COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Personal and Advertising Injury\$1,000,000

General Aggregate\$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form:

Each Accident Combined Single Limit:\$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate:\$3,000,000

Each Occurrence:\$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

INSURANCE PROVIDED BY MANUFACTURER**PRODUCT LIABILITY INSURANCE**

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when required by written contract between the Owner and a Pierce authorized dealer.

UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence:\$25,000,000

Aggregate:\$25,000,000

The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.

SINGLE SOURCE MANUFACTURER

Pierce Manufacturing, Inc. provides an integrated approach to the design and manufacture of our products that delivers superior apparatus and a dedicated support team. From our facilities, the chassis, cab weldment, cab, pump house (including the sheet metal enclosure, valve controls, piping and operators panel) body and aerial device will be entirely designed, tested, and hand assembled to the customer's exact specifications. The electrical system either hardwired or multiplexed, will be both designed and integrated by Pierce Manufacturing. The warranties relative to these major components (excluding component warranties such as engine, transmission, axles, pump, etc.) will be provided by Pierce as a single source manufacturer. Pierce's single source solution adds value by providing a fully engineered product that offers durability, reliability, maintainability, performance, and a high level of quality.

Your apparatus will be manufactured in Appleton, Wisconsin.

NFPA 2016 STANDARDS

This unit will comply with the NFPA standards effective January 1, 2016, except for fire department directed exceptions. These exceptions will be set forth in the Statement of Exceptions.

Certification of slip resistance of all stepping, standing and walking surfaces will be supplied with delivery of the apparatus.

All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and

designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA".

VEHICLE INSPECTION PROGRAM CERTIFICATION

To assure the vehicle is built to current NFPA standards, the apparatus, in its entirety, will be third-party, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition of NFPA 1901. The certification will include: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus.

A placard will be affixed in the driver's side area stating the third party agency, the date, the standard and the certificate number of the whole vehicle audit.

INSPECTION CERTIFICATE

A third party inspection certificate for the aerial device will be furnished upon delivery of the aerial device. The certificate will be Underwriters Laboratories Inc. Type 1 and will indicate that the aerial device has been inspected on the production line and after final assembly.

Visual structural inspections will be performed on all welds on both aluminum and steel ladders.

On critical weld areas, or on any suspected defective area, the following tests will be conducted:

- Magnetic particle inspection will be conducted on steel aerials to assure the integrity of the weldments and to detect any flaws or weaknesses. Magnets will be placed on each side of the weld while iron powder is placed on the weld itself. The powder will detect any crack that may exist. This test will conform to ASTM E709 and be performed prior to assembly of the aerial device.
- A liquid penetrant test will be conducted on aluminum aerials to assure the integrity of the weldments and to detect any flaws or weaknesses. This test will conform to ASTM E165 and be performed prior to assembly of the aerial device.

- Ultrasonic inspection will be conducted on all aerials to detect any flaws in pins, bolts and other critical mounting components.

In addition to the tests above, functional tests, load tests, and stability tests will be performed on all aerials. These tests will determine any unusual deflection, noise, vibration, or instability characteristics of the unit.

PUMP TEST

The pump will be tested, approved and certified by Underwriter's Laboratory at the manufacturer's expense. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the manufacturer's record of pump construction details will be forwarded to the Fire Department.

GENERATOR TEST

If the unit has a generator, the generator will be tested, approved, and certified by Underwriters Laboratories at the manufacturer's expense. The test results will be provided to the Fire Department at the time of delivery.

BREATHING AIR TEST

If the unit has breathing air, Pierce Manufacturing will draw an air sample from the air system and certify that the air quality meets the requirements of NFPA 1989, *Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection*.

AFTERMARKET SUPPORT WEBSITE

Pierceparts.com will provide Pierce authorized dealer access to comprehensive information pertaining to the maintenance and service of their customer's apparatus. This tool will provide the Pierce authorized dealer the ability to service and support their customers to the best of their ability with factory support at their fingertips.

Pierceparts.com is also accessible to the end user through the guest login. Limited access is available and vehicle specific parts information accessible by entering a specific VIN number. All end users should see their local authorized Pierce dealer for additional support and service.

The website will consist of the following screens at the dealer level:

My Fleet Screen

The My Fleet screen will provide access to truck detail information on the major components of the vehicle, warranty information, available vehicle photographs, vehicle drawings, sales options, applicable vehicle software downloads, etc.

Parts Screens

The Parts screens will provide parts look-up capability of Pierce Manufacturing sourced items, with the aid of digital photographs, part drawings and assembly drawings. The parts search application will permit the searching of parts by item description or function group (major system category). The parts application will provide the ability to submit electronically a parts order, parts quote, or parts return request directly to Pierce Manufacturing for processing.

Warranty Screen

The Warranty screens will provide dealers the ability to submit electronically warranty claims directly to Pierce Manufacturing for reimbursement.

My Reports Screens

The My Reports screens will provide access to multiple dealer reports to allow the dealership to maintain communication with the customer on the status of orders, claims, and phone contacts.

Technical Support Screens

The Technical Support screens will provide access to all currently published Operation and Maintenance and Service Publications. Access to Pierce Manufacturing Service Bulletins and Work Instructions, containing information on current service topics and recommendations will be provided.

Training

The Training screens will provide access to upcoming training classes offered by Pierce Manufacturing along with interactive electronic learning modules (Operators Guides) covering the operation of major vehicle components will be provided. Access to training manuals used in Pierce Manufacturing training classes will be provided.

About Pierce

Access to customer service articles, corporate news, quarterly newsletters, and key contacts within the Customer Service Department will be provided. The current Customer Service Policy and Procedure Manual, detailing the operation of the Customer Service group will also be accessible.

BID BOND

A bid bond as security for the bid in the form of a 10% bid bond will be provided with the proposal. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language which assures that the bidder/principal will give a bond or bonds, as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract.

Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.

PERFORMANCE BOND

Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.

APPROVAL DRAWING

A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.

A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.

COMPARTMENT LAYOUT DRAWING

A sales drawing will be provided as if the rear body compartment doors are open. This drawing will be provided for graphic representation only and will include such things as shelves, trays, reels, dividers, air control panels, air bottle storage bins, poly boxes, etc.

ELECTRICAL WIRING DIAGRAMS

One (1) CD copy and one (1) paper copy of the electrical wiring diagrams, prepared for the model of chassis and body, will be provided.

ENFORCER CHASSIS

The Pierce Enforcer™ is the custom chassis developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire apparatus. The chassis will be manufactured in the apparatus body builder's facility eliminating any split responsibility. The chassis will be designed and manufactured for heavy-duty service, with adequate strength, capacity for the intended load to be sustained, and the type of service required. The chassis will be the manufacturer's first line tilt cab.

MAXIMUM OVERALL HEIGHT

The maximum overall height of the apparatus will be 11' - .5" .

WHEELBASE

The wheelbase of the vehicle will be 271.00".

GVW RATING

The gross vehicle weight rating will be 76,640 lb.

FRAME

The chassis frame will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus. The side rails will have a 13.38" tall web over the front and mid sections of the chassis, with a continuous smooth taper to 10.75" over the rear axle. Each rail

will have a section modulus of 25.992 cubic inches and a resisting bending moment (rbm) of 3,119,040 in-lb over the critical regions of the frame assembly, with a section modulus of 18.96 cubic inches with an rbm of 2,275,200 in-lb over the rear axle. The frame rails will be constructed of 120,000 psi yield strength heat-treated 0.38" thick steel with 3.50" wide flanges.

FRAME REINFORCEMENT

In addition, a full-length mainframe internal "C" liner will be provided. It will be heat-treated steel measuring 12.50" x 3.00" x 0.25". Each liner will have a section modulus of 13.58 cubic inches, yield strength of 110,000 psi, and rbm of 857,462 in-lb. Total rbm at wheelbase center will be 4,391,869 in-lb.

The frame liner will be mounted inside of the chassis frame rail and extend the full length of the frame.

FRONT NON DRIVE AXLE

The Oshkosh TAK-4® front axle will be of the independent suspension design with a ground rating of 24,000 lb.

Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron.

The center cross members and side plates will be constructed out of 80,000-psi yield strength steel.

Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations.

There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension.

The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load.

Camber at load will be zero degrees for optimum tire life.

The ball joint bearing shall be of low friction design and be maintenance free.

Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided.

The wheel ends will have little to no bump steer when the chassis encounters a hole or obstacle.

The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase.

The axle will have a third party certified turning angle of 45 degrees. Front discharge, front suction, or aluminum wheels will not infringe on this cramp angle.

FRONT SUSPENSION

Front Oshkosh TAK-4™ independent suspension will be provided with a minimum ground rating of 24,000 lb.

The independent suspension system has been designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.

Each wheel will have a torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension.

The suspension design will be such that there is at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.

The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side.

The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.

FRONT SHOCK ABSORBERS

KONI heavy-duty telescoping shock absorbers will be provided on the front suspension.

FRONT OIL SEALS

Oil seals with viewing window will be provided on the front axle.

FRONT TIRES

Front tires will be Goodyear 425/65R22.50 radials, 20 ply Armor MAX, rated for 24,400 lb maximum axle load and 68 mph maximum speed.

The tires will be mounted on Alcoa® 22.50" x 12.25" Dura-Black® polished aluminum disc type wheels with a ten (10) stud, 11.25" bolt circle.

REAR AXLE

The rear axle will be a tandem axle assembly, of the Oshkosh TAK-4® T3, Tight Turning Technology, independent suspension design, with the ability to support a mechanical rear axle steering system. Tandem rear axles will have a ground rating of 52,640 lb.

The rear axles will be designed for specific use of the independent suspension.

The rear independent suspension driving axles will be equipped with a carrier reduction of 1.69 to 1.00 with a planetary wheel end reduction of 3.55 to 1.00. Driving torque will be transmitted from the center differential to the planetary wheel drive by means of a half shaft.

Oil fills and level checks will be required at the center differential and the planet wheel end locations.

An inter-axle differential, which divides torque evenly between axles, will be provided with an indicator light mounted on the cab instrument panel.

REAR AXLE STEERING

The tandem rear axle assembly will include a mechanical rear steering system. The mechanical rear steering system will be applied to both rear axles.

The steering geometry will be designed to minimize tire scrub of the rear tandem axle tires while reducing the overall turning diameter of the apparatus.

The mechanical rear steering system will not use electronic controls and will not have a means to be disengaged. Coordinated steering is the only steering mode supported by the mechanical steering system.

Rear steering system is actuated by a mechanical means of connecting the front master/slave steering gear system to a rear axle master/slave steering gear system.

TOP SPEED OF VEHICLE

A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 60 mph.

REAR SUSPENSION

The rear suspension will be an Oshkosh TAK-4® independent type with a minimum ground rating of 52,640 lbs.

The independent suspension will be configured with upper and lower control arms with a spring seat for a coil spring mounted to the lower control arm. The spring tower will be integrated into the suspension frame mount. Each control arm has elastomeric bushings at the inner pivot locations with a ball joint bearing at the outer pivot location. All suspension pivot joints will be of a maintenance free design.

The rear independent suspension will be provided with steering toe links providing tow adjustments and maintaining wheel control throughout the range of wheel travel.

The independent suspension will be designed to provide maximum ride quality when traveling at highway speeds over improved roads or a moderate speeds over secondary road surfaces with minimal transfer of shock and vibration to the apparatus.

Each independent suspension will utilize a coil type of spring. The design will allow for removal of the spring without the use of any spring compression.

The rear suspension will provide a minimum wheel travel of 10.00", 6.00" jounce and 4.00" of rebound.

REAR OIL SEALS

Oil seals will be provided on the rear axle(s).

DIFFERENTIAL LOCK CONTROL

A rocker style switch will be used to engage or disengage the differential lock.

DRIVER CONTROL DIFFERENTIAL LOCK (DCDL)

Both rear tandem axles will be equipped with driver controlled differential locks (DCDL). The control will be located within easy reach of the driver.

REAR TIRES

Rear tires will be four (4) Goodyear radials 445/65R22.50, 20 ply all-position G296 MSA tread, rated for 52,640 lb maximum axle load and 68 mph maximum speed.

The tires will be mounted on 22.50" x 13.00" steel disc type wheels with a ten (10) stud, 11.25" bolt circle.

TIRE BALANCE

All tires will be balanced with Counteract balancing beads. The beads will be inserted into the tire and eliminate the need for wheel weights.

TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

WHEEL SAFETY BANDS

The following one (1) pair wheels, located Front Axle, will have the Tyron Wheel Safety Bands installed. Chassis steering and handling will be improved when a tire with a band fails.

MUD FLAP

A mud flap will be installed behind the rear wheels of the apparatus. The mud flap will be plain and full-width.

MUD FLAPS

Mud flaps with a Pierce logo will be installed behind the front and rear wheels.

WHEEL CHOCKS

There will be one (1) pair of Worden Safety Products, Model HWGY-SB, wheel chocks provided.

Heavy Duty, large molded aluminum wheel chock with solid bottom, yellow powder coat finish.

WHEEL CHOCK BRACKETS

There shall be one (1) pair of Worden Safety model U815T mounting wheel chock brackets provided. The brackets shall be mounted Left side rear tire, rearward..

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco 4S4M, anti-lock braking system. The ABS will provide a four (4) channel anti-lock braking control on both the front and rear wheels (rear tandem wheels). A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any particular wheel begins to lockup, a

signal will be sent to the control unit. This control unit then will reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

AUTOMATIC TRACTION CONTROL

An anti-slip feature will be included with the ABS. The Automatic Traction Control will be used for traction in poor road and weather conditions. The Automatic Traction Control will act as an electronic differential lock that will not allow a driving wheel to spin, thereby supplying traction at all times. The ABS electronic control unit (ECU) will work with the engine ECU, sharing information concerning wheel slip. Engine ECU will use information to control engine speed, allowing only as much throttle application as required for the available traction, regardless of how much the driver is asking for. An "off road traction" switch will be provided on the instrument panel. Activation of the switch will allow additional tire slip to let the truck climb out and get on top of deep snow or mud.

BRAKES

The service brake system will be full air type.

The front brakes will be Knorr/Bendix disc type with a 17.00" ventilated rotor for improved stopping distance.

The brake system will be certified, third party inspected, for improved stopping distance.

The rear brakes will be Bendix®, Model ES1657D, 16.50" x 7.00" cam operated with automatic slack adjusters.

BRAKE SYSTEM AIR COMPRESSOR

The air compressor will be a Cummins/WABCO with 18.7 cubic feet per minute output.

BRAKE SYSTEM

The brake system will include:

- Brake treadle valve
- Heated automatic moisture ejector on air dryer
- Total air system capacity of 6,408 cubic inches
- Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi
- Spring set parking brake system
- Parking brake operated by a push-pull style control valve
- A parking "brake on" indicator light on instrument panel
- Park brake relay/inversion and anti-compounding valve, in conjunction with a double check valve system, will be provided with an automatic spring brake application at 40 psi
- A pressure protection valve to prevent all air operated accessories from drawing air from the air system when the system pressure drops below 80 psi (550 kPa)
- 1/4 turn drain valves on each air tank

The air tank will be primed and painted to meet a minimum 750 hour salt spray test.

To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.

BRAKE SYSTEM AIR DRYER

The air dryer will be a WABCO System Saver 1200 IWT, with internal wet tank, spin-on coalescing filter cartridge and 100 watt heater.

BRAKE LINES

Color-coded nylon brake lines will be provided per SAE J2580.

- Supply -Black
- Primary - Green
- Secondary - Orange
- Park - Red

The lines will be wrapped in a heat protective loom where necessary in the chassis.

AIR INLET/OUTLET

One (1) air inlet/outlet will be installed recessed with the female coupling located mounted ahead of the cab door at the driver's side corner. This system will tie into the "wet" tank of the brake system and include a check valve in the inlet line and an 85 psi pressure protection valve in the outlet line. The air outlet will be controlled by a needle valve.

A mating male fitting will be provided with the loose equipment.

The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure.

ALL WHEEL LOCK-UP

An additional all wheel lock-up system will be installed which applies air to the front brakes only. The standard spring brake control valve system will be used for the rear.

The all wheel lock-up system will be activated automatically when the aerial master switch is activated.

AIR COMPRESSOR - BRAKE SYSTEM MAINTENANCE

A Gast, Model 5HCD-10-M550X, air compressor will be provided.

It will be driven by the 110-volt shoreline electrical system.

The compressor will maintain the air pressure in the chassis air brake system while the vehicle is not in use.

A Square-D, model #1-9013-GHG2J30, pressure switch will sense when the system pressure drops and automatically start the compressor, which then will run until pressure is restored.

A coalescing filter will be provided, and installed in the system.

It will be located in compartment Ceiling of the DS rear facing EMS compartment.

REMOTE AIR TANK DRAIN

There will be a single remote drain valve provided to drain all air supply reservoirs at the same time. The drain valve will be actuated from the side of the apparatus. The drain valve will be located Below the rubrail of compartment LS4 rear of stabilizer pad.. Automatic valves will be provided to isolate the reservoirs from one another when the drain is closed.

COMPRESSION FITTINGS

Any nylon tube on the apparatus that is pneumatic will be plumbed with compression type fittings where applicable.

ENGINE

The chassis will be powered by an electronically controlled engine as described below:

Make:	Cummins®
Model:	X15
Power:	605 hp at 1800 rpm
Torque:	1850 lb-ft at 1000 rpm
Governed Speed:	2100 rpm
Emissions Level:	EPA 2021
Fuel:	Diesel
Cylinders:	Six (6)
Displacement:	912 cubic inches (14.9L)
Starter:	Delco 39MT™
Fuel Filters:	Spin-on style primary filter with water separator and water-in-fuel sensor. Secondary spin-on style filter.

The engine will include On-board diagnostics (OBD), which provides self diagnostic and reporting. The system will give the owner or repair technician access to state of health information for various vehicle sub systems. The system will monitor vehicle systems, engine and after treatment. The system will illuminate a malfunction indicator light on the dash console if a problem is detected.

REMOTE MOUNTED ENGINE FILTERS

The engine fuel and oil filters will be remote mounted for ease of maintenance.

HIGH IDLE

An automatic high idle will be provided that will automatically maintain a preset engine rpm whenever the engine has been idling for 5 minutes and the interlocks are met. A momentary switch will be installed, at the cab instrument panel, for deactivation. The high idle will reactivate whenever the ignition switch or an interlock is reset and the engine has been idling for 5 minutes.

The high idle will be operational only when the parking brake is on and the truck transmission is in neutral.

This will only occur when the pump is not engaged.

ENGINE BRAKE

A Jacobs® engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver.

The driver will be able to turn the engine brake system on/off and have a high, medium and low setting.

The engine brake will activate when the system is on and the throttle is released.

The high setting of the brake application will activate and work simultaneously with the variable geometry turbo (VGT) provided on the engine.

The engine brake will be installed in such a manner that when the engine brake is slowing the vehicle the brake lights are activated.

The ABS system will automatically disengage the auxiliary braking device, when required.

CLUTCH FAN

A fan clutch will be provided. The fan clutch will be automatic when the pump transmission is in "Road" position, and constantly engaged when in "Pump" position.

COOLANT HOSE CLAMPS

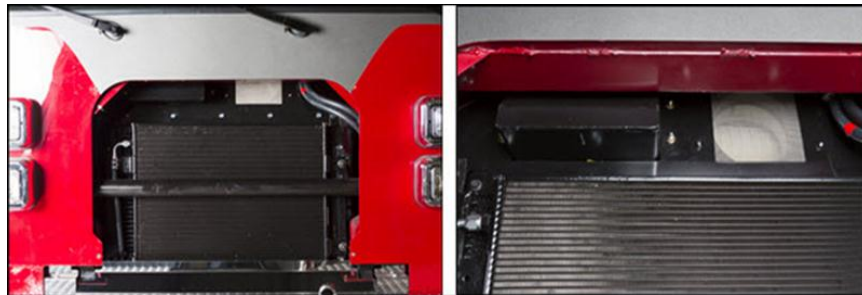
Constant torque hose clamps will be provided on all hoses supplied by the apparatus manufacturer. Clamps provided by the engine manufacturer will remain as supplied.

ENGINE AIR INTAKE

The engine air intake will be located above the engine cooling package. It will draw fresh air from the front of the apparatus through the radiator grille.

A stainless steel metal screen will be installed at the inlet of the air intake system that will meet NFPA 1901 requirements.

The air cleaner and stainless steel screen will be easily accessible by tilting the cab.

**EXHAUST SYSTEM**

The exhaust system will include a Single Module™ aftertreatment device to meet current EPA standards. The exhaust system will be stainless steel from the turbo to the inlet of the aftertreatment device, and will be 5.00" in diameter. An insulation wrap will be provided on all exhaust pipes between the turbo and aftertreatment device to minimize the heat loss to the aftertreatment device. The exhaust

will terminate horizontally ahead of the right side rear wheels. A tailpipe diffuser will be provided to reduce the temperature of the exhaust as it exits. Heat deflector shields will be provided to isolate chassis and body components from the heat of the tailpipe diffuser.

EXHAUST MODIFICATION

The exhaust pipe will be brought out from under the body at a 90 degree angle from the truck. The tail pipe will terminate flush with the body rubrail, adaptable for the Plymovent system. The diameter of the diffuser will be 7.00". There will be a clearance of 4.00" completely around the pipe once past the side of the body. A stop will be provided on the tail pipe that will prevent the nozzle from sliding too far on.

RADIATOR

The radiator and the complete cooling system will meet or exceed NFPA and engine manufacturer cooling system standards.

For maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The radiator core will consist of aluminum fins, having a serpentine design, brazed to aluminum tubes.

The radiator core will have a minimum front area of 1060 square inches.

Supply tank will be made of heavy duty glass-reinforced nylon and the return tank will be made of aluminum. Both tanks will be crimped onto the core assembly using header tabs and a compression gasket to complete the radiator core assembly. There will be a full steel frame around the inserts to enhance cooling system durability and reliability.

The radiator will be compatible with commercial antifreeze solutions.

The radiator assembly will be isolated from the chassis frame rails with rubber isolators to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven terrain.

The radiator will include a de-aeration/expansion tank. For visual coolant level inspection, the radiator will have a built-in sight glass. The radiator will be equipped with a 15 psi pressure relief cap.

A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.

Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.

COOLANT LINES

Gates, or Goodyear, rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing.

Hose clamps will be stainless steel constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 65 gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of 12-gauge, hot rolled steel. It will be equipped with swash partitions and a vent. To eliminate the effects of corrosion, the fuel tank will be mounted with stainless steel straps.

A 0.75" drain plug will be located in a low point of the tank for drainage.

A fill inlet will be provided and marked "Ultra Low Sulfur - Diesel Fuel Only." The fill inlet will be located adjacent to the air bottle storage behind a common door on the left hand side of the vehicle. The door will be polished stainless steel

A 0.50" diameter vent will be installed from tank top to just below fuel fill inlet.

The fuel tank will meet all FHWA 393.67 requirements including a fill capacity of 95 percent of tank volume.

All fuel lines will be provided as recommended by the engine manufacturer.

DIESEL EXHAUST FLUID TANK

A 4.5 gallon diesel exhaust fluid (DEF) tank will be provided and mounted in the driver's side body forward of the rear axle.

A 0.50" drain plug will be provided in a low point of the tank for drainage.

A fill inlet will be provided and marked "Diesel Exhaust Fluid Only". The fill inlet will be located below the air bottle storage behind a common door on the driver side of the vehicle.

The tank will meet the engine manufacturers requirement for 10 percent expansion space in the event of tank freezing.

The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

FUEL PRIMING PUMP

A Cummins automatic electronic fuel priming pump will be integrated as part of the engine.

FUEL SHUTOFF

A fuel line shutoff valve will be installed on both the inlet and outlet of the primary fuel filter.

FUEL COOLER

An air to fuel cooler will be installed in the engine fuel return line.

FUEL SEPARATOR

The engine will be equipped with a Racor in-line spin-on fuel and water separator in addition to the engine fuel filters.

FUEL/WATER SEPARATOR SHUTOFF

TRANSMISSION

An Allison 5th generation, Model EVS 4500P, electronic, torque converting, automatic transmission will be provided.

The transmission will be equipped with prognostics to monitor oil life, filter life, and transmission health. A wrench icon on the shift selector's digital display will indicate when service is due.

Two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 1 o'clock).

A transmission temperature gauge with red light and buzzer will be installed on the cab instrument panel.

TRANSMISSION SHIFTER

A six (6)-speed push button shift module with four (4) + two (2) "Mode" selector will be mounted to right of driver on console. Shift position indicator will be indirectly lit for after dark operation.

The transmission ratio will be 1st - 4.70 to 1.00, 2nd - 2.21 to 1.00, 3rd - 1.53 to 1.00, 4th - 1.00 to 1.00, 5th - 0.76 to 1.00, 6th - 0.67 to 1.00, R - 5.55 to 1.00.

TRANSMISSION COOLER

A Modine plate and fin transmission oil cooler will be provided using engine coolant to control the transmission oil temperature.

DOWNSHIFT MODE (W/ENGINE BRAKE)

The transmission will be provided with an aggressive downshift mode.

This will provide earlier transmission downshifts to 3rd gear from 6th gear, resulting in improved engine braking performance.

TRANSMISSION PROGRAMMING

The transmission will be programmed to automatically shift the transmission to neutral when the parking brake is set to simplify operation and increase operational safety.

TRANSMISSION PROGRAM

The transmission will shift to neutral when parking brake is set.

TRANSMISSION FLUID

The transmission will be provided with TranSynd heavy duty synthetic transmission fluid.

DRIVELINE

Drivelines will be a heavy-duty metal tube and be equipped with Spicer® 1810 universal joints.

The shafts will be dynamically balanced before installation.

A splined slip joint will be provided in each driveshaft where the driveline design requires it. The slip joint will be coated with Glidecoat® or equivalent.

STEERING

Dual Sheppard, Model M110, steering gears, with integral heavy-duty power steering, will be provided. For reduced system temperatures, the power steering will incorporate an air to oil cooler and an Eaton, Model VN20, hydraulic pump with integral pressure and flow control. All power steering lines will have wire braded lines with crimped fittings.

A tilt and telescopic steering column will be provided to improve fit for a broader range of driver configurations.

STEERING WHEEL

The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.

LOGO AND CUSTOMER DESIGNATION ON DASH

The dash panel will have an emblem containing the Pierce logo and customer name. The emblem will have three (3) rows of text for the customer's department name. There will be a maximum of eight (8) characters in the first row, 11 characters in the second row and 11 characters in the third row.

The first row of text will be: Lake Monticello

The second row of text will be: Vol. Fire Dept.

The third row of text will be: .

BUMPER

A One (1) piece aluminum bumper minimum of 10.00" high and 45 degree corners containing a 3/8" bend radius and 1.50" top and bottom flange will be attached to the modular frame extension. The bumper will be extended 15.00" from front face of cab.

It will have fully covered stabilizer cylinders that tip within a pocket inside the covers allowing the bumper to be a single wrap around piece.

The bumper will be metal finished and painted job color.

GRAVEL PAN

A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and cab face. The gravel pan will be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.

LIFT AND TOW MOUNTS

Mounted to the frame extension will be lift and tow mounts. The lift and tow mounts will be designed and positioned to adapt to certain tow truck lift systems.

The lift and tow mounts with eyes will be painted the same color as the frame.

TOW EYES

Two (2) painted steel tow eyes will be installed under the bumper and attached to the front frame members. The tow eyes will be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow eyes will not be used for lifting of the apparatus.

The inner and outer edges of the tow eyes will have a 0.25" radius.

The tow eyes will be painted black.

FRONT BUMPER LINE-X COATING

Protective black Line-X® coating will be provided on the outside exterior of the top front bumper flange. It will not be sprayed on the underside of the flange.

The lining will be properly installed by an authorized Line-X dealer.

CAB

The Enforcer cab will be designed specifically for the fire service and manufactured by the chassis builder.

The cab will be built by the apparatus manufacturer in a facility located on the manufacturer's premises.

For reasons of structural integrity and enhanced occupant protection, the cab will be a heavy duty design, constructed to the following minimal standards.

The cab will have 12 main vertical structural members located in the A-pillar (front cab corner posts), B-pillar (side center posts), C-pillar (rear corner posts), and rear wall areas. The A-pillar will be constructed of solid A356-T5 aluminum castings. The B-pillar and C-pillar will be constructed from 0.13" wall extrusions. The rear wall will be constructed of two (2) 2.00" x 2.00" outer aluminum extrusions and two (2) 2.00" x 1.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 4.625" x 3.864" x 0.090" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.25" thick corner casting at each of the front corners of the roof assembly.

The front of the cab will be constructed of a 0.13" firewall plate, covered with a 0.090" front skin (for a total thickness of 0.22"), and reinforced with a full width x 0.50" thick cross-cab support located just below the windshield and fully welded to the engine tunnel. The cross-cab support will run the full width of the cab and weld to each A-pillar, the 0.13" firewall plate, and the front skin.

The cab floors will be constructed of 0.125" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.375" of structural material at the front floor area. The front floor area will also be supported with two (2) triangular 0.30" wall extrusions that also provides the mounting point for the cab lift. This tubing will run from the floor wireway of the cab to the engine tunnel side plates, creating the structure to support the forces created when lifting the cab.

The cab will be 96.00" wide (outside door skin to outside door skin) to maintain maximum maneuverability.

The overall height (from the cab roof to the ground) of approximately 99.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight rating, the smallest diameter tires for the suspension, no water weight, no loose equipment weight, and no personnel weight. Larger tires, wheels, and suspension will increase the overall height listed.

The floor to ceiling height inside the crew cab will be 54.50" in the center and outboard positions.

The crew cab floor will measure 46.00" from the rear wall to the back side of the rear facing seat risers.

The medium block engine tunnel, at the rearward highest point (knee level), will measure 61.50" to the rear wall. The big block engine tunnel will measure 51.50" to the rear wall.

The crew cab will be a totally enclosed design with the interior area completely open to improve visibility and verbal communication between the occupants.

The cab will be a full tilt cab style.

A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.

CAB ROOF DRIP RAIL

For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be painted to match the cab roof, and bonded to the sides of the cab. The drip rail will extend the full length of the cab roof.

INTERIOR CAB INSULATION

The cab will include 1.00" insulation in the ceiling, 1.50" insulation in the side walls, and 2.00" insulation in the rear wall to maximize acoustic absorption and thermal insulation.

FENDER LINERS

Full circular inner fender liners in the wheel wells will be provided.

PANORAMIC WINDSHIELD

A one (1)-piece safety glass windshield will be provided with over 2,775 square inches of clear viewing area. The windshield will be full width and will provide the occupants with a panoramic view. The windshield will consist of three (3) layers: outer light, middle safety laminate, and inner light. The outer light layer will provide superior chip resistance. The middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage. The inner light will provide yet another chip resistant layer. The cab windshield will be bonded to the aluminum windshield frame using a urethane adhesive. A custom frit pattern will be applied on the outside perimeter of the windshield for a finished automotive appearance.



WINDSHIELD WIPERS

Three (3) electric windshield wipers with washer will be provided that meet FMVSS and SAE requirements.

The washer reservoir will be able to be filled without raising the cab.



[Washer Reservoir Location]

ENGINE TUNNEL

Engine hood side walls will be constructed of 0.375" aluminum. The top will be constructed of 0.125" aluminum and will be tapered at the top to allow for more driver and passenger elbow room.

The engine tunnel will be insulated for protection from heat and sound. Perforated foil faced insulation will be over a 1.00" thick closed cell foam affixed with pressure sensitive adhesive and further secured with mechanical fasteners. Thermal rating for this insulation will be -40 degrees Fahrenheit to 300 degrees Fahrenheit. The noise insulation keeps the dBA level within the limits stated in the current NFPA 1901 standards.

The engine tunnel will be no higher than 18.00" off the crew cab floor.

CAB REAR WALL EXTERIOR COVERING

The exterior surface of the rear wall of the cab will be overlaid with bright aluminum treadplate that covers the entire rear wall.

CAB LIFT

A hydraulic cab lift system will be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves.

Hydraulic pump will have a manual override for backup in the event of electrical failure.

Lift controls will be located on the right side pump panel or front area of the body in a convenient location.

The cab will be capable of tilting 43 degrees to accommodate engine maintenance and removal.

The cab will be locked down by a 2-point normally closed spring loaded hook type latch that fully engages after the cab has been lowered. The system will be hydraulically actuated to release the normally closed locks when the cab lift control is in the raised position and cab lift system is under pressure. When the cab is completely lowered and system pressure has been relieved, the spring loaded latch mechanisms will return to the normally closed and locked position.

The hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the control is located in the tilt position.

For increased safety, a redundant mechanical stay arm will be provided that must be manually put in place on the left side between the chassis and cab frame when the cab is in the raised position. This device will be manually stowed to its original position before the cab can be lowered.

Cab Lift Interlock

The cab lift system will be interlocked to the parking brake. The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position. If the parking brake is released, the cab tilt mechanism will be disabled.

The cab lift safety system will also be interlocked to the front stabilizers in the bumper. The cab tilt mechanism will be active only when the front stabilizers are fully stowed, and fully tilted outboard. The cab tilt mechanism will not allow the front stabilizers to be tilted inboard until the cab has been fully lowered and locked into position.

GRILLE

A bright finished aluminum mesh grille screen, inserted behind a bright finished grille surround, will be provided on the front center of the cab.

DOOR JAMB SCUFFPLATES

All cab door jambs will be furnished with a polished stainless steel scuffplate, mounted on the striker side of the jamb and include the area behind the cab door handrails.

TRIM BAND ON CAB FACE

A band of 22 gauge patterned stainless steel trim will be installed across the front of the cab, from door hinge to door hinge. The trim band will be centered on the headlights and applied with two-sided tape. A 0.625" self-adhesive trim strip will be applied around the perimeter of the trim band.

MIRRORS

A Retraco, Model 613423, dual vision, motorized, west coast style mirror, with chrome finish, will be mounted on each side of the front cab door with spring loaded retractable arms. The flat glass and convex glass will be heated and adjustable with remote control within reach of the driver.

FRONT CROSS VIEW MIRROR

A Grote 10.50" diameter convex mirror will be provided. The mirror will provide the driver with a view of the right front bumper corner and the area several feet in front of the truck.

The mirror housing, tubing, clamps and hardware will be constructed of corrosion resistant stainless steel.

DOORS

To enhance entry and egress to the cab, the forward cab door openings will be a minimum of 37.50" wide x 63.37" high. The crew cab doors will be located on the sides of the cab and will be constructed in the same manner as the forward cab doors. The crew cab door openings will be a minimum of 34.30" wide x 63.37" high.

The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.093". The exterior door skins will be constructed from 0.090" aluminum.

A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The finish of the door handle will be chrome/black. The exterior handle will be designed specifically for the fire service to prevent accidental activation, and will provide 4.00" wide x 2.00" deep hand clearance for ease of use with heavy gloved hands.



[Exterior Door Handle]

Each door will also be provided with an interior flush, open style paddle handle that will be readily operable from fore and aft positions, and be designed to prevent accidental activation. The interior handles will provide 4.00" wide x 1.25" deep hand clearance for ease of use with heavy gloved hands.

The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks exceeding FMVSS standards. The keys will be Model 751. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed.



[Interior Door Handle]

A full length, heavy duty, stainless steel, piano-type hinge with a 0.38" pin and 11 gauge leaf will be provided on all cab doors. There will be double automotive-type rubber seals around the perimeter of the door framing and door edges to ensure a weather-tight fit.

A chrome handle will be provided on the inside of each cab door for ease of entry.

A red webbed grab handle will be installed on the crew cab door stop strap. The grab handles will be securely mounted.

The bottom cab step at each cab door location will be located below the cab doors and will be exposed to the exterior of the cab.

Door Panels

The inner cab door panels will be constructed out of brushed stainless steel.

ELECTRIC OPERATED CAB DOOR WINDOWS

All four (4) cab doors will be equipped with electric operated windows with one (1) flush mounted automotive style switch on each door. The driver's door will have four (4) switches, one (1) to control each door window.

Each switch will allow intermittent or auto down operation for ease of use. Auto down operation will be actuated by holding the window down switch for approximately 1 second.

CAB STEPS

A dual step will be provided below each cab and crew cab door. The steps will be designed with a grip pattern punched into bright aluminum treadplate material providing support, slip resistance, and drainage. The steps will be a bolt-in design to minimize repair costs should they need to be replaced. The forward cab steps will be a minimum 25.00" wide, and the crew cab steps will be 21.65" wide with a 7.00" minimum depth. The bottom step will protrude past the middle step 3.00". The step design raises the middle step higher and closer to the cab floor, resulting in a 12.00" distance from the step to cab floor in the cab and a 10.25" distance from the step to cab floor in the crew cab. Stepping distances from the ground to first step will be approximately 11.90" and from first step to middle step will be approximately 12.00".

The vertical surface of the upper step well will be aluminum treadplate.

The first step will be lit by a white 12 volt DC LED light provided on the step.

CAB EXTERIOR HANDRAILS

A Hansen knurled aluminum handrail will be provided adjacent to each cab and crew cab door opening to assist during cab ingress and egress. Each handrail will be provided with white LED lights. The lights will be activated when the parking brake is applied and when the cab or crew cab doors are opened. The LED lights may be load managed.

CAB FOLDING STEP

There will be three (3) folding step(s) located PS back of cab. The step(s) will be bright finished, non-skid with a chrome finish. The step(s) can be used as a hand hold with one (1) opening wide enough for a gloved hand.

Each step will incorporate an LED light to illuminate the stepping surface. The light will be activated when the battery switch is on and by the same means as the body step lights.

STEP LIGHTS

There will be six (6) white LED step lights with chrome housing installed for cab and crew cab access steps.

- One (1) light for the left access steps.

- Two (2) lights for the left side crew cab access steps.
- Two (2) lights for the right side crew cab access steps.
- One (1) light for the right side access step.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The lights will be activated when the battery switch is on and the adjacent door is opened.

FENDER CROWNS

Stainless steel fender crowns will be installed at the cab wheel openings.

ADDITIONAL HANDRAIL

There will be one (1) handrail(s) provided PS rear of cab- location TBD. Each handrail will be an anodized aluminum extrusion with a ribbed design to provide a positive gripping surface.

RIGHT SIDE ROLLUP CREW CAB DOOR WINDOW TINT

The rollup window in the right side crew cab door will be tinted privacy dark gray.

LEFT SIDE ROLLUP CREW CAB DOOR WINDOW TINT

The rollup window in the left side crew cab door will be tinted privacy dark gray.

STORAGE COMPARTMENT

Provided under the forward facing crew cab seats will be a transverse compartment. The compartment will be open top to bottom with no dividers. The upper section will be 13.75" wide x 9.00" high x full width (transverse) of the crew cab. The lower section will be 13.75" wide x 24.50" high x 13.00" deep on both sides. The compartment will extend from the bottom of the cab to top of the seat riser.

A 4.00" long x 7.50" diameter tube will be recessed below each side of the cab compartment floor. The tube will be angled approximately 10 degrees for ease of removing an extinguisher from the compartment.

There will be two (2) double pan doors painted to match the cab exterior with a non-locking D-Ring latch, one (1) on each side of the cab with a web strap for each exterior door provided as a door stop. The clear door opening of each compartment door will be 10.25" wide x 32.00" high.

The exterior access will be provided with a brushed stainless steel scuffplate on the lower door frame.

There will be one (1) drop down door, painted to match the cab interior with two (2) non-locking lever latches with no louvers on the forward face of the seat riser.

The compartment interior will be D/A finished.

Compartment Light

There will be two (2) white Amdor LED strip lights, one (1) each hinged side of exterior compartment door openings. The lights will be controlled by an automatic door switch.

PIKE POLE STORAGE

There will be four (4) tubes provided for storage of pike poles. The tubes will be located in the transverse section of the crew cab compartment, below the seat box. The poles will be stored so that two (2) poles can be accessed out each side of the vehicle.

The size and brand of the pike poles stored will be 6' NY Roof Hook.

DOOR FRAME SCUFFPLATE

There will be two (2) scuffplate(s) provided for the bottom of the door frame of Both auxiliary crew cab compartment. Each scuffplate will be brushed stainless steel with a 0.38" lip down.

CAB ROOF COVERING

Horizontal crew cab roof surfaces will be covered with bright aluminum treadplate. The fastening screws and the perimeter between the roof and the bottom of the aluminum treadplate, no more than 1.00" in from the edge of the aluminum treadplate, will be properly caulked to prevent water from leaking under the aluminum. Side warning lights will not be mounted on top of treadplate. The treadplate will extend and terminate next to the warning lights.

CUP HOLDER

There will be two (2) cup holder(s) provided. Each cup holder will be 4.00" in diameter x 4.00" high. An approximate 1.00" wide recess in the cup holder will allow it to hold beverage containers with handles.

Black rubber matting will be provided on the bottom of each cup holder.

The cup holder(s) will be painted to match the cab interior and located Mount at final.

CAB DASH

The driver side dash, switch panel located to the right of the driver, and center console shall be constructed of aluminum and painted black.

The officer side dash will be a flat top design with an upper beveled edge to provide easy maintenance and will be constructed out of aluminum and painted to match the cab interior.

The instrument gauge cluster will be surrounded with a high impact ABS plastic contoured to the same shape of the instrument gauge cluster.

MOUNTING PLATE ON ENGINE TUNNEL

Equipment installation provisions will be installed on the engine tunnel.

A 0.188" smooth aluminum plate will be bolted to the top surface of the engine tunnel. The plate will follow the contour of the engine tunnel and will run the entire length of the engine tunnel. The plate will be spaced off the engine tunnel .75" to allow for wire routing below the plate.

The mounting surface will be painted to match the cab interior.

CAB INTERIOR

The cab interior will be constructed of primarily metal (painted aluminum) to withstand the severe duty cycles of the fire service.

The engine tunnel will be padded and covered, on the top and sides, with black 36 ounce leather grain vinyl resistant to oil, grease, and mildew.

For durability and ease of maintenance, the cab interior side walls will be painted aluminum. The rear wall will be painted aluminum.

The headliner will be installed in both forward and rear cab sections. Headliner material will be vinyl. A sound barrier will be part of its composition. Material will be installed on an aluminum sheet and securely fastened to interior cab ceiling.

The forward portion of the cab headliner will permit easy access for service of electrical wiring or other maintenance needs.

All wiring will be placed in metal raceways.

CAB INTERIOR UPHOLSTERY

The cab interior upholstery will be 36 oz black vinyl.

CAB INTERIOR PAINT

The cab interior metal surfaces, excluding the rear heater panels, will be painted black, vinyl texture paint.

The rear heater panels will be painted black, vinyl textured paint.

CAB FLOOR

The cab and crew cab floor areas will be covered with Polydamp™ acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler.

The top surface of the material has a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a 0.25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.

DEFROST/AIR CONDITIONING SYSTEM

A ceiling mounted combination heater, defroster and air conditioning system will be installed in the cab above the engine tunnel area.

Cab Defroster

A 54,000 BTU heater-defroster unit with 690 SCFM of air flow will be provided inside the cab. The heater-defrost will be installed in the forward portion of the cab ceiling. Air outlets will be strategically located in the cab header extrusion per the following:

- One (1) adjustable will be directed towards the left side cab window
- One (1) adjustable will be directed towards the right side cab window
- Six (6) fixed outlets will be directed at the windshield

The defroster will be capable of clearing 98 percent of the windshield and side glass when tested under conditions where the cab has been cold soaked at 0 degrees Fahrenheit for 10 hours, and a 2 ounce

per square inch layer of frost/ice has been able to build up on the exterior windshield. The defroster system will meet or exceed SAE J382 requirements.

Cab/Crew Auxiliary Heater

There will be one (1) 31,000 BTU auxiliary heater with 560 SCFM of air flow provided in each outboard rear facing seat risers with a dual scroll blower. An aluminum plenum incorporated into the cab structure used to transfer heat to the forward positions.

Air Conditioning

A 19.10 cubic inch compressor will be installed on the engine.

A roof-mounted condenser with a 78,000 BTU output at 2,400 SCFM that meets and exceeds the performance specification will be installed on the cab roof. Mounting the condenser below the cab or body would reduce the performance of the system and will not be acceptable. The condenser cover to be painted #10 white.

The air conditioning system will be capable of cooling the average cab temperature from 100 degrees Fahrenheit to 75 degrees Fahrenheit at 50 percent relative humidity within 30 minutes. The cooling performance test will be run only after the cab has been heat soaked at 100 degrees Fahrenheit for a minimum of 4 hours.

The evaporator unit will be installed in the rear portion of the cab ceiling over the engine tunnel. The evaporator will include one (1) high performance heating core, one (1) high performance cooling core with (1) plenum directed to the front and one (1) plenum directed to the rear of the cab. The rear plenum a metal cover painted to match the cab interior.

The evaporator unit will have a 52,000 BTU at 690 SCFM rating that meets and exceeds the performance specifications.

Adjustable air outlets will be strategically located on the forward plenum cover per the following:

- Four (4) will be directed towards the seating position on the left side of the cab
- Four (4) will be directed towards the seating position on the right side of the cab

Adjustable air outlets will be strategically located on the evaporator cover per the following:

- Minimum of five (5) will be directed towards crew cab area

A high efficiency particulate air (HEPA) filter will be included for the system. Access to the filter cover will be hinged with two (2) thumb latches.

The air conditioner refrigerant will be R-134A and will be installed by a certified technician.

Climate Control

An automotive style controller will be provided to control the heat and air conditioning system within the cab. The controller will have three (3) functional knobs for fan speed, temperature, and air flow distribution (front to rear) control.

The system will control the temperature of the cab and crew cab automatically by pushing the center of the fan speed control knob. Rotate the center temperature control knob to set the cab and crew cab temperature.

The AC system will be manually activated by pushing the center of the temperature control knob. Pushing the center of the air flow distribution knob will engage the AC for max defrost, setting the fan speeds to 100 percent and directing all air flow to the overhead forward position.

The system controller will be located within panel position #12.

Gravity Drain Tubes

Two (2) condensate drain tubes will be provided for the air conditioning evaporator. The drip pan will have two (2) drain tubes plumbed separately to allow for the condensate to exit the drip pan. No pumps will be provided.

WINDOW DEFROST FAN

A window defrost fan will be mounted on the ceiling of the cab, located on the driver's side.

WINDOW DEFROST FAN

A window defrost fan will be mounted on the ceiling of the cab, located on the passenger side.

SUN VISORS

Two (2) smoked Lexan™ sun visors will be provided. The sun visors will be located above the windshield with one (1) mounted on each side of the cab.

There will be a black plastic thumb latch provided to help secure each sun visor in the stowed position.

GRAB HANDLES

A black rubber covered grab handle will be mounted on the door post of the driver and officer's side cab door to assist in entering the cab. The grab handles will be securely mounted to the post area between the door and windshield.



ENGINE COMPARTMENT LIGHTS

There will be one (1) Whelen, Model 3SC0CDCR, 12 volt DC, 3.00" white LED light(s) with Whelen, Model 3FLANGEC, chrome flange kit(s) installed under the cab to be used as engine compartment illumination.

These light(s) will be activated automatically when the cab is raised.

ACCESS TO ENGINE DIPSTICKS

For access to the engine oil and transmission fluid dipsticks, there will be a door on the engine tunnel, inside the crew cab. The door will be on the rear wall of the engine tunnel, on the vertical surface.

The engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling.

The door will have a rubber seal for thermal and acoustic insulation. One (1) flush latch will be provided on the access door.



MAP BOX

There will be one (1) map box(es) with three (3) bins, open at top. The map box(es) will be installed at final inspection. The map box(es) will be divided into three (3) bins, each being 12.50" wide x 3.00" high x 12.00" deep. Each bin will slant 30 degrees from horizontal. The map box(es) will be constructed of 0.125" aluminum and will be painted to match the cab interior.

CAB SAFETY SYSTEM

The cab will be provided with a safety system designed to protect occupants in the event of a side roll or frontal impact, and will include the following:

- A supplemental restraint system (SRS) sensor will be installed on a structural cab member behind the instrument panel. The SRS sensor will perform real time diagnostics of all critical subsystems and will record sensory inputs immediately before and during a side roll or frontal impact event.
- A slave SRS sensor will be installed in the cab to provide capacity for eight (8) crew cab seating positions.
- A fault-indicating light will be provided on the vehicle's instrument panel allowing the driver to monitor the operational status of the SRS system.
- A driver side front air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3-point seat belt.
- A passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3-point seat belt.
- Air curtains will be provided in the outboard bolster of outboard seat backs to provide a cushion between occupant and the cab wall.

- Suspension seats will be provided with devices to retract them to the lowest travel position during a side roll or frontal impact event.
- Seat belts will be provided with pre-tensioners to remove slack from the seat belt during a side roll or frontal impact event.

FRONTAL IMPACT PROTECTION

The SRS system will provide protection during a frontal or oblique impact event. The system will activate when the vehicle decelerates at a predetermined G force known to cause injury to the occupants. The cab and chassis will have been subjected, via third party test facility, to a crash impact during frontal and oblique impact testing. Testing included all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspensions components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing provided configuration specific information used to optimize the timing for firing the safety restraint system. The sensor will activate the pyrotechnic devices when the correct crash algorithm, wave form, is detected.

The SRS system will deploy the following components in the event of a frontal or oblique impact event:

- Driver side front air bag
- Passenger side knee bolster air bag
- Air curtains mounted in the outboard bolster of outboard seat backs
- Suspension seats will be retracted to the lowest travel position
- Seat belts will be pre-tensioned to firmly hold the occupant in place

SIDE ROLL PROTECTION

The SRS system will provide protection during a fast or slow 90 degree roll to the side, in which the vehicle comes to rest on its side. The system will analyze the vehicle's angle and rate of roll to determine the optimal activation of the advanced occupant restraints.

The SRS system will deploy the following components in the event of a side roll:

- Air curtains mounted in the outboard bolster of outboard seat backs
- Suspension seats will be retracted to the lowest travel position
- Seat belts will be pre-tensioned to firmly hold the occupant in place

SEATING CAPACITY

The seating capacity in the cab will be five (5).

DRIVER SEAT

A seat will be provided in the cab for the driver. The seat design will be a cam action type, with air suspension. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel). The manual horizontal control will be a towel-bar style located below the forward part of the seat cushion. To provide flexibility for multiple driver configurations, the seat will have an adjustable reclining back. The seat back will be a high back style with side bolster pads for maximum support. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt.

OFFICER SEAT

A seat will be provided in the cab for the passenger. The seat will be a fixed type, with no suspension. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seat will be furnished with a 3-point, shoulder type seat belt.

RADIO COMPARTMENT

A radio compartment will be provided under the officer's seat.

The inside compartment dimensions will be 16.00" wide x 7.50" high x 15.00" deep, with the back of the compartment angled up to match the cab structure.

A drop-down door with a chrome plated lift and turn latch will be provided for access.

The compartment will be constructed of smooth aluminum and painted to match the cab interior.

REAR FACING LEFT SIDE CABINET

A rear facing cabinet will be provided in the crew cab at the left side outboard position.

The cabinet will be 26.75" wide x 40.25" high x 23.00" deep.

The cabinet will include one (1) infinitely adjustable shelf with a 1.25" up-turned lip painted to match the cab interior.

The cabinet will include no louvers.

The cabinet will provide access only from outside the cab with one (1) double pan door painted to match the cab exterior with a non-locking D-ring latch. The door will be located on the side of the cab

over the wheelwell. A pneumatic stay arm will be provided as a door stop. The clear door opening will be 17.00" wide x 34.00" high.

The exterior access will be provided with a brushed stainless steel scuffplate on the lower door frame.

The cabinet shall be constructed of smooth aluminum and painted to match the cab interior.

Cabinet Light

There will be one (1) white Amdor LED strip light installed on the left side of the exterior cabinet door opening. The lighting will be controlled by an automatic door switch.

REAR FACING PASSENGER SIDE OUTBOARD SEAT

There will be one (1) rear facing seat provided at the passenger side outboard position in the crew cab. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seat will be furnished with a 3-point, shoulder type seat belt.

FORWARD FACING LEFT SIDE CABINET

A forward facing cabinet will be provided in the crew cab located at the left side outboard position.

The cabinet will be 22.00" wide x 40.00" high x 16.25" deep with one (1) Amdor rollup door with anodized finish, non-locking. The frame to frame opening of the cabinet will be 19.50" wide x 34.75" high. The minimum clear door opening of the cabinet will be 16.75" wide x 28.87" high.

The cabinet will include one (1) infinitely adjustable shelf with a 1.25" up-turned lip painted to match the cab interior.

The cabinet will include no louvers.

The cabinet will be constructed of smooth aluminum, and painted to match the cab interior.

Cabinet Light

There will be one (1) red Amdor LED strip light installed on the right side of the interior cabinet door opening and one (1) red Amdor LED strip light installed on the left side of the interior cabinet door opening. The lights will be controlled by an automatic door switch.

FORWARD FACING CENTER SEATS

There will be two (2) forward facing seats provided at the center position in the crew cab. For optimal comfort, the seats will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat backs will be an SCBA style with 90 degree back. The SCBA cavity will be adjustable from front to rear in 1.00" increments to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seats will be furnished with a 3-point, shoulder type seat belt.

FORWARD FACING RIGHT SIDE CABINET

A forward facing cabinet will be provided in the crew cab located at the right side outboard position.

The cabinet will be 22.00" wide x 40.00" high x 16.25" deep with one (1) Amdor rollup door with anodized finish, non-locking. The frame to frame opening of the cabinet will be 19.50" wide x 34.75" high. The minimum clear door opening of the cabinet will be 16.75" wide x 28.87" high.

CLEAR DOOR OPENINGS (F-F = Frame to Frame)					
AMDOR		GORTITE		ROM	
HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
Subtract 2.00" from F-F	Subtract 5.88" from F-F	Subtract 2.75" from F-F	Subtract 4.75" from F-F	Subtract 2.56" from F-F	Subtract 4.50" from F-F

The cabinet will include one (1) infinitely adjustable shelf with a 1.25" up-turned lip painted to match the cab interior.

The cabinet will include no louvers.

The cabinet will be constructed of smooth aluminum, and painted to match the cab interior.

Cabinet Light

There will be one (1) red Amdor LED strip light installed on the right side of the interior cabinet door opening and one (1) red Amdor LED strip light installed on the left side of the interior cabinet door opening. The lighting will be controlled by an automatic door switch.

PAC-TRAC

Pac-Trac will be installed on the rear wall of two (2) EMS cabinets. The Pac-trac will be painted to match cab interior. The locations are Each FF EMS compartment.

SEAT UPHOLSTERY

All seat upholstery will be leather grain 36 oz black vinyl resistant to oil, grease and mildew. The cab will have five (5) seating positions.

AIR BOTTLE HOLDERS

All SCBA type seats in the cab will have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket will include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back. For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp will constrain the SCBA bottle in the seat and will exceed the NFPA standard of 9G.

There will be a quantity of four (4) SCBA brackets.

SEAT BELTS

All cab and tiller cab (if applicable) seating positions will have red seat belts. To provide quick, easy use for occupants wearing bunker gear, the female buckle and seat belt webbing length will meet or exceed the current edition of NFPA 1901 and CAN/ULC - S515 standards.

The 3-point shoulder type seat belts will include height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter. The 3-point shoulder type seat belts will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

The 3-point shoulder type belts will also include the ReadyReach D-loop assembly to the shoulder belt system. The ReadyReach feature adds an extender arm to the D-loop location placing the D-loop in a closer, easier to reach location.

Any flip up seats will include a 3-point shoulder type belts only.

To ensure safe operation, the seats will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled.

HELMET STORAGE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet storage be provided.

There is no helmet storage on the apparatus as manufactured. The fire department will provide a location for storage of helmets.

CAB DOME LIGHTS

There will be four (4) dual LED dome lights with black bezels provided. Two (2) lights will be mounted above the inside shoulder of the driver and officer and two (2) lights will be installed and located, one (1) on each side of the crew cab.

The color of the LED's will be red and white.

The white LED's will be controlled by the door switches and the lens switch.

The color LED's will be controlled by the lens switch.

In order to ensure exceptional illumination, each white LED dome light will provide a minimum of 10.1 foot-candles (fc) covering an entire 20.00" x 20.00" square seating position when mounted 40.00" above the seat.

PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.

The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.

CAB INSTRUMENTATION

The cab instrument panel include gauges, an LCD display, telltale indicator lamps, control switches, alarms, and a diagnostic panel. The function of the instrument panel controls and switches will be identified by a label adjacent to each item. Actuation of the headlight switch will illuminate the labels in low light conditions. Telltale indicator lamps will not be illuminated unless necessary. The cab instruments and controls will be conveniently located within the forward cab section, forward of the driver. The gauge assembly and switch panels are designed to be removable for ease of service and low cost of ownership.

Gauges

The gauge panel will include the following ten (10) black faced gauges with black bezels to monitor vehicle performance:

- Voltmeter gauge (volts):
 - Low volts (11.8 VDC)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - High volts (15.5 VDC)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - Very low volts (11.3 VDC)
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
 - Very high volts (16.0 VDC)
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Engine Tachometer (RPM)
- Speedometer MPH (Major Scale), KM/H (Minor Scale)
- Fuel level gauge (Empty - Full in fractions):
 - Low fuel (1/8 full)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - Very low fuel (1/32 full)
 - Red caution indicator on the information center with steady alarm
 - Amber caution light on gauge assembly
- Engine Oil pressure Gauge (PSI):
 - Low oil pressure to activate engine warning lights and alarms
 - Red caution indicator on the information center with steady alarm

- Amber caution light on gauge assembly
- Front Air Pressure Gauges (PSI):
 - Low air pressure to activate warning lights and alarm
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Rear Air Pressure Gauges (PSI):
 - Low air pressure to activate warning lights and alarm
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Transmission Oil Temperature Gauge (Fahrenheit):
 - High transmission oil temperature activates warning lights and alarm
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Engine Coolant Temperature Gauge (Fahrenheit):
 - High engine temperature activates an engine warning light and alarms
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Diesel Exhaust Fluid Level Gauge (Empty - Full in fractions):
 - Low fluid (1/8 full)
 - Amber indicator light in gauge dial

All gauges will perform prove out at initial power-up to ensure proper performance.

Indicator Lamps

To promote safety, the following telltale indicator lamps will be located on the instrument panel in clear view of the driver. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols.

The following amber telltale lamps will be present:

- Low coolant
- Trac cntl (traction control) (where applicable)
- Check engine
- Check trans (check transmission)
- Aux brake overheat (Auxiliary brake overheat)
- Air rest (air restriction)
- Caution (triangle symbol)
- Water in fuel
- DPF (engine diesel particulate filter regeneration)
- Trailer ABS (where applicable)
- Wait to start (where applicable)
- HET (engine high exhaust temperature) (where applicable)
- ABS (antilock brake system)
- MIL (engine emissions system malfunction indicator lamp) (where applicable)

- Side roll fault (where applicable)
- Front air bag fault (where applicable)

The following red telltale lamps will be present:

- Warning (stop sign symbol)
- Seat belt
- Parking brake
- Stop engine
- Rack down

The following green telltale lamps will be provided:

- Left turn
- Right turn
- Battery on

The following blue telltale lamp will be provided:

- High beam

Alarms

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Audible pulsing tone caution alarm: A pulsing audible tone alarm (chime/chirp) will be provided whenever a caution message is present without a warning message being present.

Alarm silence: Any active audible alarm will be able to be silenced by holding the ignition switch at the top position for three (3) to five (5) seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm condition no longer exists. The intermittent chirp will act as a reminder to the operator that a caution or warning condition still exists. Any new warning or caution condition will enable the steady or pulsing tones respectively.

Indicator Lamp and Alarm Prove-Out

A system will be provided which automatically tests telltale indicator lights and alarms located on the cab instrument panel. Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

Control Switches

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver. All switches will have backlit labels for low light applications.

Headlight/Parking light switch: A three (3)-position maintained rocker switch will be provided. The first switch position will deactivate all parking and headlights. The second switch position will activate the parking lights. The third switch will activate the headlights.

Panel back lighting intensity control switch: A three (3)-position momentary rocker switch will be provided. Pressing the top half of the switch, "Panel Up" increases the panel back lighting intensity and pressing the bottom half of the switch, "Panel Down" decreases the panel back lighting intensity. Pressing the half or bottom half of the switch several times will allow back lighting intensity to be gradually varied from minimum to maximum intensity level for ease of use.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will turn off and deactivate vehicle ignition. The second switch position will activate vehicle ignition and will perform prove-out on the telltale indicators and alarms for 3 to 5 seconds after the switch is turned on. A green indicator lamp is activated with vehicle ignition. The third momentary position will temporarily silence all active cab alarms. An alarm "chirp" may continue as long as alarm condition exists. Switching ignition to off position will terminate the alarm silence feature and reset function of cab alarm system.

Engine start switch: A two (2)-position momentary rocker switch will be provided. The first switch position is the default switch position. The second switch position will activate the vehicle's engine. The switch actuator is designed to prevent accidental activation.

Hazard switch will be provided on the instrument panel or on the steering column.

Heater, defroster, and air conditioning control panel.

Turn signal arm: A self-canceling turn signal with high beam headlight controls will be provided.

Windshield wiper control shall have high, low and intermittent modes.

Parking brake control: An air actuated push/pull park brake control valve will be provided.

Chassis horn control: Activation of the chassis horn control will be provided through the center of the steering wheel.

High idle engagement switch: A momentary rocker switch with integral indicator lamp will be provided. The switch will activate and deactivate the high idle function. The "OK To Engage High Idle" indicator lamp must be active for the high idle function to engage. A green indicator lamp integral to the high idle engagement switch will indicate when the high idle function is engaged.

"OK To Engage High Idle" indicator lamp: A green indicator light will be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement.

Emergency switching will be controlled by multiple individual warning light switches for various groups or areas of emergency warning lights. An Emergency Master switch provided on the instrument panel that enables or disables all individual warning light switches is included.

An additional "Emergency Master" button will be provided on the lower left hand corner of the gauge panel to allow convenient control of the "Emergency Master" system from inside the driver's door when standing on the ground.

Custom Switch Panels

The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to four (4) switch panels in the lower instrument console and up to six (6) switch panels in the overhead visor console. All switches have backlit labels for low light conditions.



Diagnostic Panel

A diagnostic panel will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow ABS systems to provide blink codes should a problem exist.

The diagnostic panel will include the following:

- Engine diagnostic port
- Transmission diagnostic port
- ABS diagnostic port
- Roll sensor diagnostic port
- Command Zone USB diagnostic port

- ABS diagnostic switch (blink codes flashed on ABS telltale indicator)
- Diesel particulate filter regeneration switch (where applicable)
- Diesel particulate filter regeneration inhibit switch (where applicable)

Cab LCD Display

A digital four (4)-row by 20-character dot matrix display will be integral to the gauge panel. The display will be capable of showing simple graphical images as well as text. The display will be split into three (3) sections. Each section will have a dedicated function. The upper left section will display the outside ambient temperature.

The upper right section will display the following, along with other configuration specific information:

- Odometer
- Trip mileage
- PTO hours
- Fuel consumption
- Engine hours

The bottom section will display INFO, CAUTION, and WARNING messages. Text messages will automatically activate to describe the cause of an audible caution or warning alarm. The LCD will be capable of displaying multiple text messages should more than one caution or warning condition exist.

AIR RESTRICTION INDICATOR

A high air restriction warning indicator light LCD message with amber warning indicator and audible alarm will be provided.

"DO NOT MOVE APPARATUS" INDICATOR

A flashing red indicator light, located in the driving compartment, will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On."

The same circuit that activates the Do Not Move Apparatus indicator will activate a steady tone alarm when the parking brake is released.

DO NOT MOVE TRUCK MESSAGES

Messages will be displayed on the Command Zone™, color display located within sight of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake released).

The following messages will be displayed (where applicable):

- Do Not Move Truck
- LS CAB DOOR, the left side cab door is open
- LS CAB COMPT DOOR, the left side cab compartment door is open
- LS CREWCAB DOOR, the left side crew cab door is open
- STEP NOT STOWED, pump house step not stowed
- LS TURNTABLE STEP, left side turntable step not stowed
- AERIAL CONTROL DR, aerial override control compartment door is open

- LS6 COMPT DR, the left side LS6 compartment door is open
- LS5 COMPT DR, the left side LS5 compartment door is open
- LS4 COMPT DR, the left side LS4 compartment door is open
- LS3 COMPT DR, the left side LS3 compartment door is open
- LS2 COMPT DR, the left side LS2 compartment door is open
- LS1 COMPT DR, the left side LS1 compartment door is open
- LS AIR BTL COMPT DR, the left side air bottle compartment door is open
- LS BASKET STEP, the left side basket steps not stowed
- STABILIZER CTRL DR, the rear stabilizer control compartment door is open
- STABILIZER DEPLOYED, the stabilizers are not stowed.
- LS CORD REEL DR, the left side cord reel compartment door is open
- RS CORD REEL DR, the right side cord reel compartment door is open
- B1 REAR COMPT DR, the rear B1 compartment door is open
- TURNTBL CTRL CNSL, the turntable control console not stowed.
- RS BASKET STEP, the right side basket steps not stowed
- RS AIR BTL COMPT DR, the right side air bottle compartment door is open.
- RS1 COMPT DR, the right side RS1 compartment door is open
- RS2 COMPT DR, the right side RS2 compartment door is open
- RS3 COMPT DR, the right side RS3 compartment door is open
- RS4 COMPT DR, the right side RS4 compartment door is open
- RS5 COMPT DR, the right side RS5 compartment door is open
- RS6 COMPT DR, the right side RS6 compartment door is open
- RS7 COMPT DR, the right side RS7 compartment door is open
- RS CREWCAB DR, the right side crew cab door is open
- RS CAB COMPT DR, the right side cab compartment door is open
- RS CAB DR, the right side cab door is open
- LT TOWER NOT STOWED, the light tower is not stowed

Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved will be displayed as a caution message after the parking brake is released.

SWITCH PANELS

The emergency light switch panel will have a master switch for ease of use plus individual switches for selective control. Each switch panel will contain eight (8) membrane-type switches each rated for one million (1,000,000) cycles. Panels containing less than eight (8) switch assignments will include non-functioning black appliqué. The built-in switch panels will be located in the lower console or overhead console of the cab.

Additional switch panel(s) will be located in the overhead position(s) above the windshield or in designated locations on the lower instrument panel layout.

The switches will be membrane-type and also act as an integral indicator light. For quick, visual indication the entire surface of the switch will be illuminated white whenever back lighting is activated

and illuminated green whenever the switch is active. An active illuminated switch will flash when interlock requirements are not met or device is actively being load managed. For ease of use, a two (2)-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch will be placed in the center of the switch. The label will allow light to pass through the letters for ease of use in low light conditions.

WIPER CONTROL

Wiper control will consist of a two (2)-speed windshield wiper control with intermittent feature and windshield washer controls. The control will be located in switch panel #9.

The wipers will be interlocked to the parking brake. The wipers will terminate operation when the parking brake is set.

HOURLY METER - AERIAL DEVICE

The following aerial hour meter messages will be included in the information centers:

- Aerial Hours, that keeps track of the time the aerial device is in motion.
- Aerial PTO Hours, that keeps track of the time the aerial master switch is on and the aerial PTO is engaged.

AERIAL MASTER

There will be a master switch for the aerial operating electrical system provided.

AERIAL PTO ACTIVATION

The aerial PTO will be activated when the aerial master switch is activated and the interlocks are met.

SPARE CIRCUIT

There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power
- The negative wire will be connected to ground
- Wires will be protected to 15 amps at 12 volts DC
- Power and ground will terminate officer side dash area
- Termination will be with 15 amp, power point plug with rubber cover
- Wires will be sized to 125 percent of the protection

The circuit(s) may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be three (3) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power.

- The negative wire will be connected to ground.
- Wires will be protected to 20 amps at 12 volts DC.
- Power and ground will terminate One each in the top of the DS rear facing crew cab compartment and one each in the two outboard FF crew cab compartments..
- Termination will be to a Blue Sea System, Model 5025, 6 circuit with negative bus bar. The terminal block will include a cover with circuit labels.

Wires will be sized to 125% of the protection.

This circuit(s) may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

The positive wire will be connected directly to the battery power.

The negative wire will be connected to ground.

Wires will be protected to 60 amps at 12 volts DC.

Power and ground will terminate behind the officer's seat..

Termination will be to a Blue Sea System, model 5026, 12 circuit with negative bus bar, St Blade Fuse Block. The terminal block will include a cover with circuit labels.

Wires will be sized to 125% of the protection.

This circuit(s) may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be two (2) dual USB fast charge socket mounts installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power.
- The negative wire will be connected to ground.
- Wires will be protected to 4.8 amps at 12 volts DC.
- The USB socket mount will be Officers Dash.
- Termination will be a Blue Sea Systems part number 1045 dual USB charger socket.
- Wires will be sized to 125% of the protection.

This circuit(s) may be load managed when the parking brake is applied.

INFORMATION CENTER

An information center employing a 7.00" diagonal touch screen color LCD display will be encased in an ABS plastic housing.

The information center will have the following specifications:

- Operate in temperatures from -40 to 185 degrees Fahrenheit
- An Optical Gel will be placed between the LCD and protective lens
- Five weather resistant user interface switches
- Grey with black accents
- Sunlight Readable
- Linux operating system
- Minimum of 1000nits rated display
- Display can be changed to an available foreign language
- A LCD display integral to the cab gauge panel will be included as outlined in the cab instrumentation area.
- Programmed to read US Customary

General Screen Design

Where possible, background colors will be used to provide "At a Glance" vehicle information. If information provided on a screen is within acceptable limits, a green background will be used.

If a caution or warning situation arises the following will occur:

- An amber background/text color will indicate a caution condition
- A red background/text color will indicate a warning condition
- The information center will utilize an "Alert Center" to display text messages for audible alarm tones. The text messages will be written to identify the item(s) causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) have been resolved. The background color for the "Alert Center" will change to indicate the severity of the "warning" message. If a warning and a caution condition occur simultaneously, the red background color will be shown for all alert center messages.
- A label for each button will exist. The label will indicate the function for each active button for each screen. Buttons that are not utilized on specific screens will have a button label with no text or symbol.

Home/Transit Screen

This screen will display the following:

- Vehicle Mitigation (if equipped)
- Water Level (if the water level system includes compatible communications to the information center)
- Foam Level (if the foam level system includes compatible communications to the information center)
- Seat Belt Monitoring Screen
- Tire Pressure Monitoring (if equipped)
- Digital Speedometer
- Active Alarms

On Scene Screen

This screen will display the following and will be auto activated with pump engaged (if equipped):

- Battery Voltage
- Fuel
- Oil Pressure
- Coolant Temperature
- RPM
- Water Level (if equipped)
- Foam Level (if equipped)
- Foam Concentration (if equipped)
- Water Flow Rate (if equipped)
- Water Used (if equipped)
- Active Alarms

Virtual Buttons

There will be four (4) virtual switch panel screens that match the overhead and lower lighting and HVAC switch panels.

Page Screen

The page screen will display the following and allow the user to progress into other screens for further functionality:

- Diagnostics
 - Faults
 - Listed by order of occurrence
 - Allows to sort by system
 - Interlock
 - Throttle Interlocks
 - Pump Interlocks (if equipped)
 - Aerial Interlocks (if equipped)
 - PTO Interlocks (if equipped)
 - Load Manager
 - A list of items to be load managed will be provided. The list will provide a description of the load.
 - The lower the priority numbers the earlier the device will be shed should a low voltage condition occur.
 - The screen will indicate if a load has been shed (disabled) or not shed.
 - "At a glance" color features are utilized on this screen.
 - Systems
 - Command Zone
 - Module type and ID number
 - Module Version
 - Input or output number
 - Circuit number connected to that input or output

- Status of the input or output
 - Power and Constant Current module diagnostic information
 - Foam (if equipped)
 - Pressure Controller (if equipped)
 - Generator Frequency (if equipped)
- Live Data
 - General Truck Data
- Maintenance
 - Engine oil and filter
 - Transmission oil and filter
 - Pump oil (if equipped)
 - Foam (if equipped)
 - Aerial (if equipped)
- Setup
 - Clock Setup
 - Date & Time
 - 12 or 24 hour format
 - Set time and date
 - Backlight
 - Daytime
 - Night time
 - Sensitivity
 - Unit Selection
 - Home Screen
 - Virtual Button Setup
 - On Scene Screen Setup
 - Configure Video Mode
 - Set Video Contrast
 - Set Video Color
 - Set Video Tint
- Do Not Move
 - The screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will be indicated
 - Driver Side Cab Door
 - Passenger's Side Cab Door
 - Driver Side Crew Cab Door
 - Passenger's Side Crew Cab Door
 - Driver Side Body Doors
 - Passenger's Side Body Doors
 - Rear Body Door(s)
 - Ladder Rack (if applicable)
 - Deck Gun (if applicable)
 - Light Tower (if applicable)
 - Hatch Door (if applicable)

- Stabilizers (if applicable)
 - Steps (if applicable)
- Notifications
 - View Active Alarms
 - Shows a list of all active alarms including date and time of the occurrence is shown with each alarm
 - Silence Alarms - All alarms are silenced
- Timer Screen
- HVAC (if equipped)
- Tire Information (if equipped)
- Ascendant Set Up Confirmation (if equipped)

Button functions and button labels may change with each screen.

COLLISION MITIGATION

There will be a HAAS Alert®, Model HA5 Responder-to-Vehicle (R2V) collision avoidance system provided on the apparatus. The HA5 cellular transponder module will be installed behind the cab windshield, as high and near to the center as practical, to allow clear visibility to the sky. The module dimensions are 5.40" long x 2.70" wide x 1.30" high, and operating temperature range is -40 degree C to 85 degree C.

The transponder will be connected to the vehicle's emergency master circuit and battery direct power and ground.

While responding with emergency lights on, the HA5 transponder sends alert messages via cellular network to motorists in the vicinity of the responding truck that are equipped with the WAZE app.

While on scene with emergency lights on, the HA5 transponder sends road hazard alerts to motorists in the vicinity of the truck that are equipped with the WAZE app.

The HA5 Responder-to-Vehicle (R2V) collision avoidance system will include the transponder and a 5 year cellular plan subscription.

Activation of the HAAS Alert system requires a representative of the customer to accept the End User License Agreement (EULA) via an on-line portal.

VEHICLE DATA RECORDER

There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.

The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:

- Vehicle Speed - MPH
- Acceleration - MPH/sec
- Deceleration - MPH/sec
- Engine Speed - RPM
- Engine Throttle Position - % of Full Throttle
- ABS Event - On/Off
- Seat Occupied Status - Yes/No by Position
- Seat Belt Buckled Status - Yes/No by Position
- Master Optical Warning Device Switch - On/Off
- Time - 24 Hour Time
- Date - Year/Month/Day

Seat Belt Monitoring System

A seat belt monitoring system (SBMS) will be provided on the Command Zone™ color display. The SBMS will be capable of monitoring up to 10 seating positions indicating the status of each seat position per the following:

- Seat Occupied & Buckled = Green LED indicator illuminated
- Seat Occupied & Unbuckled = Red LED indicator with audible alarm
- No Occupant & Buckled = Red LED indicator with audible alarm
- No Occupant & Unbuckled = No indicator and no alarm

The seat belt monitoring screen will become active on the Command Zone color display when:

- The home screen is active:
 - and there is any occupant seated but not buckled or any belt buckled with an occupant.
 - and there are no other Do Not Move Apparatus conditions present. As soon as all Do Not Move Apparatus conditions are cleared, the SBMS will be activated.

The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.

INTERCOM SYSTEM

A five (5) position David Clark, Model U3800, intercom system with single radio interface capability at the driver and officer positions will be provided. Three (3) crew cab positions at two (2) forward facing seats and one (1) rear facing seat will have radio listen / intercom only.

The following components will be supplied with this system:

- One (1) U3805 Radio Cord Junction Module
- One (1) U3815 Radio Interface Module (Driver)
- One (1) U3811 Radio Interface Module (Officer)
- One (1) U3800 Intercom Unit (1 Crew)
- One (1) C3820 Power Cable
- One (1) U3802 Remote Headset Station (1 Crew)
- One (1) U3801 Remote Headset Station (1 Crew)

- All necessary station cables and connectors

RADIO / INTERCOM INTERFACE INCLUDED

All radio interfaced stations will have universal radio interfaces installed. The interface wiring will be routed within the cab to Officer Seat .

OVER THE HEAD HEADSET

There will be five (5) over the head, headset(s) provided Driver, Officer, PS rear facing and center FF seating positions..

Each David Clark, Model H3432, headset will feature:

- 5' Coiled cord
- Noise cancelling electric microphone
- Flexible microphone boom rotates 200 degrees for left or right dress
- Microphone on/off button
- Comfort Gel Earseals
- 23 dB noise reduction



HEADSET HANGERS

There will be five (5) headset hanger(s) installed driver's seat, officer's seat, driver's side inboard forward facing seat, passenger's side inboard forward facing seat and passenger's side outboard rear facing seat. The hanger(s) will meet NFPA 1901, Section 14.1.11, requirement for equipment mounting.

BRACKET, JOHNNY RAY

A Johnny Ray, Model JR-207, radio swivel bracket rated for 14 lbs. will be provided and installed mount at post paint.

TWO WAY RADIO INSTALLATION

There will be one (1) customer supplied two way radio(s) with a single remote head sent to the apparatus manufacturers preferred radio installer to be installed Behind the officer's seat per the shipping document.

The remote radio head will be located TBD .

No antenna mount or whip will be included in this option.

Specific shipping requirements will be followed.

RADIO ANTENNA MOUNT

There will be two (2) standard 1.125", 18 thread antenna-mounting base(s) installed on the right side on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the instrument panel area. A weatherproof cap will be installed on the mount.



RADIO ANTENNA MOUNT

There will be one (1) standard 1.125", 18 thread antenna-mounting base(s) installed Antenna routed behind officers seat on the cab roof with high efficiency, low loss, coaxial cable(s) routed to behind the officer seat. A weatherproof cap will be installed on the mount.



VEHICLE CAMERA SYSTEM

There will be a color vehicle camera system provided.

There will be color cameras located on the driver side of the cab activated with the left turn signal and passenger side of the cab activated with the right turn signal and at the rear of the vehicle, as close to center as possible, activated when the vehicle is put into reverse.. The camera images will be displayed on the provided apparatus driver's vehicle information center display. Audio from the rear camera will be not provided.

Safety Vision components will include:

- One (1) 620 color rear camera
- 622 color side camera(s) as defined above
- All necessary cables

ELECTRICAL POWER CONTROL SYSTEM

The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible.

Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership.

Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be Type-I automatic reset (continuously resetting). When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.

Solid-State Control System

A solid-state electronics based control system will be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network will consist of electronic modules located near their point of use to reduce harness lengths and improve reliability. The control system will comply with SAE J1939-11 recommended practices.

The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system will utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.

For increased reliability and simplified use the control system modules will include the following attributes:

- Green LED indicator light for module power
- Red LED indicator light for network communication stability status
- Control system self test at activation and continually throughout vehicle operation
- No moving parts due to transistor logic
- Software logic control for NFPA mandated safety interlocks and indicators
- Integrated electrical system load management without additional components
- Integrated electrical load sequencing system without additional components
- Customized control software to the vehicle's configuration
- Factory and field re programmable to accommodate changes to the vehicle's operating parameters
- Complete operating and troubleshooting manuals
- USB connection to the main control module for advanced troubleshooting

To assure long life and operation in a broad range of environmental conditions, the solid-state control system modules will meet the following specifications:

- Module circuit board will meet SAE J771 specifications
- Operating temperature from -40C to +70C
- Storage temperature from -40C to +70C
- Vibration to 50g
- IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and one (1) meter)
- Operating voltage from eight (8) volts to 16 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

Circuit Protection and Control Diagram

Copies of all job-specific, computer network input and output (I/O) connections will be provided with each chassis. The sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.

On-Board Electrical System Diagnostics

Advanced on-board diagnostic messages will be provided to support rapid troubleshooting of the electrical power and control system. The diagnostic messages will be displayed on the information center located at the driver's position.

The on-board information center will include the following diagnostic information:

- Text description of active warning or caution alarms
- Simplified warning indicators
- Amber caution indication with intermittent alarm
- Red warning indication with steady tone alarm

Prognostics

A software based vehicle tool will be provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone, color display and/or wireless enabled device to proactively alert of upcoming service intervals.

Prognostics will include:

- Engine oil and filter
- Transmission oil and filter
- Pump oil (if equipped)
- Foam oil (if equipped)
- Aerial oil and filter (if equipped)

Advanced Diagnostics

An advanced, Windows-based, diagnostic software program will be provided for this control system. The software will provide troubleshooting tools to service technicians equipped with a Windows-based computer or wireless enabled device.

The service and maintenance software will be easy to understand and use and have the ability to view system input/output (I/O) information.

Tech Module With WiFi

An in cab module will provide WiFi wireless interface and data logging capability. The WiFi interface will comply with IEEE 802.11 b/g/n capabilities while communicating at 2.4 Gigahertz. The module will provide an external antenna connection allowing a line of site communication range of up to 300 feet with a roof mounted antenna.

The module will transmit a password protected web page to a WiFi enabled device (i.e. most smart phones, tablets or laptops) allowing two levels of user interaction. The firefighter level will allow vehicle monitoring of the vehicle and firefighting systems on the apparatus. The technician level will allow diagnostic access to inputs and outputs installed on the Command Zone, control and information system.

The data logging capability will record faults from the engine, transmission, ABS and Command Zone, control and information systems as they occur. No other data will be recorded at the time the fault occurs. The data logger will provide up to 2 Gigabytes of data storage.

A USB connection will be provided on the Tech Module. It will provide a means to download data logger information and update software in the device.

Indicator Light and Alarm Prove-Out System

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

Voltage Monitor System

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels.

The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

Power and Ground Studs

Spare circuits will be provided in the primary distribution center for two-way radio equipment.

The spare circuits will consist of the following:

- One (1) 12-volt DC, 30 amp battery direct spare
- One (1) 12-volt DC ground and un-fused switched battery stud located in or adjacent to the power distribution center

Enhanced Software

The solid-state control system will include the following software enhancements:

All perimeter lights and scene lights (where applicable) will be deactivated when the parking brake is released.

Cab and crew cab dome lights will remain on for 10 seconds for improved visibility after the doors close. The dome lights will dim after 10 seconds or immediately if the vehicle is put into gear.

Cab and crew cab perimeter lights will remain on for 10 seconds for improved visibility after the doors close. The dome lights will dim after 10 seconds or immediately if the vehicle is put into gear.

EMI/RFI Protection

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10Khz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10Khz-1GHz to 100 Volts/Meter requirements.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

1. All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
2. Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
3. Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.
4. Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).
5. All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.
6. All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal portion of the terminal.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

BATTERY SYSTEM

There will be six (6) 12 volt Exide®, Model 31S950X3W, batteries that include the following features will be provided:

- 950 CCA, cold cranking amps
- 190 amp reserve capacity
- High cycle
- Group 31
- Rating of 5700 CCA at 0 degrees Fahrenheit
- 1140 minutes of reserve capacity
- Threaded stainless steel studs

Each battery case will be a black polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45 degree tilt capacity.

The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.

BATTERY SYSTEM

There will be a single starting system with an ignition switch and starter button provided and located on the cab instrument panel.

MASTER BATTERY SWITCH

There will be a master battery switch provided within the cab within easy reach of the driver to activate the battery system.

An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.

BATTERY COMPARTMENTS

Batteries will be placed on non-corrosive mats and stored in well ventilated compartments located under the cab.

Heavy-duty, 2/0 gauge, color coded battery cables will be provided. Battery terminal connections will be coated with anti-corrosion compound.

Battery solenoid terminal connections will be encapsulated with semi-permanent rubberized compound.

JUMPER STUDS

One (1) set of battery jumper studs with plastic color-coded covers will be included on the battery compartments.

BATTERY CHARGER

There will be an IOTA™, Model DSL 75, battery charger with IQ4, controller provided.

The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.

There will be a Kussmaul™, Model #091-94-12, remote indicator included.

The battery charger will be located on the back wall of the EMS compartment, located DS rear facing EMS compartment..

The battery charger indicator will be located near the driver's seat riser with special bracketry.

SHORELINE INLET

There will be one (1) Blue Sea Sure Eject™ part number 7851, 20 amp 120 volt AC shoreline inlet provided to operate the dedicated 120 volt AC circuits on the apparatus.

The shoreline will be connected to Battery Charger, 120V Air Compressor and shoreline receptacles..

The shoreline inlet cover color to be red.

The connector body will be released from the inlet when the apparatus engine start button is activated.

There will be a mating connector body supplied with the loose equipment.

There will be a label installed near the inlet(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

The shoreline receptacle will be located on the driver side of cab, to the front of cab door.

ALTERNATOR

A Delco Remy®, Model 55SI, alternator will be provided. It will have a rated output current of 430 amps, as measured by SAE method J56. The alternator will feature an integral regulator and rectifier system that has been tested and qualified to an ambient temperature of 257 degrees Fahrenheit (125 degrees Celsius). The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.

OVERRIDE SWITCH

A switch will be provided to override the parking brake interlock for the windshield wiper controls. The switch will allow the windshield wipers to operate with the parking brake set.

The switch will be located Panel # 7 bottom right location in panel..

ELECTRONIC LOAD MANAGER

An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.

For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.

The system will include the following features:

- System voltage monitoring.
- A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off.
- Sixteen available electronic load shedding levels.
- Priority levels can be set for individual outputs.
- High Idle to activate before any electric loads are shed and deactivate with the service brake.
 - If enabled:
 - "Load Man Hi-Idle On" will display on the information center.
 - Hi-Idle will not activate until 30 seconds after engine start up.
- Individual switch "on" indicator to flash when the particular load has been shed.
- The information center indicates system voltage.

The information center, where applicable, includes a "Load Manager" screen indicating the following:

- Load managed items list, with priority levels and item condition.
- Individual load managed item condition:
 - ON = not shed
 - SHED = shed

SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator.

For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.

Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Sequencing of the following items will also occur, in conjunction with the ignition switch, at half-second intervals:

- Cab Heater and Air Conditioning
- Crew Cab Heater (if applicable)

- Crew Cab Air Conditioning (if applicable)
- Exhaust Fans (if applicable)
- Third Evaporator (if applicable)

HEADLIGHTS

There will be four (4) JW Speaker®, Model 8800, 4" x 6" rectangular LED lights mounted in the front quad style, chrome housing on each side of the cab grille:

- the outside light on each side will contain a part number 055***1 low beam module
- the inside light on each side will contain a part number 055***1 high beam module
- the headlights to include chrome bezels

The low beam lights will be activated when the headlight switch is on.

The high beam and low beam lights will be activated when the headlight switch and the high beam switch is activated.

DIRECTIONAL LIGHTS

There will be two (2) Whelen 600 series, LED combination directional/marker lights provided. The lights will be located on the outside cab corners, next to the headlights.

The color of the lenses will be the same color as the LED's.

INTERMEDIATE LIGHT

There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.

CAB CLEARANCE/MARKER/ID LIGHTS

There will be seven (7) amber LED lights provided per the following:

- Three (3) amber LED identification lights will be installed in the center of the cab above the windshield.
- Two (2) amber LED clearance lights will be installed, one (1) on each outboard side of the cab above the windshield as close to the outside of the apparatus as practical.
- Two (2) amber LED clearance lights will be installed, one (1) on each side of the cab as high and far forward as practical.

The lights will be installed without guards.

FRONT CAB SIDE CLEARANCE/MARKER LIGHTS

There will be two (2) Truck-Lite®, Model 19036Y, amber LED lights installed to the outside of the chrome wrap around bezel, one (1) on each side of the cab.

The lights will activate as additional directional lights with the corresponding directional circuit.

REAR CLEARANCE/MARKER/ID LIGHTING

There will be three (3) Truck-Lite®, Model 33050R, LED lights used as identification lights recessed and located at the rear of the apparatus per the following:

- As close as practical to the vertical centerline
- Centers spaced not less than 6.00" or more than 12.00" apart
- Red in color
- All at the same height

There will be two (2) Truck-Lite, Model 33050R, LED lights recessed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:

- To indicate the overall width of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the rear
- All at the same height

There will be two (2) Truck-Lite, Model 33050R, LED lights recessed on the side of the apparatus as marker lights as close to the rear as practical per the following:

- To indicate the overall length of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the side
- All at the same height

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

Per FMVSS 108 and CMVSS 108 requirements.

MARKER LIGHTS

There will be one (1) pair of amber and red LED marker lights with rubber arm, located at the rear most lower corner of the body. The amber lens will face the front and the red lens will face the rear of the truck.

These lights will be activated with the running lights of the vehicle.

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen®, Model M6BTT, red LED stop/tail lights
- Two (2) Whelen, Model M6T, amber LED arrow turn lights

The lights will be provided with color lenses.

The lights will be mounted in a polished combination housing.

There will be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the body.

A white LED light will illuminate the license plate. A stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

LIGHTING BEZEL

There will be two (2) Whelen, Model M6FCV4P, four (4) place chromed ABS housings with Pierce logos provided for the rear M6 series stop/tail, directional, back up, scene lights or warning lights.

TAIL LIGHT MOUNTING INFORMATION

The following lights will be installed in the following order from the top down:

The top lights will be brake tail lights.

The second lights from the top will be the directional lights.

The third lights from the top will be back up lights.

The bottom light will be the warning lights.

BACK-UP ALARM

A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.

ADDITIONAL LIGHT

There will be additional white LED light(s) provided.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The light(s) will be installed Three (3) lights each side of cab roof to illuminate treadplate walking surface.

There will be six (6) light(s) provided.

These light(s) will be controlled when parking brake is applied

CAB PERIMETER SCENE LIGHTS

There will be four (4) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" white LED strip lights provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

PUMP HOUSE PERIMETER LIGHTS

There will be one (1) Amdor, Model AY-LB-12HW020, 350 lumens, 20.00" LED weatherproof strip light with bracket provided under the passenger's side pump panel running board.

If the combination of options in the vehicle does not permit clearance for a 20.00" light, a 12.00" version of the Amdor light will be installed.

The light will be activated when the battery switch is on, and controlled by the same means as the body perimeter lights.

BODY PERIMETER SCENE LIGHTS

There will be three (3) Amdor®, Model AY-LB-12HW012, 190 lumen, 12.00" long, white 12 volt DC LED strip lights provided.

The lights will be mounted in the following locations.

- One (1) light will be provided under the left side turntable access steps
- One (1) light will be provided under the left side basket access steps
- One (1) light will be provided under the right side basket access steps

The perimeter scene lights will be activated when a switch within reach of the driver is activated, the parking brake is applied, the driver's side directional is activated, activating on the driver's side facing perimeter lights with a 10 second delay after directional is deactivated and the passenger's side directional is activated, activating on the passenger's side facing perimeter lights with a 10 second delay after directional is deactivated.

ADDITIONAL PERIMETER LIGHTS

There will be eight (8) lights - Amdor® Model AY-LB-12HW020, 350 lumens, 20.00" long, with white LED's installed with one (1) light under compartment LS1, one (1) light under compartment RS1, one (1) light under compartment RS2, one (1) light under compartment LS4, one (1) light under compartment RS4, one (1) light under compartment LS2, one (1) light under compartment LS5 and one (1) light under compartment RS5.

With the chassis battery switch energized, the lights will be activated by the same means as the body perimeter lights.

12 VOLT LIGHTING

There will be one (1) Whelen® Model P*H2*, 17,750 lumens 12 volt DC light(s) with a combination of flood and spot optics provided on the front visor, centered.

The housing(s) painted parts of this light assembly to be white.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch at the passenger's side switch panel.

These light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be a Whelen® Model S72M**, 72.00" long 32,400 lumens DC powered light provided on the front cab roof as far forward as practical. The painted parts of this light assembly to be white.

The light will include the following:

- White scene LEDs
- Two (2) amber LED modules as clearance lights that are not energized
- Three (3) amber LED modules as identification lights that are not energized
- Four (4) additional LED modules. The additional modules to be four (4) scene light modules with white LEDs

The scene LEDs will be activated when the battery switch is on and by a switch at the driver's side switch panel and by a switch at the passenger's side switch panel.

There will be a switch in the cab on the switch panel to control the flashing or spot LED modules.

Amber flashing LED modules will be deactivated when the parking brake is released.

The white scene and flashing LED modules may be load managed when the parking brake is applied.

12 VOLT DC SCENE LIGHTS

There will be one (1) Whelen® Model S44M**, 19,440 lumens 44.00" 12 volt DC light(s) with white LEDs provided on the left side of the cab roof located, DS cab roof between cab and crew cab doors mounted outboard.. The painted parts of this light assembly to be white.

The light(s) will include the following:

- Six (6) scene light modules with white LEDs
- Three (3) amber LEDs as marker lights
- Two (2) additional LED modules. The additional modules to be two (2) warning light modules with red LEDs.

The lights will be activated per the following:

- The amber marker lights not activated.
- The scene LEDs will be controlled when the cab or crew cab doors on the driver's side are open and by the same control that has been selected for the driver's side flood light(s).
- There will be a switch in the cab on the switch panel to control the flashing or spot LED modules.
- The light(s) may be load managed when the parking brake is applied.

12 VOLT DC SCENE LIGHTS

There will be one (1) Whelen® Model S44M**, 19,440 lumens 44.00" 12 volt DC light(s) with white LEDs provided on the right side of the cab roof located, PS cab roof between cab and crew cab doors mounted outboard.. The painted parts of this light assembly to be white.

The light(s) will include the following:

- Six (6) scene light modules with white LEDs
- Three (3) amber LEDs as marker lights
- Two (2) additional LED modules. The additional modules to be two (2) warning light modules with red LEDs.

The lights will be activated per the following:

- The amber marker lights not activated.
- The scene LEDs will be controlled when the cab or crew cab doors on the passenger's side are open and by the same control that has been selected for the passenger's side flood light(s).
- There will be a switch in the cab on the switch panel to control the flashing or spot LED modules.
- The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) Whelen® Model S30M**, 12,960 lumens 30.00" 12 volt DC light(s) with white LEDs provided on the rear face of the body located, Mount above the B1 door on 4-way bracket. The painted parts of this light assembly to be white.

The light(s) will include the following:

- Six (6) scene light modules with white LEDs
- Three (3) amber LEDs as marker lights that are not activated at any time.
- Two (2) additional LED modules. The additional modules to be two (2) scene light modules with white LEDs.

The lights will be activated per the following:

- The scene LEDs will be controlled by a switch at the driver's side switch panel and by a switch in a stainless steel cup located on the driver's side at the rear of the apparatus no more than 72.00" from the ground.
- There will be a switch in the cab on the switch panel to control the flashing or spot LED modules.
- The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) Whelen® Model S44M**, 19,440 lumens 44.00" 12 volt DC light(s) with white LEDs provided on the left side of the body located, DS Catwalk. The painted parts of this light assembly to be white.

The light(s) will include the following:

- Six (6) scene light modules with white LEDs
- Three (3) amber LEDs as marker lights

- Two (2) additional LED modules. The additional modules to be two (2) warning light modules with red LEDs.

The lights will be activated per the following:

- The amber marker lights not activated.
- The scene LEDs will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.
- There will be a switch in the cab on the switch panel to control the flashing or spot LED modules.
- The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) Whelen® Model S44M**, 19,440 lumens 44.00" 12 volt DC light(s) with white LEDs provided on the right side of the body located, PS catwalk. The painted parts of this light assembly to be white.

The light(s) will include the following:

- Six (6) scene light modules with white LEDs
- Three (3) amber LEDs as marker lights
- Two (2) additional LED modules. The additional modules to be two (2) warning light modules with red LEDs.

The lights will be activated per the following:

- The amber marker lights not activated.
- The scene LEDs will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.
- There will be a switch in the cab on the switch panel to control the flashing or spot LED modules.
- The light(s) may be load managed when the parking brake is applied.

HOSE BED LIGHTS

There will be 12 volt DC light strips with stainless steel protective covers and white LEDs provided to illuminate the hose bed area per the following:

- A light strip will be installed along the front edge of the hose bed facing rearward.
- A light strip will be installed under the boom support facing forward.

The lights will be activated by a stainless steel cup switch located at the rear no more than 72.00" from the ground.

WALKING SURFACE LIGHT

There will be two (2) Model P25 12 volt DC LED lights with chrome housing provided to illuminate the top of body walking surface. These LED lights will be located on the rear facing surface of the upper portion of the body to illuminate the walking surface to the platform basket.

There will be one (1) Amdor®, Model AY-LB-12HW020, 350 lumen, 20" long, white 12 volt DC LED strip light located on the tower cradle, facing the rear of the body, to illuminate the walking area directly behind the tower cradle.

These lights will be activated when "Aerial Master" is on.

WATER TANK

The water tank will have a capacity of 300 gallons and will be constructed of UV stabilized ultra high impact polypropylene plastic.

The joints and seams will be nitrogen welded inside and out.

The tank will be baffled in accordance with the current edition of NFPA 1901 requirements.

The baffles will have vent openings at both the top and bottom of each baffle to permit movement of air and water between compartments.

The longitudinal partitions will be constructed of 0.38" polypropylene plastic and extend from the bottom of the tank through the top cover to allow positive welding.

The transverse partitions extend from 4.00" off the bottom to the underside of the top cover.

All partitions interlock and will be welded to the tank bottom and sides.

The tank top will be constructed of 0.50" polypropylene.

It will be recessed 0.38" and will be welded to the tank sides and the longitudinal partitions.

It will be supported to keep it rigid during fast filling conditions.

Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions.

Two (2) of the dowels will be drilled and tapped (0.50" diameter, 13.00" deep) to accommodate lifting eyes.

A sump will be provided at the bottom of the water tank. The sump will include a drain plug and the tank outlet.

Tank will be installed on top of the torque box with the use of two (2) brackets constructed of structural steel. The torque box will resist transferring any torsional stress caused by the chassis frame flexing to the water tank.

Rubber cushions, 0.50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on.

Stops will be provided to prevent an empty tank from bouncing excessively while moving vehicle.

Tank mounting system will be approved by the manufacturer.

Fill tower will be constructed of .50" polypropylene and will be a minimum of 6.00" wide x 12.00" long.

Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.

An overflow pipe, constructed of 3.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.

HOSE BED

The hose bed will be fabricated of 0.125" 5052-H32 aluminum with a tensile strength range of 31,000 to 38,000 psi.

The hose bed will be located between the aerial boom support and water tank.

There will be a hose chute to the side and rear of the hose bed on the right side to allow for payout/removal of the hose.

The hose bed flooring will consist of removable aluminum grating with a top surface that is perforated to aid in hose aeration.

The hose bed/cargo area walls will be unpainted and dual action finished.

Hose capacity will be a minimum of 800 feet of 5.00" large diameter hose.

AERIAL HOSE BED HOSE RESTRAINT

The hose in the hose bed will be restrained as follows:

- The hose bed forward of the aerial boom support and in the upper body area will be restrained by a black vinyl cover with Velcro® securing all four (4) sides.
- The hose bed chute located under the aerial basket will be restrained by an aluminum treadplate cover and guide plate at the transition point of the upper hose bed to the lower hose chute. The cover will hinge to the inside to allow ease of access to the hose.
- The rear of the hose bed chute will be restrained with black webbing that will have 1.00" web straps that loop through footman loops and fasten with spring clip and hook fasteners.

RUNNING BOARDS

The running boards will be fabricated of 0.125" bright aluminum treadplate and supported by structural steel angle assemblies bolted to the chassis frame rails.

Running boards will be 13.00" deep and are spaced away from the body 0.50".

A splash guard will be provided to keep road dirt or water from splashing up onto the pump panels.

The running boards will have a riser on the body to protect the painted surface from damage by stepping on the running boards.

The entire surface of the running boards will be covered with bright aluminum treadplate.

TURNTABLE STEPS

Access to the turntable will be provided by a set of swing-down steps on the left side of the truck. There shall be no bottom flip step provided. The bottom step will have a step height not exceeding 24.00" from the ground to the top surface of the step at any time. All steps will have a height no greater than 14.00" from top surface to top surface.

The access steps will be located just behind the front body and in front of the middle stabilizer.

The swing down step assembly will be constructed of D/A finished aluminum with bright aluminum treadplate steps. The steps shall have a punched grip pattern design.

The stepwell will be lined with bright aluminum treadplate to act as scuffplates.

A knurled aluminum handrail will be provided on the left side of the steps.

Holes will be provided in each side step plate for hand holds.

The steps will be connected to the "Do Not Move Truck" indicator in the cab.

STEP LIGHTS

There will be three (3) white LED step lights provided for the aerial turntable access steps.

In order to ensure exceptional illumination, each light shall provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The step lights will be actuated by the aerial master switch in the cab.

SMOOTH ALUMINUM REAR WALL

The rear wall will be smooth aluminum.

TOW EYES

Two (2) rear painted tow eyes will be located at the rear of the apparatus and will be mounted directly to the frame rails. The inner and outer edges of the tow eyes will be radiused.

COMPARTMENTATION

Compartmentation will be fabricated of 0.125" 5052 aluminum.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided. For prevention of rust pockets and ease of maintenance, the fender liners will be formed from aluminum and removable for maintenance.

Compartment flooring will be of the sweep out design with the floor higher than the compartment door lip.

Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum treadplate or polished stainless steel.

The top of the compartment will be covered with bright aluminum treadplate rolled over the edges on the front, rear and outward side. These covers will have the corners welded.

Side compartment covers will be separate from the compartment tops.

All screws and bolts, which are not Grade 8, will be stainless steel and where they protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

The backbone of the body support system will begin with the aerial torque box which is the strongest component of the apparatus and is designed for sustaining maximum loads.

An aluminum body structure will be mounted to the aerial torque box at four (4) points using neoprene elastomer isolators. The front mounts will attach from structural steel brackets on the sides of the torque box to a structural tube on the body. The rear mounts will attach structural members on the rear body to the top of the rear down rigger mounting structure.

The combination of the elastomer isolators and the body structure design allow the chassis and torque box to flex without driving loads into the body.

The compartment floor support design will result in an 800 lb equipment support rating per lower compartment, and a 500 lb equipment support rating for the upper, over the axle compartments.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

All body compartments will be vented to provide one (1) way airflow out of the compartment that prevents water and dirt from gaining access to the compartment.

TESTING OF BODY DESIGN

Body structural analysis will be fully tested. Proven engineering and test techniques such as finite element analysis, model analysis, and strain gauging have been performed with special attention given to fatigue, life and structural integrity of the body and substructure.

The body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

- Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.
- Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.
- Driving the vehicle on at 35 mph on a washboard road.
- Driving the vehicle at 55 mph on a smooth road.
- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

LEFT SIDE COMPARTMENTATION

The override door forward of the stabilizer will include a pair of SouthCo C2 chrome raised trigger lever latches.

A full height rollup door compartment ahead of the rear wheels will be approximately 29.16" wide x 23.25" high (floor to false ceiling) x 27.13" deep inside with a minimum clear door opening of approximately 26.38" wide x 21.37" high.

One (1) liftup door compartment above the fender compartments and over the rear axles will be provided. The compartment will be approximately 84.00" wide x 22.13" high x 27.13" deep inside with a clear door opening of approximately 81.25" wide x 19.13" high.

A full height rollup door compartment behind the rear wheels will be approximately 41.25" wide x 47.00" high (floor to false ceiling) x 27.13" deep. The minimum clear door opening will be approximately 38.50" wide x 47.00" high.

One (1) rollup door compartment behind the rear stabilizer will be provided. The compartment will be approximately 18.13" wide x 38.63" high (floor to false ceiling) x 27.13" deep inside with a minimum clear door opening of approximately 15.50" wide x 38.87" high.

Roll-up door compartments will include a drip pan below the roll of the door.

RIGHT SIDE COMPARTMENTATION

A full height rollup door compartment ahead of the front stabilizer will be provided. The compartment will be approximately 18.38" wide x 27.25" high (floor to false ceiling) x 9.91" deep inside with a minimum clear door opening of approximately 15.63" wide x 28.37" high.

A full height rollup door compartment ahead of the rear wheels will be approximately 29.13" wide x 23.25" high (floor to false ceiling) x 27.13" deep inside with a minimum clear door opening of approximately 26.38" wide x 21.37" high.

One (1) liftup door compartment above the fender compartments and over the rear axles will be approximately 59.00" wide x 22.13" high x 15.75" deep inside with a clear door opening of approximately 56.25" wide x 19.13" high.

A full height rollup door compartment behind the rear wheels will be approximately 41.25" wide x 47.00" high (floor to false ceiling). It will be 27.13" deep in the lower 41.50" of compartment height and 15.75" deep in the remaining upper portion. The minimum clear door opening will be approximately 38.50" wide x 47.00" high.

One (1) rollup door compartment behind the rear stabilizer will be approximately 18.13" wide x 38.63" high (floor to false ceiling) x 27.13" deep inside with a minimum clear door opening of approximately 15.50" wide x 38.87" high.

Roll-up door compartments will include a drip pan below the roll of the door.

SIDE COMPARTMENT ROLL-UP DOORS

There will be seven (7) compartment doors installed on the side compartments. The doors will be double faced aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by R-O-M Corporation.

Every slat will have interlocking end shoes to prevent slat from moving side-to-side and binding the door.

Slats will have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects.

Slats will be double-wall extrusion 1.366" high by .315" thick.

Between each slat will be a co-extruded PVC inner seal to prevent metal-to-metal contact and to repel moisture. This inner seal is not visible to detract from appearance of door.

Mounting and adjusting the curtain will be done with a clip system that connects the curtain slats to the operator drum allowing for easy tension adjustment without tools.

A non-locking liftbar to be provided for each roll-up door. The lift bar will be located at the bottom of the door and have latches on the outer extrusion of the door frame. A ledge will be supplied over the lift bar as additional area to aid in closing the door.

Each door will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surfaces will be concave to provide strength and prevent loose equipment from jamming the door from inside.

Each roll-up door will have a 4.00" diameter counterbalance operator drum to assist in lifting the door.

The header for the roll-up door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights..

SIDE COMPARTMENT LAP DOORS

All hinged compartment doors will be lap style with double panel construction and fabricated of 0.09" 5052H32 aluminum. Doors will be a minimum of 1.50" thick. To provide additional door strength, a "C" section reinforcement will be installed between the outer and interior panels.

Doors will be provided with a closed cell rubber gasket around the surface that laps onto the body. A second heavy-duty automotive rubber molding with a hollow core will be installed on the door framing that seals onto the interior panel, to ensure a weather resisting compartment.

All compartment doors will have polished stainless steel continuous hinge with a pin diameter of 0.25", that is bolted or screwed on with stainless steel fasteners. A dielectric substance will be applied to each hinge fastener.

All door lock mechanisms will be fully enclosed within the door panels to prevent fouling of the lock in the event equipment inside shifts into the lock area.

Doors will be latched with recessed, polished stainless steel D-ring handles and Eberhard 106 locks.

To prevent corrosion caused by dissimilar metals, compartment door handles will not be attached to outer door panel with screws. A rubber gasket will be provided between the D-ring handle and the door.

REAR BUMPER

A 3.00" rear bumper will be furnished. Bumper will be constructed of steel and will be covered with polished aluminum treadplate. The bumper will be 2.50" deep x 4.00" high and will be spaced away from the body approximately 0.50". The corners of the bumper will be angled at 45 degrees to be flush with the angled rear body. It will extend the full width of the body.

COMPARTMENT DOOR TABS

The compartment doors will be provided with prototype door tabs. The door tabs will be fastened to the inside of the door pan with huck fasteners. The door tabs will be made out of 12 gage unpainted stainless steel material.

LIFTUP DOOR PULL STRAPS

four (4) compartment doors will be provided with pull straps. The pull straps will be 14.00" long and black in color.

The straps will be installed directly to the inside of the liftup door.

The liftup door compartments to have these straps will be LS3& RS3- two straps equally spaced on each door..

COMPARTMENT LIGHTING

There will be nine (9) compartments with Amdor, Model AY-9220, white 12 volt DC LED compartment light strips. The lights will be mounted with mechanical fasteners.

There will be two (2) strip lights installed vertically in each compartment opening per the latest NFPA requirements.

The lights will be activated when the battery switch is on and the respective compartment door is opened.

COMPARTMENT LIGHTING

Metal clamps will be used to retain the strip lighting in all body compartments.

ADDITIONAL COMPARTMENT LIGHTING

There will be two (2) Amdor, Model AY-9220-42, 41.61" long white 12 volt DC LED light stick(s) provided. These light will be installed Mounted horizontally in compartments LS3 & RS3. The lights will be mounted with mechanical fasteners.

Opening the compartment door(s) will automatically turn the compartment lighting on.

These lights may be load managed when the parking brake is applied.

MOUNTING TRACKS

There will be recessed tracks installed vertically to support the adjustable shelf(s).

Tracks will not protrude into any compartment in order to provide the greatest compartment space and widest shelves possible.

The tracks will be provided in each compartment except for the one that contains the pump operator's panel.

ADJUSTABLE SHELVES

There will be nine (9) shelves with a capacity of 500 lb provided.

The shelf construction will consist of .188" aluminum with a brushed finish with 2.00" sides.

Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track.

The shelves will be held in place by .12" thick stamped plated brackets and bolts.

The location(s) will be in RS1 centered between the floor and the ceiling, in RS5 centered between the floor and the ceiling, in RS1 in the upper third, in RS2 in the upper third to the left of the partition, in RS2 in the lower third to the left of the partition, in LS1 centered between the floor and ceiling, in LS2 centered between the floor and ceiling, in LS2 in the upper third and in LS1 in the upper third.

SLIDE-OUT ADJUSTABLE HEIGHT TRAY

There will be one (1) slide-out tray provided.

Each tray will have 2.00" high sides and a minimum capacity rating of 250 lb in the extended position.

Each tray will be designed to be as wide and as deep as the compartment space will allow.

with a brushed finish

Each tray will be mounted on a pair of side mounted slides. The slide mechanisms will have ball bearings for ease of operation and years of dependable service. The slides will be mounted to shelf tracks to allow the tray to be adjustable up and down within the designated mounting location.

An automatic lock will be provided for both the in and out tray positions. The lock trip mechanism will be located at the front of the tray and will be easily operated with a gloved hand.

The tray(s) will be located LS4.

SLIDE-OUT FLOOR MOUNTED TRAY

There will be four (4) floor mounted slide-out tray(s) with 2.00" sides provided LS2 and three (3) trays forward of partition in RS2 with tool boards mounted in the tray.. Each tray will be rated for up to 500lb in the extended position. The tray(s) will be constructed of .19" aluminum with non-welded corners. The finish will be unpainted aluminum with a DA finish.

There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.

To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.

TOOL BOARD

An aluminum tool board will be provided.

It will be a minimum of .188" thick with .281" diameter diameter holes in a pegboard pattern with 1.00" centers between holes.

A 1.00" x 1.00" aluminum tube frame will be welded to the edge of the board.

The board will be installed on adjustable tracks on a slide out tray. The tracks will allow side to side adjustment. The board will be as high as space permits and full length of the tray. The tray is not included in this option.

There will be Three (3) toolboard(s) provided. The toolboard(s) will be with a brushed finish and installed Floor mounted trays forward of partition in RS2.

Four (4) partitions, vertically mounted in adjustable tracks, will be installed in [Location].

VERTICAL COMPARTMENT PARTITION

One (1) partition will be provided.

The partition construction will consist of body material with a brushed finish. Each partition will be the full vertical height of the compartment.

The location(s) will be in RS2, 24.00" from the forward door frame.

TOOL BOX

A tool box will be furnished.

The outside size will be 24.00" long x 12.00" wide x 12.00" deep.

The tool box will be black in color.

Construction will be of .50" polypropylene plastic with joints and seams nitrogen welded. A cut out carrying handle will be provided on each end.

There will be three (3) provided. It will be located Compartment RS2 rear of vertical partion.

STRAP

There will be one (1) black 2.00" wide nylon strap(s) provided LS2 - Mid Height from partition to rear door opening.. The strap(s) will be fastened with Velcro in the center.

RUB RAIL

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail.

Trim will be 3.12" high with 1.50" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Polished stainless steel fender crowns will be provided around the rear wheel openings.

An unpainted fender liner will be provided to avoid paint chipping. The liners will be removable to aid in the maintenance of rear suspension components.

A dielectric barrier will be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.

The fender crowns will be held in place with stainless steel screws that thread directly into a composite nut and not directly into the parent body sheet metal to eliminate dissimilar metals contact and greatly reduce the chance for corrosion.

HARD SUCTION HOSE

Hard suction hose will not be required.

HANDRAILS

The handrails will be Hansen LED backlit knurled aluminum. The handrails will be lit with a white LED light. The handrails will be activated with the application of the parking brake.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

Handrails will be provided to meet NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.

THREE AIR BOTTLE/EXTINGUISHER STORAGE COMPARTMENT

A total of two (2) air bottle compartments will be provided and located one (1) on the left side and one (1) on the right side centered between the tandem rear wheels. The compartment will consist of individual bins each designed to hold an air bottles or extinguishers with a maximum diameter of 8.00" and a maximum depth of 26.00".

Each compartment will hold three (3), two (2) stored next to each other in the top area, and one (1) stored centered below. Each bin will be separated by a partition.

A drain hole and black rubber matting will be provided on the floor of each compartment. A lift up with pneumatic spring with a pair of flush lift & turn latches will be provided for each compartment. The door will be polished stainless steel. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

COMPARTMENT STRAP

Straps will be provided in the compartment(s) to help contain the equipment. The straps will wrap around the neck of each and attach to the wall of the compartment.

AIR BOTTLE STORAGE

A total of one (1) air bottle compartment will be provided and located on the left side rearward of the rear wheels. The triangular door shall cover the air bottle opening and the fuel tank access.. The air bottle compartment will be a minimum of 15.00" wide x 7.50" tall x 26.00" deep. A polished stainless steel, triangular shaped door with a Southco raised trigger C2 chrome lever latch will be provided. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment, black Dura-Surf friction reducing material will be provided.

AIR BOTTLE STORAGE (SINGLE)

A quantity of one (1) air bottle compartment, approximately 7.50" wide x 7.50" tall x 26.00" deep, will be provided on the left side forward of the rear wheels. The compartment will be square with angled corners. A polished triangular shaped stainless steel door with a Southco raised trigger C2 chrome lever latch will be provided to contain the air bottle and DEF tank access. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment, black Dura-Surf friction reducing material will be provided.

AIR BOTTLE STORAGE (SINGLE)

A quantity of one (1) air bottle compartment, approximately 7.50" wide x 7.50" tall x 26.00" deep, will be provided on the right side forward of the rear wheels. The compartment will be square with angled corners. A polished stainless steel, triangular shaped door with a Southco raised trigger C2 chrome lever latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment, black Dura-Surf friction reducing material will be provided.

AIR BOTTLE STORAGE (TRIPLE)

A quantity of one (1) air bottle compartment designed to hold (3) air bottles up to 7.25" in diameter x 26.00" deep will be provided on the right side rearward of the rear wheels. A polished stainless steel door with a Southco raised trigger C2 chrome lever latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment, black Dura-Surf friction reducing material will be provided.

AIR BOTTLE COMPARTMENT STRAP

A strap will be provided in the air bottle compartment(s) to help contain the air bottles when the vehicle is parked on an incline. The strap will wrap around the neck and attach to the wall of the compartment.

EXTENSION LADDER

There will be two (2) 35' two (2) section aluminum Duo-Safety Series 1200-A extension ladder(s) provided.

AERIAL EXTENSION LADDERS

There will be two (2) 28' two (2) section aluminum Duo-Safety Series 1200-A extension ladder(s) provided and located in the aerial torque box.

ROOF LADDER

There will be two (2) 16' aluminum, Duo-Safety, Series 875-DR roof ladder(s) provided. The ladder(s) will have hooks on both ends.

ADDED ROOF LADDER

There will be one (1) 20' aluminum, Duo-Safety, Series 875-DR roof ladder(s) provided.

AERIAL FOLDING LADDER

There will be one (1) 10' aluminum Duo-Safety Series 585-A folding ladder(s) provided and located in the aerial torque box.

GROUND LADDER STORAGE

The ground ladders are stored within the torque box and are removable from the rear.

Ladders will be enclosed to prevent road dirt and debris from fouling or damaging the ladders.

The ladders rest in full length stainless steel slides and are arranged in such a manner that any one ladder can be removed without having to move or remove any other ladder.

A Gortite rollup door will be provided at the rear, double faced, aluminum construction, and painted one (1) color to match the lower portion of the body. A polished stainless steel lift bar to be provided for the rear roll-up door. The latching mechanism will consist of a full length lift bar lock with latches on the outer extrusion of the door frame.

A stainless plate with a 2-bend flange and a stainless steel hinge will be provided to secure the aerial ladder complement. The plate assembly will be mounted to the bottom of the entrance of the torque box ladder storage area.

When the plate is vertical, it will secure the ladders and prevent them from migrating to the rear of the apparatus. When the plate is down and not securing the ladders, the rollup door can not close, which will activate the "Open Door Indicator Light" within the cab. The hinged plate will have a positive latching feature that will secure the plate in the vertical position.

GENERATOR STORAGE

Provisions will be made in the compartment below the ladder storage for locating a hydraulic generator.

LADDER STORAGE LIGHTING

There will be two (2) Amdor part number AY-9220-32, 31.43" long 12 volt DC strip lights with white LEDs provided to illuminate the torque box ladder storage area and the compartment directly below the ladder storage. One (1) light will be provided on each side of the ladder storage area.

The lights will be activated when the battery switch is on and the storage compartment door is open.

NESTED LADDER STORAGE

There will be nested ladders on the left side of the ladder storage compartment. The ladders will be nested so that one ladder can be removed without removing the adjoining ladder.

NESTED LADDER STORAGE

There will be nested ladders on the right side of the ladder storage compartment.

12' PIKE POLES

There will be two (2) Fire Hooks Unlimited Model RH-12' New York Roof Hook with a fiberglass shaft and pry end provided. The pike pole(s) will be stored in tubular holders located in the ground ladder storage compartment.

8' PIKE POLE

There will be two (2) Fire Hooks Unlimited, New York Hook , 8' long roof hook with steel shaft and chisel (pry) end provided Torque Box.

ADDITIONAL PIKE POLE

There will be one (1) Fire Hooks Unlimited, Model RH-10, 10' long pike pole(s) with steel handle and pry end provided.

PIKE POLE

There will be three (3) Fire Hooks Unlimited, Model RH-6, 6' long New York Roof Hook with steel handle and pry end provided and located Transverse cab storage compartment..

PIKE POLE STORAGE IN TORQUE BOX/LADDER STORAGE

There will be aluminum tubing provided in the torque box/ladder storage area for a total of four (4) pike poles. The pike pole tube(s) will be notched to allow a New York style pike pole to fit in the tube.

If the head of a pike pole can come into contact with a painted surface, a stainless steel scuffplate will be provided.

PIKE POLE STORAGE MODIFICATION

The pike pole storage in the torque box/ladder storage area will be modified to provide non-standard spacing.

PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. The pump compartment will be constructed of the same material as the body compartmentation.

The pump compartment substructure will be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a single assembly.

PUMP MOUNTING

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.

LEFT SIDE PUMP CONTROL PANELS

All pump controls and gauges will be located at the left side of the apparatus and properly identified.

Layout of the pump control panel will be ergonomically efficient and systematically organized.

The pump operator's control panel will be removable in two (2) main sections for ease of maintenance:

The upper section will contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels will be removable from the face of the pump panel for ease of maintenance. Below the sub panels will be located all valve controls and line pressure gauges.

The lower section of the panel will contain all inlets, outlets, and drains.

All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding. The linkage from the control rod to the valve will be stainless steel, this will not include the clevis ends of the linkage which will remain anodized steel.

IDENTIFICATION TAGS

The identification tag for each valve control will be recessed in the face of the tee handle.

All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge.

All line pressure gauges will be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting will be removable from the face of the pump panel for ease of maintenance. The casting will be color coded to correspond with the discharge identification tag.

All remaining identification tags will be mounted on the pump panel in chrome plated bezels.

Trim rings will be installed around all inlets and outlets.

MIDSHIP FIRE PUMP

Midship fire pump will be a Waterous S100, 2000 gpm single (1) stage midship mounted centrifugal type.

Pump will be the class "A" type.

Pump will deliver the percentage of rated discharges at the pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.
- 100% of rated capacity at 165 psi net pump pressure.
- 70% of rated capacity at 200 psi net pump pressure.
- 50% of rated capacity at 250 psi net pump pressure.

Entire pump and both suction and discharge passages will be hydrostatically tested to a pressure of 600 psi (40.8 bar).

Pump will be fully tested at the pump manufacturer's factory to the performance requirements outlined in the current NFPA 1901 standards and will be free from objectionable pulsation and vibration.

Pump body and related parts will be of fine grain, alloy cast iron with a minimum tensile strength of 30,000 psi (2041.2 bar).

All moving parts in contact with water will be of high quality bronze or stainless steel.

MECHANICAL SEAL ON PUMP

Pump will be equipped with a self-adjusting, maintenance-free, mechanical shaft seal.

The mechanical seal will consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring will press against a highly polished stainless steel stationary ring that is sealed within the pump body.

In addition, a throttling ring will be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance will not deteriorate, nor will the pump lose prime, while drafting if the seal fails during pump operation.

Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.

PUMP TRANSMISSION

Pump transmission will be made of a three (3) piece, high tensile aluminum, horizontally split casing. Power transfer to pump will be through a passive lubricated, Morse HY-VO drive chain.

Drive shafts will be a minimum of 2.35" diameter hardened and ground alloy steel. All shafts will be ball bearing supported. The case will be designed as to eliminate the need for water cooling.

PUMPING MODE

An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system will be designed to allow stationary pumping only.

AIR PUMP SHIFT

Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the left side pump panel.

Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump".

The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements.

The pump shift control in the cab will be illuminated to meet NFPA requirements.

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE

One (1) Trident Air Max intake relief valve(s) will be installed on the suction side of the pump preset at 150 psig.

The relief valve will have a working range of 50 PSI to 350 PSI.

The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag.

One (1) adjustable air regulator and pressure indicating gauge will be located on a common bezel behind the right side pump panel with a stainless steel access door to control the intake valve(s).

PRESSURE CONTROLLER

A Fire Research Pump Boss Model PBA400 pressure governor will be provided.

A pressure transducer will be installed in the water discharge manifold on the pump.

A pressure transducer will be installed in the inlet manifold on the pump

The display panel will be located at the pump operator's panel.

PRIMING PUMP

The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of NFPA 1901.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction.

One (1) priming control will open the priming valve and start the pump primer.

PUMP MANUALS

There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.

PLUMBING, STAINLESS STEEL AND HOSE

All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.

Plumbing manifold bodies will be ductile cast iron or stainless steel.

All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame.

All water carrying gauge lines will be of flexible polypropylene tubing.

All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.

MAIN PUMP INLETS

Two (2) 6.00" pump inlets will be provided. One (1) on the left side and One (1) on the right side of the vehicle.

The suction inlets will include removable zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

MAIN PUMP INLET CAP PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 16.6.8 requires all intakes to be provided with caps or closures capable of withstanding a hydrostatic gauge pressure of 500 psi.

The caps are not on the apparatus as manufactured. The fire department will provide both caps for the main pump inlets.

VALVES

All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Valves will have a **ten (10) year** warranty.

The location of the valve for the one (1) inlet will be recessed behind the pump panel.

INLET CONTROL

The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.

LEFT SIDE INLET

There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.

The auxiliary inlet will be provided with a strainer, chrome swivel and plug.

INLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line will run from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

DISCHARGE OUTLET CONTROLS

The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve.

If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

LEFT SIDE DISCHARGE OUTLETS

There will be Two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

LEFT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the left side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

RIGHT SIDE DISCHARGE OUTLETS

There will be One (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

RIGHT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the right side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

LARGE DIAMETER DISCHARGE OUTLET

There will be a 4.00" discharge outlet with a 4.00" Akron valve installed on the right side of the apparatus, terminating with a 4.00" (M) National Standard hose thread adapter. This discharge outlet will be actuated with a small handwheel control at the pump operator's control panel.

An indicator will be provided to show when the valve is in the closed position.

LARGE DIAMETER OUTLET ELBOWS

The 4.00" outlet will be furnished with a 4.00" (F) National Standard hose thread x 4.00" Storz elbow adapter with Storz cap.

DISCHARGE CAPS/ INLET PLUGS

Chrome plated, rocker lug, caps with vinyl covered cables will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets.

Chrome plated, rocker lug, plugs with vinyl covered cables will be furnished for all auxiliary inlets 1.00" thru 3.00" in size.

The caps and plugs will incorporate a thread design to automatically relieve stored pressure in the line when disconnected.

OUTLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

REDUCER

There will be three (3) adapters with 2.50" FNST x 1.50" MNST threads and a 1.50" chrome plated cap installed on (2) DS and (1) PS 2.5" Panel Discharges.

AERIAL OUTLET

The aerial waterway will be plumbed from the pump to the water tower line with 5.00" pipe and a 4.00" Akron valve. The small handwheel control for the waterway valve will be located at the pump operator's panel.

An indicator will be provided to show the position of the valve.

CROSSLAY HOSE BEDS

Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying 200 feet of 1.75" double jacketed hose and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve.

Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located so that hose may be removed from either side of apparatus.

The crosslay controls will be at the pump operator's panel.

A removable tray will be provided for each crosslay hosebed. The crosslay trays will be constructed of black poly to provide a lightweight sturdy tray. Two (2) hand holes will be in the floor and additional hand holes will be provided in the sides for easy removal and installation from the compartment. The floor of the trays will be perforated to allow for drainage and hose drying. The bottom of the crosslay compartments will be lined with stainless steel to allow the tray to slide with ease. Scuffplates will be provided on both sides, at the sides and bottom of each opening to protect the paint.

CROSSLAY HOSE RESTRAINT

A 2.00" black nylon webbing design restraint will be provided at each of the ends of two (2) crosslay(s) to secure the hose during travel. The webbing assembly is to be attached at the bottom of the crosslays, with footman loops and a permanent attachment, while the top outside corners are attached with seat belt buckles, and a small piece of hinge, keeping the buckles beneath the height of the crosslays and avoiding a tripping hazard. The female end of the seat buckle will be permanently attached at the top, inboard forward and rearward, corners of the opening facing outboard. A nylon strap will be attached to the female seat belt buckles to allow a center pull for releasing the buckles on the webbing.

FOAM SYSTEM

A foam system will not be required on this apparatus.

COLOR CODED TAGS

A detailed drawing/chart of the colors used on all of the inlet(s) and outlet(s) will be provided for the customer to review. The customer will be allowed to make changes and/or mark-ups to this approval drawing/chart. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved drawing/chart of the colors will become part of the contract documents.

SPECIAL TEXT/VERBIAGE TAGS

A detailed drawing/chart of the text/verbiage used on all of the inlet(s) and outlet(s) will be provided for the customer to review. The customer will be allowed to make changes and/or mark-ups to this approval drawing/chart. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved drawing/chart of the text/verbiage will become part of the contract documents.

PUMP PANEL CONFIGURATION

The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.

PUMP OPERATOR'S PLATFORM

A pull out, flip down platform will be provided at the pump operator's control panel.

The front edge and the top surface of the platform will be made of DA finished aluminum with a Morton Cass insert.

The platform will be approximately 13.75" deep when in the stowed position and approximately 22.00" deep when extended. The platform stepping surface will be 28.00" wide. The platform will lock in the retracted and the extended position.

The platform will be wired to the "step not stowed" indicator in the cab.

PUMP OPERATOR'S PLATFORM PERIMETER LIGHT

There will be an On Scene Solutions, Model Night Stick Access, 20.00" white 12 volt DC LED strip light provided to illuminate the ground area.

PUMP AND GAUGE PANEL

The pump and gauge panels will be constructed of aluminum with a black vinyl finish. A polished aluminum trim molding will be provided around each panel.

PUMP ACCESS**Right Side Panel**

The right side upper pump panel will be removable.

Panel Fastener

The removable panels will be secured with chrome flush lift and turn latch.

The left side pump panels will be attached with screws.

The right side lower pump panel (drain bank) will be attached with screws.

PUMP COMPARTMENT LIGHT

There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12 volt DC LED light(s) with Whelen, Model 3FLANGEC, flange(s) installed in the pump compartment.

There will be a switch accessible through a door on the pump panel included with this installation.

PUMP PANEL GAUGES AND CONTROLS

The following will be provided on the pump panels in the FRC IN Control Pressure Governor system

- Engine Oil Pressure Gauge: LED bar graph display
- Engine Water Temperature Gauge: LED bar graph display
- Tachometer: over 1/2" high LED digits
- Master Pump Drain Control
- Voltmeter: LED bar graph display

THROTTLE READY GREEN INDICATOR LIGHT

There will be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.

OK TO PUMP INDICATOR LIGHT

There will be a green indicator light installed on the pump operators panel that is activated when the pump is in Ok To Pump mode.

AIR HORN SWITCH

An air horn control switch will be provided at the pump operator's control panel. This switch will be red and properly labeled. The switch will be located within easy reach of the operator in the electrical switch panel.

VACUUM AND PRESSURE GAUGES

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©.

The gauges will be a minimum of 4.50" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.

Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They will be marked with a label.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1© interlube filled.

They will be 2.50" in diameter and have white faces with black lettering.

Gauges will have a pressure range of 0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

WATER LEVEL GAUGE

A Fire Research TankVision Pro model WLA300-A00 water tank indicator gauge will be installed on the pump operators panel. The gauge kit will include an electronic indicator module, a pressure sensor, and a 10' sensor cable. The gauge will show the volume of water in the tank on nine (9) easy to see super bright RGB LEDs. A wide view lens over the LEDs will provide for a viewing angle of 180 degrees. The gauge case will be waterproof, manufactured of Polycarbonate/Nylon material, and have a distinctive blue label.

The program features will be accessed from the front of the indicator module. The program will support self-diagnostics capabilities, self-calibration, six (6) programmable colored light patterns to display tank volume, adjustable brightness control levels and a data link to connect remote indicators. Low water warnings will include flashing LEDs at 1/4 tank and down chasing LEDs when the tank is almost empty.

The gauge will receive an input signal from an electronic pressure sensor. The sensor will be mounted from the outside of the water tank near the bottom. No probe will be placed on the interior of the tank. Wiring will be weather resistant and have automotive type plug-in connectors.

PUMP PANEL ILLUMINATION

There will be a stainless steel light shield installed over the pump operators panel. This shield will include three (3) 12 volt DC white LED lights to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by the pump panel light switch.

There will be two (2) 12 volt DC white LED lights to illuminate the pump panel under the pump operators panel. These lights will be activated by the same switch as the lights over the pump operators panel.

There will be one (1) 12 volt DC white LED light to illuminate the pump panel under the pump operators panel. This light will be activated when the pump is in "Ok to Pump" mode.

There will be a light activated above the pump panel light switch when the parking brake is set. This is to afford the operator some illumination when first approaching the control panel.

ADDITIONAL LIGHT SHIELD

An additional light shield will be provided above passenger's side pump panel. The pump panel will be illuminated by three (3) LED lights installed under a stainless steel light shield.

The lights will be operated from a switch on the pump panel.

AIR HORN SYSTEM

There will be two (2) Grover air horns recessed in the front bumper. The horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed in-line to prevent loss of air in the air brake system.

Air Horn Location

The air horns will be located on each side of the bumper, inside of the frame rails.

AIR HORN CONTROL

The air horn(s) will be activated by the following:

- Right side chrome push button switch
- Left side foot switch

ELECTRONIC SIREN

A Whelen, Model: 295SLSC1, electronic siren with a plug-in, detachable noise canceling microphone will be provided.

This siren to be active when the battery switch is on and that emergency master switch is on.

Electronic siren head will be located in the center console.

The electronic siren will be controlled on the siren head only. No horn button or foot switches will be provided.

SPEAKER

There will be one (1) Whelen®, Model SA315P, black nylon composite, 100-watt, speaker with through bumper mounting brackets and polished stainless steel grille provided. The speaker will be connected to the siren amplifier.

The speaker(s) will be recessed in the center of the front bumper.

AUXILIARY MECHANICAL SIREN

There will be a Federal Signal Model Q2B mechanical siren furnished and installed in the front of the apparatus.

The Q2B will be chrome finish.

The siren will have a 2-gauge cable connected to a power solenoid that is connected by a 2-gauge cable ran battery direct to the primary chassis batteries and will be labeled Q2B+ at the battery. The power solenoid will only be enabled when the emergency master switch is on.

The siren will have a 2-gauge ground wire connected to the chassis battery stud. The cable will be labeled Q2B- at the battery.

When the chassis battery switch is on, and the emergency master switch is on, the Q2B siren will be activated by the following:

The mechanical siren will be mounted on the bumper deck plate. It will be mounted on the left side. A reinforcement plate will be furnished to support the siren.

MECHANICAL SIREN CONTROL

The mechanical siren will be activated by the following:

- Left side foot switch.
- Right side push button switch.

A momentary switch will be included in the right side overhead switch panel to activate the siren brake.

A momentary switch will be included in the left side overhead switch panel to activate the siren brake.

SIREN PROGRAMMING

The electronic siren will be programmed to include the warble and whoop tones.

CAB ROOF LIGHTBAR

There will be an 81.00" Whelen® Freedom® IV Rota-Beam™ lightbar mounted on the cab roof.

The lightbar will include the following:

- One (1) red flashing in a semi circle pattern LED module in the left side rear corner position
- Open in the left side end position
- One (1) red flashing in a semi circle pattern LED module in the left side front corner position
- One (1) red flashing in a semi circle pattern LED module in the left side first front position
- One (1) red flashing in a semi circle pattern LED module in the left side second front position
- One (1) red flashing in a semi circle pattern LED module in the left side third front position
- Two (2) white flashing LED modules in the center front positions
- One (1) red flashing in a semi circle pattern LED module in the right side third front position
- One (1) red flashing in a semi circle pattern LED module in the right side second front position
- One (1) red flashing in a semi circle pattern LED module in the right side first front position
- One (1) red flashing in a semi circle pattern LED module in the right side front corner position
- Open in the right side end position
- One (1) red flashing in a semi circle pattern LED module in the right side rear corner position

There will be clear lenses included on the lightbar.

There will be a switch in the cab on the switch panel to control the lightbar.

The white flashing LED modules will be disabled when the parking brake is applied.

The red flashing LED modules in the front positions may be load managed when the parking brake is applied.

LIGHTS, FRONT ZONE LOWER

There will be four (4), Whelen® Model M6** 4.32" high x 6.75" wide x 1.37" deep flashing LED warning lights installed on the cab face above the headlights in twin bezels.

- The left side outside warning light to include red LEDs
- The left side inside warning light to include white LEDs
- The right side inside warning light to include white LEDs
- The right side outside warning light to include red LEDs
- The warning light lens colors to be the same as the LEDs
- The housing to be polished and the trim shall be chrome

The lights may be controlled per the following:

- A switch on the cab instrument panel will control the lights
- White LEDs will be deactivated when the parking brake is applied
- Amber LEDs will be activated when the parking brake is applied
- Amber, blue green or red LEDs in the inside positions may be load managed when the parking brake is applied

FRONT WARNING LIGHT

A Whelen Dominator, Model DP8, LED light bar will be mounted to the upper section of the front cab grille. The lightbar will include eight (8) LINZ6, red LED modules.

The dimensions will be 30.36" long x 1.75" high x 2.18" deep.

The light flash pattern will be controlled by an internal programmable flasher. The flash pattern will be set to flash back and fourth.

There will be a switch located in the cab on the switch panel to control the lightbar.

This light may be load managed when the parking brake is set.

SIDE ZONE LOWER LIGHTING

There will be six (6) Whelen®, Model M6**, 4.31" high x 6.75" long x 1.37" deep flashing LED warning lights with chrome trim installed per the following:

- Two (2) lights located, one (1) each side on the bumper extension. The driver's side, side front light to include red warning LEDs and the passenger's side, side front light to include red warning LEDs.
- Two (2) lights located, one (1) each side of cab rearward of crew cab doors. The driver's side, side middle light to include red warning LEDs and the passenger's side, side middle light to include red warning LEDs.

- Two (2) lights located, one (1) each side located between the tandems. The driver's side, side rear light to include red warning LEDs and the passenger's side, side rear light to include red warning LEDs.
- The warning light lens colors to be the same as the LEDs.

There will be a switch in the cab on the switch panel to control the lights.

INTERIOR CAB DOOR WARNING LIGHTS

There will be four (4) Weldon, Model 8401-0000-20, amber 12 volt DC LED flashing strip lights provided.

- One (1) light on the driver's side cab door over the window.
- One (1) light on the passenger's side cab door over the window.
- One (1) light on the passenger's side crew cab door over the window.
- One (1) light on the driver's side crew cab door over the window.

Each light will be activated when the battery switch is on and the adjacent door is opened.

Each light will be installed so the flash pattern directs traffic away from the doors.

SIDE WARNING LIGHTS

There will be four (4) Whelen, Model WIONSMC* LED light(s) provided and located in the body rub rails Mounted in the rub rail centered beneath LS2, LS4, RS2 and RS4. The lights will NOT be mounted with the rubber gasket behind the light which will allow the light(s) to fit in the rub rails.

The color of each light will be red LED with a clear lens.

Each light will be provided with a chrome plated ABS flange.

The light(s) will be activated with the side warning switch.

REAR ZONE LOWER LIGHTING

There will be two (2) Whelen®, Model M6*, LED flashing warning lights will be located at the rear of the apparatus.

- The driver's side rear light to be red
- The passenger's side rear light to be red

Both lights will include a lens that is the same color as the LED's.

There will be a switch located in the cab on the switch panel to control the lights.

WARNING LIGHTS (REAR)

There will be two (2) Whelen®, Model M6# split color LED flashing warning light(s) with chrome trim provided one each side, high on rear body bulkheads.

The rear light to be red to the outside and amber to the inside.

These light(s) will be controlled with the rear upper warning switch.

These light(s) will include a lens that is clear.

REAR/SIDE ZONE UPPER WARNING LIGHTS

There will be two (2) Whelen®, Model L31H*FN, LED warning beacons provided at the rear of the truck, located one (1) each side. There will be a switch located in the cab on the switch panel to control the beacons.

The color of the lights will be red LEDs with both domes red.

REAR BODY MOUNTING BRACKET

There will be a 5.00" deep aluminum treadplate bracket provided at the rear of the body, spanning the width of the rear compartment door. The bracket(s) will be provided to mount lights, cameras, or other accessories. The brackets will include a removable panel to protect the wire connections.

ELECTRICAL SYSTEM GENERAL DESIGN FOR ALTERNATING CURRENT

The following guidelines will apply to the 120/240 VAC system installation:

General

Any fixed line voltage power source producing alternating current (ac) line voltage will produce electric power at 60 cycles plus or minus 3 cycles.

Except where superseded by the requirements of NFPA 1901, all components, equipment and installation procedures will conform to NFPA 70, National Electrical Code (herein referred to as the NEC).

Line voltage electrical system equipment and materials included on the apparatus will be listed and installed in accordance with the manufacturer's instructions. All products will be used only in the manner for which they have been listed.

Grounding

Grounding will be in accordance with Section 250-6 "Portable and Vehicle Mounted Generators" of the NEC. Ungrounded systems will not be used. Only stranded or braided copper conductors will be used for grounding and bonding.

An equipment grounding means will be provided in accordance with Section 250-91 (Grounding Conductor Material) of the NEC.

The grounded current carrying conductor (neutral) will be insulated from the equipment grounding conductors and from the equipment enclosures and other grounded parts. The neutral conductor will be colored white or gray in accordance with Section 200-6 (Means of Identifying Grounding Conductors) of the NEC.

In addition to the bonding required for the low voltage return current, each body and driving or crew compartment enclosure will be bonded to the vehicle frame by a copper conductor. This conductor will have a minimum amperage rating of 115 percent of the nameplate current rating of the power source specification label as defined in Section 310-15 (amp capacities) of the NEC. A single conductor properly sized to meet the low voltage and line voltage requirements will be permitted to be used.

All power source system mechanical and electrical components will be sized to support the continuous duty nameplate rating of the power source.

Operation

Instructions that provide the operator with the essential power source operating instructions, including the power-up and power-down sequence, will be permanently attached to the apparatus at any point where such operations can take place.

Provisions will be made for quickly and easily placing the power source into operation. The control will be marked to indicate when it is correctly positioned for power source operation. Any control device used in the drive train will be equipped with a means to prevent the unintentional movement of the control device from its set position.

A power source specification label will be permanently attached to the apparatus near the operator's control station. The label will provide the operator with the following information:

- Rated voltage(s) and type (ac or dc)
- Phase
- Rated frequency
- Rated amperage
- Continuous rated watts
- Power source engine speed

Direct drive (PTO) and portable generator installations will comply with Article 445 (Generators) of the NEC.

Overcurrent protection

The conductors used in the power supply assembly between the output terminals of the power source and the main over current protection device will not exceed 144.00" (3658 mm) in length.

For fixed power supplies, all conductors in the power supply assembly will be type THHW, THW, or use stranded conductors enclosed in nonmetallic liquid tight flexible conduit rated for a minimum of 194 degree Fahrenheit (90 degrees Celsius).

For portable power supplies, conductors located between the power source and the line side of the main overcurrent protection device will be type SO or type SEO with suffix WA flexible cord rated for 600-volts at 194 degrees Fahrenheit (90 degrees Celsius).

Wiring Methods

Fixed wiring systems will be limited to the following:

- Metallic or nonmetallic liquid tight flexible conduit rated at not less than 194 degrees Fahrenheit (90 degrees Celsius)
- or
- Type SO or Type SEO cord with a WA suffix, rated at 600 volts at not less than 194 degrees Fahrenheit (90 degrees Celsius)

Electrical cord or conduit will not be attached to chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components, or low voltage wiring. In addition the wiring will be run as follows.

- Separated by a minimum of 12.00" (305 mm), or properly shielded, from exhaust piping
- Separated from fuel lines by a minimum of 6.00" (152 mm) distance

Electrical cord or conduit will be supported within 6.00" (152 mm) of any junction box and at a minimum of every 24.00" (610 mm) of continuous run. Supports will be made of nonmetallic materials or corrosion protected metal. All supports will be of a design that does not cut or abrade the conduit or cable and will be mechanically fastened to the vehicle.

Wiring Identification

All line voltage conductors located in the main panel board will be individually and permanently identified. The identification will reference the wiring schematic or indicate the final termination point. When prewiring for future power sources or devices, the unterminated ends will be labeled showing function and wire size.

Wet Locations

All wet location receptacle outlets and inlet devices, including those on hardwired remote power distribution boxes, will be of the grounding type provided with a wet location cover and installed in accordance with Section 210-7 "Receptacles and Cord Connections" of the NEC.

All receptacles located in a wet location will be not less than 24.00" (610 mm) from the ground. Receptacles on off-road vehicles will be a minimum of 30.00" (762 mm) from the ground.

The face of any wet location receptacle will be installed in a plane from vertical to not more than 45 degrees off vertical. No receptacle will be installed in a face up position.

Dry Locations

All receptacles located in a dry location will be of the grounding type. Receptacles will be not less than 30.00" (762 mm) above the interior floor height.

All receptacles will be marked with the type of line voltage (120-volts or 240-volts) and the current rating in amps. If the receptacles are direct current, or other than single phase, they will be so marked.

Listing

All receptacles and electrical inlet devices will be listed to UL 498, Standard for Safety Attachment Plugs and Receptacles, or other appropriate performance standards. Receptacles used for direct current voltages will be rated for the appropriate service.

Electrical System Testing

The wiring and associated equipment will be tested by the apparatus manufacturer or the installer of the line voltage system.

The wiring and permanently connected devices and equipment will be subjected to a dielectric voltage withstand test of 900-volts for one (1) minute. The test will be conducted between live parts and the

neutral conductor, and between live parts and the vehicle frame with any switches in the circuit(s) closed. This test will be conducted after all body work has been completed.

Electrical polarity verification will be made of all permanently wired equipment and receptacles to determine that connections have been properly made.

Operational Test per Current NFPA 1901 Standard

The apparatus manufacturer will perform the following operation test and ensure that the power source and any devices that are attached to the line voltage electrical system are properly connected and in working order. The test will be witnessed and the results certified by an independent third-party certification organization.

The prime mover will be started from a cold start condition and the line voltage electrical system loaded to 100 percent of the nameplate rating.

The power source will be operated at 100 percent of its nameplate voltage for a minimum of two (2) hours unless the system meets category certification as defined in the current NFPA 1901 standard.

Where the line voltage power is derived from the vehicle's low voltage system, the minimum continuous electrical load as defined in the current NFPA 1901 standard will be applied to the low voltage electrical system during the operational test.

GENERATOR

The apparatus will be equipped with a complete AC (alternating current) electrical power system. The generator will be a Harrison Model MID6.0, 6,000 watt hydraulic driven unit.

The generator will be driven by a transmission power take off unit, through a hydraulic pump and motor.

The hydraulic engagement supply will be operational only after the chassis parking brake is applied.

An electric/hydraulic valve will supply hydraulic fluid to the clutch engagement unit provided on the chassis PTO drive.

Generator Instruments and Controls

To properly monitor the generator performance a digital meter panel will be furnished and mounted near the circuit breaker panel.

GENERATOR LOCATION

The generator will be installed below the ladder storage in the rear compartment. Proper ventilation will be provided for generator operation. A removable aluminum treadplate cover will be provided over the rear of the generator. There will be open access to the hydraulic reservoir fill.

GENERATOR START

There will be a switch provided on the cab instrument panel to engage the generator.

GENERATOR REMOTE START

There will be one (1) remote start switch provided in the cab and at the pump panel and turntable to engage the hydraulic generator PTO and field. A light at each switch location will be provided to indicate that the generator is running.

CIRCUIT BREAKER PANEL

A circuit breaker panel will be high on the left wall of compartment LS2. A directory for each breaker will be provided adjacent to the circuit breaker panel. Identification of circuits will be done in a durable manner that provides years of service.

GENERATOR OIL DRAIN

There will be a generator hydraulic fluid drain provided from the main line teed off with a cap located by the PTO.

GENERATOR BREAKER SWITCH GUARD

The generator on/off circuit breaker switch, located Mount over the breaker panel in RS4 will have a guard to prevent accidental shutting the breakers off.

ELECTRIC CORD REEL

There will be one (1) Hannay, Model ELFCR1624-10-11-6, 3-conductor cord reel(s) provided with a 12-volt electric rewind switch, that is guarded to prevent accidental operation and labeled for its intended use. The switch will be installed at a height not to exceed 72 inches above the operators standing position.

The exterior finish of the reel(s) will be painted #269 gray from the reel manufacturer.

A Nylatron guide to be provided to aid in the payout and loading of the reel. A ball stop will be provided to prevent the cord from being wound on the reel.

A label will be provided in a readily visible location adjacent to the reel. The label will indicate current rating, current type, phase, voltage and total cable length.

The reel(s) will be installed, Locate behind rear wall of LS2 in hosebed..

CORD

Provided for electric distribution will be one (1) length installed on the reel of 150 feet of Carol Super Vu-Tron II yellow 12/3 electrical cord. A Hubbell L5-20, 20 amp, 120 volt, twist lock connector body will be installed on the end of the cord.

LIGHT INSIDE REEL ENCLOSURE

There will be one (1) reel enclosures located, Install within the reel enclosure, directly over the reel guide to assist when stowing the cable. that will include an Amdor part number AY-LB-12HR012, 12.00", strip light(s) with red LEDs and aluminum extrusion installed above the cord exit opening. The light will be used to illuminate the inside of the enclosure.

The light(s) will be activated when parking brake is applied.

REEL ENCLOSURE

An aluminum treadplate enclosure will be installed over the reel. The enclosure will be provided with a stainless steel hinge that will allow the cover to be opened.

A rubber seal will be provided over the opening to the body compartment to keep as much dust and water as possible from entering the compartment. A ball stop will be provided on the cord to stop the cord at the roller assembly

A total of one (1) will be installed Cord reel behind LS2.

POWER OUTLET STRIP

There will be two (2) Fellowes Model FEL99089 receptacle strip(s) with seven (7) 15 amp 120 volt AC straight blade receptacles at 90 degrees with a 12' power cord and surge protective metal housing provided One mounted in the top of each FF crew cab compartments..

The strip(s) selected will be powered from the shoreline inlet through a receptacle located adjacent to the strip(s).

There will be a label installed near the strip(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

120 VOLT RECEPTACLE

There will be four (4), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with an interior stainless steel wall plate, installed TBD. The NEMA configuration for the receptacle(s) will be 5-20R.

The receptacle(s) will be powered from the shoreline inlet.

There will be a label installed near the receptacle(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

AERIAL GENERAL INFORMATION

It is the intent of these specifications to describe a mid-mounted telescoping, elevating platform. The unit will consist of a five (5) section, steel ladder with a self-leveling basket attached to the ladder fly section.

Operation on Grades

The aerial unit will be capable of operating safely, on any slope up to 10 degrees at full capacities. (Operation beyond this limit will be at the operator's discretion).

Construction Standards

The ladder will be constructed to meet all of the requirements as described in the current edition of NFPA 1901.

These capabilities will be established in an unsupported configuration.

All structural load supporting elements of the aerial device that are made of a ductile material will have a design stress of not more than 50 percent of the minimum yield strength of the material based on the combination of the live load and the dead load. This 2:1 structural safety factor meets the current NFPA 1901 standard.

All structural load supporting elements of the aerial device that are made of non-ductile material will have a design stress of not more than 20 percent of the minimum ultimate strength of the material, based on the combination of the rated capacity and the dead load. This 5:1 safety factor meets the current 1901 NFPA standard.

The aerial device will be capable of sustaining a static load one and one-half times its rated tip load capacity (live load) in every position in which the aerial device can be placed when the vehicle is on a firm level surface.

The aerial device will be capable of sustaining a static load one and one-third times its rated tip load capacity (live load) in every position the aerial device can be placed when the vehicle is on a slope of five degrees downward in the direction most likely to cause overturning.

With the aerial device out of the cradle in the in the fully extended position at zero degrees elevation, a test load will be applied in a horizontal direction normal to the centerline of the ladder. The turntable will not rotate and the ladder will not deflect beyond what the product specification allows.

All welding will be in compliance with the American Welding Society standards. All welding personnel will be certified, as qualified under AWS welding codes.

The aerial device will be capable of operating in either of the two (2) following conditions:

- Conditions of high wind up to 35 mph
- Conditions of icing, up to a coating of 0.25" over the entire aerial structure

All of the design criteria must be supported by the following test data:

- Strain gage testing of the complete aerial device

The following criteria for materials are to be used in the design of the aerial device:

- Materials are to be certified by the mill that manufactured the material
- Material testing that is performed after the mill test will be for verification only and not with the intent of changing the classification.

Ladder Construction

The ladder will be comprised of five (5) sections and will extend to a nominal height, of 100' above the ground, as measured by 1901 recommendations. The ladder (handrails, baserails, trusses, k-braces and rungs) will be constructed of welded, high strength steel certified by the manufacturer as being a minimum of 100,000 lb per square inch of yield strength. All critical points will be reinforced, for extra rigidity, and to provide a high strength-to-weight ratio. Ladder rungs will be round and welded to each section in two (2) places with "K" bracing for torsional rigidity. A minimum of 70.25" of overlap between each of the aerial sections will be provided.

The inside width dimensions of the ladder will be:

Base Section:	56.12"
Lower Mid Section:	46.12"
Center Mid Section:	36.62"
Upper Mid Section:	28.12"
Fly Section:	22.12"

The height of the handrails above the centerline of the rungs will be:

Base Section:	40.72"
Lower Mid Section:	39.08"
Center Mid Section:	32.32"
Upper Mid Section:	29.02"
Fly Section:	26.37"

Vertical Height

The height of the unit will extend to no less than 100', as measured by a plumb line from the top surface of the basket handrail assembly to the ground, with the basket raised to a 77 degree angle.

Horizontal Reach

The rated horizontal reach will be 93'. The measurement of horizontal reach will be consistent with NFPA standards.

Mounting of Elevating Platform

The aerial device will be mid mounted, to a torque box, on the truck chassis.

Torque Box

A "torsion box" subframe will be installed between two sets of stabilizers. The torque box will be constructed of 100,000 lb per square inch yield steel with an integral ladder storage box. The torque box assembly will be capable of withstanding all torsional and horizontal loads when the unit is on the stabilizers. The torque box will be bolted to the chassis frame rails using forty-eight 0.750" SAE grade 8 bolts with nuts.

Turntable

The turntable will be coated with a non-skid, chemical resistant material in the walking areas. The stepping surfaces will meet the skid-resistance requirements in the current NFPA 1901 standard.

The turntable will serve as a step for access to the ladder.

The turntable handrails will be a minimum 42.00" high and will not increase the overall travel height of the vehicle. The handrails will be constructed from 1.62" diameter extruded 6061-T6 aluminum with a slip resistant knurled surface. The handrails will be anodized to resist corrosion.

Elevation System

Two (2) double acting, lift cylinders will be utilized to provide smooth, precise elevation from 15 degrees below horizontal to 77 degrees above horizontal. The lift cylinder will be attached to each side of the base section. The lift cylinders will have a 7.50" internal diameter (bore), 3.50" diameter cylinder rod and a 53.89" stroke. The lift cylinder rod will be chrome plated, to provide smooth operation of the aerial and reduce seal wear. The lift cylinders will be equipped with integral holding valves located in the cylinder, to prevent the unit from descending should the charged lines be severed, at any point within the hydraulic system and to maintain the ladder in the bedded position during road travel. The integral holding valves will NOT be located in the transfer tubes.

The elevation system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Collision avoidance of the elevation system to prevent accidental body damage
- Automatic deceleration when the aerial device is lowered into the cradle
- Automatic deceleration at the end of stroke, in maximum raise and lower positions
- Deceleration of the aerial device from 0 to -15 degrees

Extension/Retraction System

A hydraulically powered, extension and retraction system will be provided through dual hydraulic cylinders and wire ropes. The extension cylinder will have a 6.50" internal diameter (bore), 2.75" diameter rod and a 53.12" stroke. Each set will be capable of operating the ladder in the event of a failure, of the other. For safety, systems that use only a single extension/retraction system will not be acceptable. The extension cylinder rod will be chrome plated to provide smooth operation of the aerial device and reduce seal wear. The extension/retraction cylinders will be equipped, with integral holding valves, to prevent the unit from retracting should the charged line be severed, at any point within the hydraulic system. The integral holding valves will NOT be located in the transfer tubes.

Wire ropes and attaching systems used to extend and retract the fly sections will have a 5:1 safety factor based on the ultimate strength under all operating conditions. The factor of safety for the wire rope will remain above 2:1 during any extension or retraction stall. The minimum ratio of the diameter of wire rope used to the diameter of the sheave used will be 1:12. Wire ropes will be constructed of seven (7) strands over an inner wire core for increased flexibility. The wire rope will be galvanized to reduce corrosion.

The extension/retraction system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Automatic deceleration at the end of stroke, in maximum extend and retract positions
- Controls the rate of retraction while flowing water

All sheaves and sheave pins will utilize greasable bronze bushings. Sheave pins will be polished stainless steel.

Rotation System

A 54.00" diameter, external tooth, monorace rotation bearing will be used for the rotation system and will provide 360 degree continuous rotation. The turntable will be bolted to the bearing using 30 SAE grade 8, 0.875" diameter bolts. To secure the bearing to the base support, 36 grade 8, 0.875" diameter bolts will be used. The turntable base and the torque box bearing plate will be machined to fit the bearing, thereby providing even distribution of forces. Two (2) hydraulically driven, planetary gear boxes, with drive speed reducer, will be used to provide infinite and minute rotation control, throughout the entire rotational travel. Each planetary gearbox has a torque rating of 130,000 lb per square inch. A spring applied, hydraulically released, disc type, swing brake will be furnished to provide positive braking of the turntable assembly. Provisions will be made for auxiliary operation of the rotation system should complete loss of normal hydraulic power occur.

The rotation system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Envelope control of rotation system to prevent accidental body damage
- Prevent the aerial from being rotated into the short-jacked side of the unit

Manual Override Controls

Manual override controls will be provided for all aerial and stabilizer functions.

Ladder Slide Mechanism

Wear pads will be used between the telescoping ladder sections, to reduce friction for smoother operation. Slide pads will also be used to control side play between the ladder sections.

Basket Leveling System

A basket leveling system will be provided and so designed, that the basket with it's rated load, can be supported and maintained level, relative to the turntable, regardless of the elevation or flexion of the ladder.

The leveling of the basket features a hydraulic cylinder system mounted between the ladder fly section and the basket with each side capable of supporting the load, while maintaining the basket level.

The hydraulic circuitry includes pressure operated counter balance valves, on the load side of the cylinders, to prevent the basket from tipping should the hydraulic lines be severed.

The microprocessor will control the level of the basket during bedding operations, preventing the basket from hitting the body deck when the truck is setup on unlevel ground.

Rotation Interlock

The microprocessor will be used to prevent the rotation of the aerial device, to the side in which the stabilizers have not been fully deployed (short-jacked). The microprocessor will allow full and unrestricted use of the aerial, in the 180 degree area, on the side(s) where the stabilizers have been fully deployed. The system will also have a manual override, to comply with NFPA 1901.

Load Capacities

The following load capacities will be established with the stabilizers at full horizontal extension and placed in the down position to level the truck and to relieve the weight from the tires and axles. Capacities will be based upon full extension and 360 degree rotation.

A load chart, visible at the operator's station, will be provided. The load chart will show the recommended safe load at any condition of the aerial device's elevation and extension.

35 MPH Wind Conditions/Dry

Degree of Elevation	-15 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 77
Basket	1000	1000	1000	1000	1000	1000	1000
Fly	-	-	-	-	250	250	500
Upper Mid	-	-	-	-	250	250	500
Center Mid	-	-	250	250	250	500	500
Lower Mid	-	-	250	250	500	500	500
Base	-	250	500	500	500	500	750

Water Tower Operation

The following capacities will be based upon continuous 360 degree rotation and full extension.

35 MPH Wind Conditions/Water Charged

Degree of Elevation	-15 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 77
Basket	500	500	500	500	500	500	500
Fly	-	-	-	-	-	-	250
Upper Mid	-	-	-	-	-	250	250
Center Mid	-	-	-	-	250	250	500
Lower Mid	-	-	-	250	250	500	500
Base	-	-	250	250	250	500	500

Elevation -15 to 77 Degrees

The aerial device will be able to maintain the above load capacities while flowing up to 1500 GPM and a nozzle position of 0 to 90 degrees to either side of the ladder centerline, and as far above and below horizontal to the platform as nozzle design allows.

The aerial device will be able to maintain the above load capacities while flowing up to 2000 GPM and a nozzle position of 0 to 45 degrees to either side of the ladder centerline, and 30 degrees above horizontal and as far below horizontal to the platform as nozzle design allows.

Reduced loads in the basket can be redistributed in 250 lb Increments to the fly, mid, or base as needed.

Ladder Cradle Interlock System

A ladder cradle interlock system will be provided through the microprocessor to prevent the lifting of the aerial device from the nested position until the operator places all the stabilizers in a load supporting configuration. A switch will be installed at the boom support to prevent operation of the stabilizers once the aerial has been elevated from the nested position.

AERIAL BOOM PANEL

There will be one boom panel provided on each side of the aerial ladder base section. The boom panel will be painted #10 white.

The boom panels will be designed so no mounting bolts are in the face of the panel. This will keep the lettering surface free of holes.

AERIAL DEVICE RUNG COVERS

Each rung will be covered with a secure, heavy-duty, fiberglass pultrusion that incorporates an aggressive, no-slip coating.

The rung covers will be glued to each rung, and will be easily replaceable should the rung cover become damaged.

The center portion of each rung cover will be black and the outside 2.00" edge at each side will be safety yellow.

Under no circumstances will the rung covers be fastened to the rungs using screws or rivets.

The rung covers will have a 10-year, limited warranty.

PIKE POLE MOUNTING BRACKETS

Mounting will be provided near the end of the fly section of the aerial ladder for one (1) pike pole(s).

The bracket will be sized to hold a Fire Hooks Unlimited 10' New York roof hook.

BASKET BRACKETS STORAGE BOX

There will be a storage box provided at the base section of the aerial ladder on the right side. The box will be painted to match the aerial device and located at the tip of the base section. The box will have a hinged cover with pneumatic cylinders and a D-handle latch. The box will have no louvers. The cover will have the same finish as the box. The cover will be tied in to the open door indicator circuitry when in the open position.

The maximum capacity of the box will be 40 lb.

STOKES STORAGE BRACKETS

There will be one (1) aluminum bracket(s) at the base section of the aerial ladder on the right side of the aerial device while viewed from the turntable. The brackets will be located above the aerial boom

panel. The brackets will be painted to match the aerial device and include locking pins to secure the basket.

LADDER STORAGE MOUNTING BRACKETS

There will be brackets that are painted to match the aerial device provided near the end of the fly section of the aerial for mounting a roof ladder.

The mounting brackets will accommodate a 16' Duo-Safety 875-DR roof/wall ladder as determined by the type of aerial device and the available space.

SAW STORAGE BOX

There will be a total of one (1) storage box(es) provided at the base section of the aerial ladder, one (1) on the left side of the aerial device while viewed from the turntable. The box(es) will be painted to match the aerial device and located at the tip of the base section. The box(es) will have a hinged cover with D-handle latch and gas struts to secure the saw. The cover will have the same finish as the box. The cover will be tied in to the open door indicator circuitry when in the open position. The box will have louvers on the side of the box facing the aerial device for ventilation.

The maximum capacity of each box will be 25 lb.

BASKET STRUCTURE

The complete basket structure will be constructed of welded high strength steel certified by the manufacturer to have a minimum of 100,000 lb per square inch yield strength on all structural members. The aerial basket will be fully tested and independent third party certified.

The flooring of the basket will be multi-piece Morton Cass material, preventing the accumulation of water on the standing surface. The floor will measure approximately 33.63" long x 72.75" wide. The stepping surfaces will meet the skid-resistance requirements of current NFPA 1901 standard.

The outside basket steps used for transferring in and out of the basket will be at the same level as the basket floor and will be constructed of aluminum treadplate. The steps on the front and sides are approximately 8.00" deep. The front corners of the basket step will be mitered at 45 degrees to allow the basket to be maneuvered closer to buildings when approaching at an angle.

Four (4) stainless steel pompier belt safety loops will be attached to the inside of the basket. Two (2) lifting eyes will be provided on the bottom side of the basket support structure. Each lifting eye will be rated for 500lb.

Four (4) rubber bumpers are provided on the bottom side of the basket structure for damage protection when setting it down on a surface.

The basket interior will be illuminated as required per the current edition of NFPA 1901. Electrical sub-components will be mounted under the basket in a enclosed area providing protection from heat exposure while allowing for easy servicing and maintaining an unobstructed basket interior.

BASKET SIDES

The sides of the basket will be of tubular steel construction and aluminum sheet skin, and along with the basket doors, will form a continuous 42.00" high wall around the basket.

PLATFORM ENTRANCES/EXITS

Two (2) swing-in, spring-loaded, self-closing doors will be of steel frame construction with an aluminum sheet skin and will be provided on the 45 degree angles at the front of the platform. A paddle style door latch will allow the basket doors to be opened from the outside by applying pressure to the paddle with the hand. The rear of the platform will be equipped with a vertical self-closing gate for transfer to and from the platform's ladder device.

ACCESSORY MOUNTING RECEPTACLES

Universal accessory mounting receptacles will be permanently affixed on the left side of the basket to receive options such as the rescue basket holders, rappelling arms, roof ladder brackets, winch, etc. Complete interchangeability will be required without modification to the basket.

RUBBER BUMPER ON BASKET

A black rubber bumper will be provided on the edge of the front and sides of the platform basket exterior stepping area.

HOSE BOX AT PLATFORM

There will be one (1) hose storage box(es) with a cover and rubber draw latch provided at the platform. A brushed stainless steel scuffplate will be provided under each latch. The box(es) will be located at the right side of the basket when viewed from the turntable and will match the finish of the aerial device. The box(es) will be sized to fit 50' of 2.50" diameter hose.

Drain holes will be provided in the bottom corners of each box and a louver will be provided on each side near the top of the box, below the latches.

LIGHTS FOR TURNTABLE WALKWAY

There will be On Scene Model 73006-WHW 6.00" long white LED lights and P25 white LED lights provided at the aerial turntable. The lights will be located to illuminate the entire walking surface of the turntable including the area around the turntable console. These lights will be activated by the aerial master switch.

TURNTABLE CONSOLE LIGHTING

There will be one (1), TecNiq Model E10, white LED light mounted in the turntable console cover to illuminate the controls located on both the upper and lower portion of the turntable control station. These lights will be activated by the aerial master switch.

BASKET HEAT SHIELDS

A heat reflective shield constructed of 0.063 aluminum will be provided on the front, sides, bottom, and access doors of the basket.

The front, side and access door heat shields will be painted to match the aerial basket.

The heat shields on the bottom of the basket will be easily removable for ease of servicing components located under the basket. These heat shields will be provided with a non-glare finish.

INFORMATION CENTER

There will be an information center provided. The information center will operate in temperatures from -40 to 185 degrees Fahrenheit. The information center will employ a Linux operating system and a 7.00" (diagonal measurement) LCD display. The LCD will have a 1000 nits rated color display. The LCD will be daylight visible. The LCD display will be encased in an ABS, grey plastic housing with a black decal. There will be five (5), weather-resistant user interface buttons provided. The LCD display can be changed to an optional single foreign language.

Operation

The information center will be designed for easy operation in everyday use. There will be a page button to cycle from one screen to the next screen in a rotating fashion. A video button will allow an NTSC camera signal into the information center to be displayed on the LCD. If any button is pressed while viewing a video feed, the information center will return to the vehicle information screens. There will be a menu button to provide access to maintenance, setup, and diagnostic screens. All other button labels will be specific to the information being viewed.

General Screen Design

Where possible, background colors will be used to provide vehicle information *At A Glance*. If the information provided on a screen is within acceptable limits, a green background color will be used. If the information provided on a screen is not within acceptable limits, an amber background color will indicate a caution condition and a red background color will indicate a warning condition.

Every screen in the information center will include the aerial tip temperature, the time (12- or 24-hour mode) and a text Alert Center. The time will be synchronized between all Command Zone color displays located on the vehicle. The Alert Center will display text messages for audible alarms. The text messages will identify any items causing the audible alarm to sound. If more than one (1) audible alarm is activated, the text message for each alarm will cycle every second until the problems have been resolved. The background for the Alert Center will change to indicate the severity of the warning message. Amber will indicate a caution condition and red will indicate a warning condition. If a warning and a caution condition occur simultaneously, the red background color will be shown for all Alert Center messages.

A label will be provided for each button. The label will indicate the function for each active button for each screen. If the button is not utilized on specific screens, it will have a button label with no text.

Symbols will accurately depict the aerial device type the information pertains to such as rear mount ladder, rear mount platform, mid-mount ladder or mid-mount platform.

Page Screens

The Information center will include the following pages:

The Aerial Main and Load Chart page will indicate the following information:

Rungs Aligned and Rungs Not Aligned will be indicated with text and respective green or red colored ladder symbols.

Ladder Elevation will be indicated via a fire apparatus vehicle with ladder symbol with the degree of elevation indicated between the vehicle and ladder.

Water Flow (if applicable) will be indicated via a water nozzle symbol and text indicating flow / time.

Breathing Air Levels will be indicated via an air bottle symbol and text indicating the percent (%) of air remaining. A green bar graphs shown inside the bottle will indicate oxygen levels above 20 percent. A red bar graph will indicate oxygen levels at or below 20 percent. When oxygen levels are at or below 10 percent the red bar graph will flash.

The Aerial Load Chart will indicate the load limit on each section of the ladder based on actual ladder position and water flow (if applicable).

At A Glance color features will be utilized on this screen. Caution type conditions will be indicated via a yellow background. Warning type conditions will be indicated via a red background. Conditions operating within acceptable limits will be indicated via a green background.

The Aerial Reach and Hydraulic Systems page will indicate the following information:

Aerial Hydraulic Oil Temperature will be indicated with symbol and text. At a glance features will be utilized.

Aerial Hydraulic Oil Pressure will be indicated with a symbol and text. At a glance features will be utilized.

The following calculations will be indicated on a representative vehicle symbol:

Aerial Device Extension length.

Aerial Device Height indicating the height of the aerial device tip from the ground.

Aerial Device Reach indicating the horizontal distance the aerial reaches from the turntable.

Aerial Device Angle indicating the angle from the vehicle which the device is at.

At A Glance color features will be utilized on this screen. Caution type conditions will be indicated via a yellow background. Warning type conditions will be indicated via a red background. Conditions operating within acceptable limits will be indicated via a green background.

The Level Vehicle page will indicate the following information:

The grade of the vehicle will be indicated via a fire apparatus vehicle symbol with the degree of grade shown in text format. The symbol will tilt dependent on the vehicle grade.

The slope of the vehicle will be indicated via a fire apparatus vehicle symbol with the degree of slope shown in text format. The symbol will tilt dependent on the vehicle slope.

Outriggers status will be indicated via a colored symbol for each outrigger present. Each outrigger status will be defined as one of the following:

Outrigger stowed indicated with a silver pan located close to the vehicle

Outrigger fully extended indicated with a fully deployed green outrigger

Outrigger short-jacked indicated by a yellow outrigger partially deployed

Outrigger not set indicated by a red outrigger that is not set on the ground

A text box located on the vehicle symbol will be utilized to identify the overall status of the outrigger leveling system. The following status will be indicated in the text box:

Deployed status will indicate all outriggers are properly set on the ground at full extension

Shortjacked status will indicate one or more outriggers are set on the ground but not fully extended.

Not Set status will indicate one or more outriggers is not properly set on the ground.

Stowed status will indicate all outriggers are stowed for vehicle travel.

A bedding assist alert will indicate that the aerial device is being aligned by the Command Zone system as the operator lowers the aerial device into the cradle with the joystick.

At A Glance color features will be utilized on this screen. Caution type conditions will be indicated via a yellow background. Warning type conditions will be indicated via a red background. Conditions operating within acceptable limits will be indicated via a green background.

Menu Screens

The following screens will be available through the Menu button:

The View System Information screen will display aerial device hours, aerial PTO hours, ladder aligned for stowing, aerial rotation angle, total water flow (if applicable), and aerial waterway valve status (if applicable).

The Set Display Brightness screen will allow brightness increase and decrease and include a default setting button.

The Configure Video Mode screen will allow setting of video contrast, video color and video tint.

The Set Startup screen allows setting of the screen that will be active at vehicle power-up.

The Set Date and Time screen has a 12- or 24-hour format, and allows setting of the time and date.

The View Active Alarms screen shows a list of all active alarms including the date and time of each alarm occurrence and shows all alarms that are silenced.

The System Diagnostics screen allows the user to view system status for each module and it's respective inputs and outputs. Viewable data will include the module type and ID number; the module version; and module diagnostics information including input or output number, the circuit number connected to that input or output, the circuit name (item connected to the circuit), status of the input or output, and other module diagnostic information.

Aerial calibrations screen indicates items that may be calibrated by the user and instructions to follow for proper calibration of the aerial device.

Button functions and button labels may change with each screen.

LOWER CONTROL STATION

A lower control station with pendant control will be located at the rear of the apparatus in an easily accessible area. The controls and indication labels will be illuminated for nighttime operation. The following items will be furnished at the lower control station and will be clearly identified and conveniently located for ease of operation and viewing:

- Level assist switch
- Override switch to override microprocessor
- Emergency power unit switch

AERIAL DEVICE CONTROL STATIONS

There will be two (2) aerial device control stations, one (1) will be referred to as the basket control station, and the other as the turntable control station. All elevation, extension, and rotation controls will operate from both of these locations. The controls will permit the operator to regulate the speed of the aerial functions, within the safe limits as determined by the manufacturer and NFPA standards. The controls will be clearly marked and illuminated for night time operation.

Each control will be equipped with an operator presence, preventing accidental activation.

TURNTABLE CONTROL STATION

The turntable control station will be located on the right side of the turntable so the operator may easily observe the basket while operating the controls. A console cover will be provided at the turntable control station. The controls will be so designed to allow the turntable control station to immediately override the basket controls even if the ladder is being operated by the basket controls.

The following items will also be provided at the turntable control station and be clearly identified and illuminated for nighttime operation and conveniently located for ease of operation and viewing:

- Three (3) separate controls for raise/lower, extend/retract, and left/right rotation
- Intercom controls
- Tip tracking light switch
- Emergency power unit switch
- Operator's load chart
- Two (2) position switch for selecting aerial operational speed
- Aerial monitor switches

BASKET CONTROL STATION

The basket control station will be located at the front, center of the platform basket. The following items will also be provided at the basket control station and be clearly identified and illuminated for nighttime operation and conveniently located for ease of operation and viewing:

- Three (3) separate controls for raise/lower, extend/retract, and left/right rotation

- Intercom controls
- Tip tracking light switch
- Basket leveling switches
- Operator's load chart
- Aerial monitor switches

HIGH IDLE

The high idle will be controlled by the microprocessor. The microprocessor will automatically adjust the engine rpm, to compensate for the amount of load placed upon the system. The system will include a safety device that allows activation of the high idle, only when the parking brake is set and the transmission is placed in neutral.

INTERIOR BASKET ILLUMINATION

There will be three (3) Amdor Model AY-LB-12HW020-0, 350 lumens 20.00" weather resistant strip lights with white LEDs and stainless steel shield provided to illuminate the interior of the aerial basket.

- One (1) light over the control console
- One (1) light on the left side rear of the basket
- One (1) light on the right side rear of the basket

The lights will be activated when the battery switch is on and the aerial master switch is on.

STABILIZERS

The vehicle will come equipped with a stabilization system consisting of six (6) hydraulically operated stabilizers. The middle two (2) will be out and down style, the front and rear two (2) will be down only. This system will meet or exceed all requirements of the NFPA specifications related to stabilization and setup on sloped surfaces.

The stabilizer/leveling jacks will have a maximum spread of 18' measured from the centerline of the jack footpads when the beams are fully extended. The beams will be 6.81" wide x 13.00" high with 1.00" thick top and bottom plates and 1/2" thick sides of 100,000-PSI minimum yield strength steel. The cylinders will have pilot-operated check valves with thermal relief designed to ensure that the beams will not drift out of the stowed position during travel. Wear pads will guide the stabilizers.

The horizontal extension cylinders will be totally enclosed within the beams and will incorporate telescoping hydraulic tubing to supply the jack cylinder hydraulic power. Stabilizer hydraulic hoses will remain stationary during operation of the stabilizers to prevent hose wear and potential failure. The cylinders will be equipped with decelerators to reduce the speed of extension and retraction when the beams are near the fully retracted and extended positions. The stabilizer extension hydraulic cylinders will have the following dimensions: 2.25" bore, 1.38" rod, and 62.25" stroke.

The front vertical jack cylinders will be capable of 15.00" ground penetration. The middle and rear vertical jack cylinders will be capable of 18.00" ground penetration. The cylinders will be supplied with pilot operated check valves on each jack cylinder to hold the cylinder in the stowed or working position, should a charged line be severed at any point in the hydraulic system. For safety, the integral holding valves will be located in the cylinder base, NOT in the transfer tube. Vertical jack cylinder rods will be

fully enclosed by a telescoping inner box to protect the cylinder rods from damage. The stabilizer jack hydraulic cylinders will have the following dimensions: 4.25" bore, 3.00" rod, and 34.88" stroke.

The middle and rear stabilizer jack will have a pan that will be a maximum of 14.00" wide so as to allow the extension of the stabilizer between parked cars or other obstacles. This pan will serve as a protective guard and a mounting surface for warning lights. The top, forward, and rear edges will be flanged back 90 degrees for added strength. The front stabilizers will be designed for easy cab tilt.

STABILIZER PADS

The stabilizer footpad will include an integrated stabilizer pad. The footpad will be attached to the jack cylinder rod by means of a machined ball at the end of the jack cylinder rod which mates to a socket machined into the footpad. The footpad will automatically position itself when being stowed so that no portion of the foot extends outside the body.

STABILIZER CONTROLS

A portable stabilizer control pendant will be provided. The control pendant will be weatherproof and oil resistant. Each function and indicator light will be labeled on a mylar lexan panel. The control pendant can be taken as far away as 15' from the vehicle with an attached coil cable.

The stabilizer control pendant will include the following:

- One (1) green power indicator light for stabilizer control that will be illuminated when the Stabilizer Power Enable switch has been activated. This will be interlocked such that the aerial master must be activated, the ladder is in the cradle, or the Global Override at the rear of the apparatus is activated.
- Two (2) electric toggle switches for stabilizers: each toggle switch will control the extend/retract (middle only) and raise/lower (front/middle/rear) of its respective stabilizer to allow vehicle set up in restricted areas and/or on uneven surfaces.
- Level assist switch: The stabilizer control system will incorporate a computerized leveling system to enhance the stabilizer set up. The computerized system will ensure full stabilizer extension, proper jack penetration, and will level the vehicle within eight tenths of a degree of level for safe operation of the aerial device.
- Stow assist switch: The stabilizer control system will incorporate a computerized system to move all six (6) stabilizer shoes to the full raised position while this switch is held.
- Tilt assist toggle switch: The stabilizer control system will incorporate a computerized system to tilt the chassis to five (5) degrees for enhanced side angle deployment of the aerial device.
- One (1) electric push button switch for the engaging the emergency power unit.
- One (1) red "stabilizer not stowed" indicator light: this light will illuminate when the stabilizers are not in the fully stowed position.
- Two (2) fully extended beams green indicator lights: these lights will be illuminated when each of the respective stabilizer beams are fully extended.
- Six (6) firm on ground green indicator lights: each light will be illuminated when its respective stabilizer shoe is in the load supporting condition.

Each toggle switch will activate the engine fast idle automatically.

Manual override will be supplied for each stabilizer control valve.

A "Stabilizers Not Stowed" indicator will be provided in the driver's compartment. It will illuminate automatically whenever the stabilizers are not fully stowed to prevent damage to the apparatus if moved. The stabilizer system will also be wired to the "Do Not Move Indicator Light", which will flash whenever the apparatus parking brake is not fully engaged and the stabilizers are not fully stowed.

CRADLE INTERLOCK SYSTEM

A cradle interlock system will be provided, to prevent the lifting of the aerial from the nested position, until the operator has positioned all the stabilizers in a load supporting configuration. A switch will be installed at the cradle, to prevent operation of the stabilizers once the aerial has been elevated from the nested position.

STABILIZER PAN AND TRIM MATERIAL

The aerial stabilizer pans will be polished stainless steel and the aerial stabilizer trim will be polished stainless steel .

STABILIZER CONTROL BOX DOOR

A vertically hinged brushed stainless steel door will be provided over the stabilizer control box. The door will be hinged along the inboard edge and provided with a Southco raised trigger C2 chrome latch.

STABILIZER PLACEMENT

There will be two (2) cameras provided and installed on the body, one (1) directly above each stabilizer. The cameras will be activated with a switch in the cab and will provide a picture to specify the fully extended stabilizer position allowing the driver the ability to position the vehicle with the proper clearance for stabilizer deployment.

ADDITIONAL STABILIZER PADS

There will be two (2) additional pair of composite stabilizer pads that will be shipped loose with the vehicle. The additional stabilizer pad(s) brackets will not be provided with the vehicle.

HYDRAULIC SYSTEM

All hose assemblies will be assembled and crimped by the hose manufacturers certified technician.

All manufacturing employees responsible for the installation of hydraulic components will be properly trained. Training will include: proper handling, installation, torque requirements, cleanliness and quality control procedures for hydraulic components.

Hoses used in the aerial hydraulic system will be of a premium quality hose with a high abrasion resistant cover. All pressure hoses will have a working pressure of 4000 psi and a burst pressure rating of 16,000 psi.

All hydraulic fittings and tubing will be plated or constructed of 304 stainless steel to minimize corrosion.

The fitting will use an O-ring seal where possible to minimize hydraulic leaks.

An interlock will be provided that prevents activation of the hydraulic pump until the transmission is placed in neutral and the parking brake is set as outlined in the current NFPA 1901 standard.

The system will meet the performance requirement of the current NFPA 1901 standard, which requires adequate cooling less than 2.5 hours of operations.

All hydraulic components that are non-sealing whose failure could result in the movement of the aerial will comply with current NFPA 1901 standards and have burst strength of 4:1.

Dynamic sealing components whose failure could cause aerial movement will have a margin of 2:1 on maximum operating pressure per the current NFPA 1901 standard.

All hydraulic hoses, tubes, and connections will have a minimum burst strength of 3:1 per the current NFPA 1901 standard.

A chassis mounted positive displacement piston pump for consistent pressure and rapid responses will supply hydraulic power for all aerial operations. The positive displacement pump will provide 3,000psi. The hydraulic pump will be solely dedicated to aerial operations.

Each aerial will be evaluated as to the region and climate where it will be used to determine the optimum viscosity and proper oil grade. Oil viscosity will be based on an optimum range of 80 to 1000 SUS during normal aerial use. Before shipment of the unit, an oil sample will be taken and analyzed to confirm the oil is within the allowable ISO grade tolerance.

The aerial hydraulic system will have a minimum oil cleanliness level of ISO 18/15/13 based on the ISO 4406:1999 cleanliness standard. Each customer will receive a certificate of actual cleanliness test results and an explanation of the rating system.

Oil samples can be taken from the hydraulic manifold GP1 port which is also used for verifying system pressure.

Ball valves will be provided in the hydraulic suction lines to permit component servicing without draining the oil reservoir.

The aerial will incorporate the use of trombone steel tubes inside the stabilizer beams to eliminate hydraulic hose wear and leaks.

Hydraulic power to the ladder will be transferred from the pedestal by a hydraulic swivel.

The system hydraulic pressure will be displayed on the turntable display.

The hydraulic system will be additionally protected from excessive pressure by a secondary pressure relief valve set at 3,500 psi. In the event the main hydraulic pump compensator malfunctions, the secondary relief will prevent system damage.

HYDRAULIC CYLINDERS

All cylinders used on the aerial device will be produced by a manufacturer that specializes in the manufacture of hydraulic cylinders.

Each cylinder will include integral safety holding cartridges. No manifold or transfer tube mounted cartridge will be acceptable.

Each cylinder will be designed to a minimum safety factor of 4:1 to failure.

All safety holding cartridges will be installed at the cylinder manufacturer, in a controlled clean environment to avoid possible contamination and or failure.

POWER TAKEOFF/HYDRAULIC PUMP

The apparatus will be equipped with a power takeoff driven by the chassis transmission and actuated by an electric shift, located inside the cab. The power takeoff which drives the hydraulic pump will meet all the requirements for the aerial unit operations.

An amber indicator light will be installed on the cab instrument panel to notify the operator that the power takeoff is engaged.

An interlock will be provided that allows operation of the aerial power takeoff shift only after the chassis spring brake has been set and the chassis transmission has either been placed in the neutral position or drive position after the driveline has been disengaged from the rear axle.

The hydraulic system will be supplied by a variable displacement load and pressure compensating piston pump. The pump will meet the demands of all three simultaneous aerial functions. The pump will provide proper flow for single aerial function with the engine at idle speed. A switch will be provided on the control console to increase the engine speed for multiple function operation.

EMERGENCY PUMP

The hydraulic system will be designed with an auxiliary power unit meeting the guidelines of the current NFPA 1901 standard.

The aerial will be equipped with an emergency hydraulic pump, electrically driven from the truck batteries. The pump will be capable of running for 30 minutes for limited aerial functions to stow the unit in case of a main pump or truck system failure. A momentary switch will be located at the stabilizer and aerial control locations to activate the emergency pump.

AERIAL CONTROL VALVE

The aerial hydraulic control valve will be designed with special spool flows, limiting the oil flow for the designed function speed. The valve will be electrically controlled and be located below the swivel and integrated with the stabilizer control manifold. The handles will be oriented outward and will be spaced 1.80" apart. The valve spools will be designed to bleed off downstream pressure, in the neutral position and allow proper sealing of any cylinder holding cartridge.

OIL RESERVOIR

The oil reservoir will have a minimum capacity of 39 gallons. The oil fill location will be easily accessible and be labeled "Hydraulic Oil Only" and also indicate the grade of oil that is installed in the reservoir. A drain port will be provided.

Two suction ports will be provided, one for the main hydraulic pump and one for the emergency pump. The emergency suction port will be raised slightly off the bottom of the reservoir.

Magnetic filter will be installed in line with the return hose.

A float type sending unit in the reservoir will provide an indication of oil level on an electronic display. A temperature sending unit in the reservoir will provide indication of the oil temperature on an electronic display.

The hydraulic oil reservoir will be labeled per the current edition of NFPA 1901 standard.

RETURN FILTER

The low pressure oil return filter will be remote mounted in the return line and designed to prevent oil loss during filter change. A 50 psi bypass will be included to protect the element and hydraulic system during lower than normal operating temperatures. The system will incorporate the following filter to provide dependable service:

- return filter: beta 1000 at 6 micron

HYDRAULIC SWIVEL

The aerial ladder will be equipped with a three (3) port, high pressure hydraulic swivel which will connect the hydraulic lines from the hydraulic pump and reservoir through the rotation point to the aerial control bank. The hydraulic swivel will allow for 360 degree continuous rotation of the aerial.

ELECTRIC SWIVEL

The ladder will be equipped with an electric swivel to allow 360 degrees rotation of the aerial while connecting all electrical circuits through the rotation point. A minimum of 36 collector rings will be provided that are capable of supplying 20 amp continuous service. All collector rings will be enclosed and protected with desiccant plugs against condensation and corrosion. No oil or silicone will be used.

WATER SWIVEL

Water will be transferred to the aerial waterway by means of a 5.00" internal diameter waterway, through the swivel, permitting 360 degree continuous rotation.

13-BIT ABSOLUTE ENCODER

The aerial ladder will be equipped with a 13-Bit Absolute Encoder which provides 8192 counts per shaft turn for position and direction reference.

The 13-Bit Absolute Encoder will provide a unique binary word to reference each position and direction for all 360 degrees of rotation.

If the power is interrupted for any reason, the 13-Bit Absolute Encoder will allow power to be returned to the system without having to re-zero the settings.

The 13-Bit Absolute Encoder will be an integral part of a micro-processor based control system.

ELECTRICAL SYSTEM

The aerial device will utilize a microprocessor-based control system. The system will consist of the following components:

- Control System Modules

Each of the control system modules will be configured as follows:

- Sealed to a NEMA 4X rating
- Operating range from -40 degrees F to 156 degrees F (-40 degrees C to 70 degrees C)
- Communicate using J1939 data link
- Two (2) diagnostic LED lights
 - One (1) green light that illuminates when module has power (B+) and ground
 - One (1) red light that flashes to indicate the module is capable of communicating via the data link
- Up to 16 diagnostic LEDs on each module
- Ground matrix identification system

The following control system modules will be used:

- Control Module
 - Main controller for the system
 - USB connection allows for computer diagnostics
- Power Module
 - Built-in fault sensing
 - Eight (8) digital outputs
 - Pulse width modulating (PWM) capable
 - 10A continuous per output
 - Circuit protection based on actual current draw (not affected by heat)
- Current Control Module
 - Built-in fault sensing
 - Three (3) analog inputs
 - Eight (8) digital outputs
 - Pulse width modulating (PWM) capable
 - 3A continuous per output
 - Closed Loop System
 - Circuit protection based on actual current draw (not affected by heat)
- Input Module
 - 16 software selectable (digital or analog) inputs
- Output Module
 - 16 digital outputs
- Input/Output Module
 - Eight (8) software selectable (digital or analog) inputs
 - Eight (8) digital outputs
- Valve Module
 - 36 digital inputs
 - 36 digital outputs

TIP LIGHT

There will be two (2) Whelen® Model MPB*, 4,100 lumens 12 volt DC LED lights with adjustable mounts installed on the front of the basket. The painted parts of this light assembly to be black.

The lights will be controlled with the tracking lights.

TRACKING LIGHTS

There will be two (2) Whelen® MPB*, 5,695 lumens 12 volt DC LED lights with bail bracket mounts installed near the tip of the base section of the aerial device. The lights are installed at the tip so the overall width of the apparatus is not affected. The lights will be mounted below the top edge of the aerial device so the overall height of the apparatus is not affected.

- One (1) located on the left side with flood optics
- One (1) located on the right side with spot optics
- The painted parts of this light assembly to be black.

Power to the lights will be controlled by a master on/off switch at the turntable control operator's position.

BASKET ACCESS

Access to the basket will be provided by a pull-out, swing-down climbing ladder. The 2.25" deep climbing ladder surfaces will be constructed with Traction Tread®. The bottom step will be a flip-down, stirrup step. The access ladder will be recessed into the angled corners of the rear body on each side. Hand holds will be provided in each side of the ladder.

The step well finish shall be aluminum treadplate.

All stepping surfaces will have a height not greater than 14.00" from top surface to top surface.

The bottom stepping height will not exceed 24.00" from the ground to the top of the stepping surface at any time.

STEP LIGHTS

There will be two (2) white LED step lights provided for each set of aerial basket access steps.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The step lights will be actuated by the aerial master switch in the cab.

These lights will meet NFPA requirements for step lighting.

LIGHTING ON AERIAL DEVICE

There will be TecNiq, Model D02, LED rung lighting provided on both sides of the aerial ladder base, lower mid, middle, upper mid and fly sections. The lighting will be located adjacent to the ladder rungs along the lower rail of the ladder sections and will run the length of the ladder section.

The color of the sections will be per the following:

- The base section of the ladder to be red.
- The lower mid section of the ladder to be red.

- The mid section of the ladder to be white.
- The upper mid section of the ladder to be blue.
- The fly section of the ladder to be blue.

The LED rung lighting will be activated when the aerial master switch is activated.

The lights may be load managed when the parking brake is applied.

AERIAL LOCATOR LIGHT

There will be two (2) Whelen Model VTX609*, 1.00" high x 2.25" in diameter flashing LED modules with chrome flanges installed at the aerial tip for the purpose of locating the aerial device while in operation.

Both modules will be activated whenever the aerial is raised from the cradle.

The color of the locator light will be blue.

The lens color will be clear.

STABILIZER WARNING LIGHTS

There will be four (4) Whelen®, Model M6*, LED flashing warning lights with Whelen, Model M6FC, chrome flanges installed, one (1) on each stabilizer cover panel.

- The front stabilizer pan lights will be red LED with a lens color the same as the LEDs
- The rear stabilizer pan lights will be red LED with a lens color the same as the LEDs

These warning lights will be activated by the same switch as the side warning lights.

STABILIZER BEAM WARNING LIGHTS

Two (2) 4.00" diameter red LED flashing lights will be mounted on each stabilizer, one (1) facing forward and one (1) facing rearward. The lights will be Grote Supernova 40 series LED lights. The lights will be recessed in the horizontal beam of the stabilizer. These warning lights will be activated with the aerial master switch.

STABILIZER SCENE LIGHTS

There will be one (1) Amdor®, Model AY-LB-12HW012, 190 lumen, 12" long, white LED strip light installed under each stabilizer beam to illuminate the surrounding area. A total of six (6) lights will be installed. The lights will be activated by the aerial master switch.

PLATFORM 120-VOLT ELECTRIC SYSTEM

Two (2), 20 amp, NEMA L5-20, 120-volt, three (3)-prong twist lock receptacles with weatherproof covers will be provided in the aerial platform. Both receptacles will be located on the left side rear of the basket. Each receptacle will be supplied from individual branch circuits protected by dedicated 20 amp/120-volt circuit breakers. All wiring will be sized to and conform to the latest edition of NEC standards.

UNDER PLATFORM LIGHTING

There will be four (4) Whelen, Model PCP2AFS, 150 watt 120 volt AC light(s) with white LEDs, and bail bracket(s) provided under One (1) light installed under the left side step in the center position, One (1)

light installed under the left side corner step in the center position, One (1) light installed under the right side corner step in the center position and One (1) light installed under the right side step in the center position. The painted parts of this light assembly to be black.

The light(s) will be controlled from a switch(es) at the platform/tip and turntable.

COMMUNICATION SYSTEM

An Atkinson three (3)-way communications system will be provided. The communication system will be furnished between the platform, the pump operator's panel and the turntable operator's position. The master control located at the turntable control console will have the transmitting and receiving volume controls along with the push to talk button. A self-contained "hands-off" speaker microphone will be located in the platform which will require no operator attention to transmit or receive.

BREATHING AIR

Breathing air will be supplied to the aerial platform. The air system will incorporate one (1) 6000 psi, 509 cubic foot ASME cylinder. To allow the turntable operator an unobstructed view of the platform the cylinders will be mounted on the left side of the aerial base section while viewed from the turntable. A pressure regulator located at the air cylinder. A shutoff valve with guard will be provided on the cylinder. The air will be routed to the platform using hose especially designed for use in breathing air systems. At the platform, the breathing air will be accessible via two (2) quick couplings for air masks. These will have a Foster stainless steel SHD3 series coupling. Two (2) couplings will be located at the rear of the basket, one (1) on each side. There will be a weather resistant storage compartment for two (2) air masks provided at the basket with a rubber draw latch. A no refill hose provided recharge hose will be provided for refilling the air cylinder without having to remove the tank from its mounting.

The air cylinder will be designed and constructed to conform to the requirements of the American Society of Mechanical Engineers' Pressure Vessel Code per OSHA 29 CFR 1910.169 for transporting compressed air.

BREATHING AIR LEVEL AND WARNING SYSTEM

The level of breathing air remaining will be visible on the LCD display at all operating positions. The display will incorporate a low-pressure warning circuit that activates an audible alarm when 20% maximum air cylinder capacity remains. A second, louder audible alarm will activate when the remaining air level drops to 10% of maximum air cylinder capacity.

BREATHING AIR OUTLET AT TURNTABLE

A breathing air outlet will also be provided on the front of the turntable control console, in the lower portion. The air fitting will match those supplied at the tip.

BREATHING AIR GAUGE GUARD

There will be an aluminum three (3) sided guard provided over the sides and top of the breathing air gauges on the base of the device. The guard will be approximately 3.00" deep on each side to help protect the gauges, but allow regulator adjustment and access. The guard will be painted to match the aerial device.

AERIAL PEDESTAL

The aerial pedestal will accommodate the height of the cab.

LYFECOMBO™ BRACKETS

Brackets will be provided to increase the safety of firefighters during fire ground and rescue operations. The removable brackets will have the following three (3) functions: securing a roof ladder to the basket, two (2) rappelling anchor points, and mounting bars to allow the secure mounting of a rescue basket stretcher.

LyfeLadder™ brackets will be designed to allow firefighter access below the basket using up to a 20' roof ladder. The ladder will be secured through its beams and one (1) rung, by a 1.00" diameter aluminum rod capable of being positively latched in place and able to withstand a minimum of a 500lb load. There will be a latch to keep the ladder in a vertical position at all times. A set of nylon guides will be provided to aid in positioning the roof ladder on the mounting brackets.

Two (2) **LyfeEye™** rappelling arms will be provided. Forged stainless steel eyebolts with a 1.38" inside diameter will be incorporated into the design of the brackets for use as a rappel line anchor. Each anchor point will have a capacity of 300lb.

LyfeSupport™ rescue basket support brackets will be provided to allow patient transport using the aerial. Two (2) quick clip basket straps will be used to secure the basket to the brackets.

Strain gauging and testing will have been completed on the system (ladder and complete holding device) to ensure structural integrity of all components and maintain a minimum of two to one (2:1) safety factor.

AERIAL TURNTABLE MANSAYER™ BAR

A ManSaver™ bar will be installed at the aerial turntable.

AERIAL WATERWAY

The aerial waterway will be capable of being supplied by either a midship mounted pump or an external water source through a 5.00" intake at the side of the apparatus.

A 5.00" water swivel will be installed below the aerial turntable permitting the ladder to rotate 360 degrees continuously.

A 5.00" water swivel will be installed at the aerial heel pivot pin that will permit water tower operations of -15 degrees to 77 degrees. The heel pivot pin will not be integral with the waterway swivel at any point. The waterway design will allow complete servicing of the waterway swivel without disturbing the heel pivot pin.

A telescoping aluminum waterway will be installed on the side of the aerial ladder sections. The waterway will consist of a 5.50" diameter tube for the base section, 5.00" diameter tube for the lower mid section, 4.50" diameter tube for the center mid section, 4.00" diameter tube for the upper mid section, and 3.50" diameter tube for the fly section.

A 1.50" drain will be provided for the waterway.

WATERWAY SEALS

The waterway seals will be of type-B PolyPak design, composed of nitroxile seal and a nitrile wiper, which together offer maximum stability and extrusion resistance on the waterway. The seal will be

capable of withstanding pressures up to 2000 psi, temperatures in excess of 250 degrees Fahrenheit and have resistance to all foam generating solutions. The seals will be internally lubricated.

The waterway seals will have automatic centering guides constructed of synthetic thermalpolymer. The guides will provide positive centering of the extendible sections within each other and the base section to insure longer service life and smoother operation.

PLATFORM WATER SYSTEM

A 4.00" (internal diameter) water swivel will connect the fly section waterway to the platform waterway. The water swivel will permit water tower operations from -15 degrees to 77 degrees. The water will be routed from the swivel to a 4.00" gear operated valve(s) on the front of the platform using a combination of 4.00" tubes and piping. The monitor(s) will be bolted onto the valve(s).

A 2.50" preset pressure relief valve will be provided in the waterway system. It will be designed to protect the aerial waterway from excess pressure. It will dump water to the ground when operating.

A shower nozzle rated at 75 gpm will be provided beneath the platform for heat protection for the platform personnel. A direct linkage control for the shower nozzle will be provided.

VALVE UNDER MONITOR

A TFT Valve Under Monitor (VUM) valve and manifold will be provided under each monitor at the aerial platform. Each VUM will be manually controlled at the basket with a handwheel control. The outboard facing port of each VUM will have one (1) gated elbow with 2.50" NH threads. One (1) 1.50" x 2.50" reducer and cap will be provided on the gated elbow. All remaining ports of the VUM will be provided with a blind plug.

An automatic ball drain will be provided on each VUM.

AERIAL MONITOR

There will be two (2) Task Force Tips monitors provided at the platform.

One will be a Y4-MP1A-P-01 double crank controlled monitor with a TFT YST-4NN stacked tips.

The other will be a Y4-EP1A-P electric monitor with a TFT 2000 gpm Model M-ERP2000 electric nozzle.

The controls for the electronic monitor will be located at the platform and the turntable control console.

WATERWAY FLOWMETER

Waterway flow, including total water flowed, will be monitored by the microprocessor. An LCD display will be located at the upper and lower control stations.

WATERWAY INLET

There will be a 5.00" schedule 10 stainless steel inlet pipe on the right side of the apparatus. The inlet will be connected to the base of the ladder, through the turntable swivel, to assure continuous rotation. The inlet will terminate with a 5.00" NST chrome adapter and a long handled chrome cap.

ADAPTER, STORZ INLET

A 5.00" FNST x 4.00" Storz adapter with blind cap will be provided on the aerial inlet.

MANUALS

The aerial manufacturer will provide two (2) operator maintenance manuals and two (2) wiring diagrams pertaining to the aerial device.

INITIAL INSTRUCTION

On initial delivery of the fire apparatus, the contractor will supply a qualified representative to demonstrate the apparatus and provide initial instruction to the fire department regarding the operation, care, and maintenance of the apparatus for a period of three (3) consecutive days.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT

The following loose equipment as outlined in NFPA 1901, 2016 edition, section 9.9.3 and 9.9.4 will be provided by the fire department.

- 800 ft (240 m) of 2.50" (65 mm) or larger fire hose, in any combination.
- 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose, in any combination.
- One (1) handline nozzle, 200 gpm (750 L/min) minimum.
- Two (2) handline nozzles, 95 gpm (360 L/min) minimum.
- One (1) playpipe with shutoff and 1.00" (25 mm), 1.125" (29 mm), and 1.25" (32 mm) tips.
- One (1) SCBA complying with NFPA 1981 for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer.
- One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s).
- One (1) first aid kit.
- Four (4) salvage covers, each a minimum size of 12 ft x 14 ft (3.6 m x 5.5 m).
- Four (4) combination spanner wrenches.
- Two (2) hydrant wrenches.
- One (1) double female 2.50" (65 mm) adapter with National Hose threads.
- One (1) double male 2.50" (65 mm) adapter with National Hose threads.
- One (1) rubber mallet, for use on suction hose connections.
- Four (4) ladder belts meeting the requirements of NFPA 1983.
- One (1) 150 ft (45 m) light-use life safety rope meeting the requirements of NFPA 1983.
- One (1) 150 ft (45 m) general-use life safety rope meeting the requirements of NFPA 1983.
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, *Standard for High Visibility Public Safety Vests*, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front.

- Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (152 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band.
- Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.
- One (1) automatic external defibrillator (AED).
- If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, will be carried mounted in brackets fastened to the apparatus.
- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side will be carried. Any intake connection larger than 3.00" (75 mm) will include a pressure relief device that meets the requirements of 16.6.6.
- If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake will be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.
- If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters will be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.8.2.1 requires a minimum of 20' of suction hose or 15' of supply hose will be carried.

Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose.

DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 9.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 9.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PAINT

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.
2. Chemical Cleaning and Pretreatment - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion.
3. Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective basecoat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a Critical aesthetic finish. The Surfacer Primer is a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.
4. Finish Sanding - The Surfacer Primer will be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.
5. Sealer Primer - The Sealer Primer is applied prior to the Basecoat in all areas that have not been previously primed with the Surfacer Primer. The Sealer Primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when topcoated.
6. Basecoat Paint - Two coats of a high performance, two component high solids polyurethane basecoat will be applied. The Basecoat will be applied to a thickness that will achieve the proper color match. The Basecoat will be used in conjunction with a urethane clear coat to provide protection from the environment.
7. Clear Coat - Two (2) coats of Clear Coat will be applied over the Basecoat color. The Clear Coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style and roll-up doors will be Clear Coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacturer.

After the cab and body are painted, the color will be verified to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color

standard entered into the computer. Color specifications will be used to determine the color match. A Delta E reading will be used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and painted separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

The paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) are to meet or exceed Cadillac/General Motors GMW15777 global paint requirements. Orange peel levels are to meet or exceed the #6 A.C.T. standard in critical areas. These requirements must be met in order for the exterior paint finish to be considered acceptable. The manufacture's written paint standards will be available upon request.

PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current state regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.
- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations will have a 99.99% efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient
- Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.
- Paint wastes are disposed of in an environmentally safe manner.
- Empty metal paint containers will be recycled to recover the metal.
- Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with his state EPA rules and regulations.

CAB TWO-TONE PAINT

The cab will be painted two-tone with the upper section painted #10 white and the lower section painted #103 Lime Yellow. There will be a standard two-tone cab paint break provided.

There will be a standard cab shield provided.

BODY PAINT

The body will be painted to match the lower section of the cab.

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly will be finished with primer and gloss black paint before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc.

Components that are included with the chassis frame assembly that will be painted are:

- Frame rails
- Frame liners
- Cross members
- Axles
- Suspensions
- Steering gear
- Battery boxes
- Bumper extension weldment
- Frame extensions
- Body mounting angles
- Rear Body support substructure (front and rear)
- Pump house substructure
- Air tanks
- Steel fuel tank
- Castings
- Individual piece parts used in chassis and body assembly

FILM TECHNICAL PROPERTIES		
PROPERTY	TEST METHOD	PERFORMANCE
Color	~	Black
Film Thickness	~	0.5 - 1.5 Mills
Gloss - 60 Degree	ASTM D523	65 - 85
Pencil Hardness	ASTM D3363	2H Minimum
Direct Impact	ASTM D2794	100 in. - lbs. Minimum
Reverse Impact	ASTM D2794	60 in. - lbs. Minimum
Crosshatch Adhesion	ASTM D3359	4B - 5B
Humidity	ASTM D1735	1000 Hours Minimum
Water Immersion	ASTM D870	250 Hours Minimum
Gravelometer	GM9508P	6 Minimum
Throwpower	GM9535P	12 - 15 in.
Cold rolled steel lab panels, Zinc Phosphate pretreatment, 0.6 mils average film thickness, cured 20 minutes @ 350°F.		
PROPERTY	SUBSTRATE PRETREATMENT	SALT SPRAY* 1000 HOURS
Corrosion Resistance	CRS / Zinc Phos / Non-Chrome	1 - 2 mm
*Salt Spray - ASTM B117, cold rolled steel lab panels cured 20 minutes @ 350°F. (Average Total Scribe Creep)		

Components treated with epoxy E-coat protection prior to paint:

- Two (2) C-channel frame rails
- Two (2) frame liners

The E-coat process will meet the technical properties shown.

PAINT, REAR WHEELS

All wheel surfaces, inside and outside, will be provided with powder coat paint #101 black.



[Powder Coat Aluminum Paint Color]

AXLE HUB PAINT

All axle hubs will be painted to match lower job color.

TRANSIT COATING

All non-painted metal surfaces on the exterior of the vehicle will be sprayed with a corrosion protective coating provided by Carwell. The coating can be removed with soap and water. The coating is made of a linseed oil base and is biodegradable.

The underside non-painted metal surfaces will also be coated with a corrosion protective coating.

COMPARTMENT INTERIOR FINISH

The interior of the compartments will be dual action finished and not painted.

AERIAL DEVICE PAINT COLOR

The aerial device paint procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the aerial device structural components above the rotation point will be thoroughly cleaned and mechanically shot-blasted to remove metal impurities and prepare the aerial for painting.
2. Zinc Rich Primer - Zinc rich primer will be applied to the torque box and stabilizers.
3. Primer/Surfacer Coats - A two (2) component epoxy primer/surfacer will be applied to the mechanically shot-blasted metal surfaces to provide a strong corrosion protective base coat and to smooth out the surface. All seams will be caulked with a two (2) component epoxy caulk before painting.

4. Hand Sanding - The primer/surfacer coat of the outer surfaces of the hand rails and base rails will be lightly sanded to a smooth finish.
5. Primer Coat - A two (2) component epoxy primer coat will be applied over the sanded primer.
6. Topcoat Paint - Urethane base coat will be applied to opacity for correct color matching.
7. Clear Coat - Two (2) coats of an automotive grade two (2) component urethane will be applied.

Surfaces that will not be painted include all chrome plated, polished stainless steel, anodized aluminum and bright aluminum treadplate.

All buy out components, such as monitor, nozzle, gauges, etc. will be supplied as received from the vendor.

Removable items such as brackets will be removed and painted separately to ensure paint coverage behind all mounted items.

The aerial device components will be painted as follows using the aforementioned seven (7) step finishing process:

- Aerial basket and basket leveling cylinders at tip: black 101
- Aerial device ladder sections and extension cylinders: black 101
- Aerial turntable and leveling cylinders (if applicable) at turntable: black 101
- Aerial control console: black 101
- Aerial lift cylinders: black 101
- Aerial rotation motor (if applicable): black
- Aerial torque box, support structure and components below the rotation point: black 101 paint
- Aerial stabilizers (middle and rear only): black 101
- Aerial boom support: black 101

REFLECTIVE STRIPES

Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" white stripe at the top with a 1.00" gap then a 6.00" white stripe with a 1.00" gap and a 1.00" white stripe on the bottom.

REFLECTIVE STRIPE ON CAB FACE

The reflective band provided on the cab face will be located below the stainless steel trim band and above the front bumper.

REAR CHEVRON STRIPING

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. Covered surfaces will include the rear wall and aluminum doors. Rear compartment doors, stainless steel access doors, and the rear bumper will not be covered.

The colors will be red and fluorescent yellow green diamond grade.

Each stripe will be 6.00" in width.

This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.

REFLECTIVE STRIPE ON STABILIZERS

There will be 4.00" wide alternating fluorescent yellow green diamond grade and red diamond grade reflective chevron stripes provided on the forward and rear facing sides of both aerial stabilizers. The stripes will be angled at a 45 degree angle.

REFLECTIVE STRIPES

Three (3) reflective stripes will be provided across the sides and front of the aerial basket. The reflective bands will consist of a 1.00" white stripe at the top with a 1.00" gap then a 4.00" white stripe with a 1.00" gap and a 1.00" white stripe on the bottom. This band will stay consistent with the striping on the body.

JOG(S) IN REFLECTIVE BAND

The reflective band located on each side of the apparatus body will contain one (1) jog(s) and will be angled at approximately a 45 degrees when installed.

OUTLINE, REFLECTIVE STRIPE

A Vivid Blue outline will be applied on the top and the bottom of the reflective band. There will be one (1) set of outline stripes required.

SLIDE OUT TRAY REFLECTIVE STRIPES

There will be D.O.T. red/white reflective stripes installed on the front and sides of three (3) slideout tray(s) located All slide out trays

TOOLBOARD REFLECTIVE STRIPES

There will be D.O.T. red/white reflective stripes installed on the two (2) toolboard(s) located All swing out and slide out tool boards

INVERTED "V" CHEVRON STRIPING ON CAB AND CREW CAB DOORS

There will be alternating chevron striping located on the inside of each cab and crew cab door.

The striping will consist of the following colors:

The first color will be red diamond grade

The second color will be fluorescent yellow green diamond grade

The size of the striping will be 4.00".

CAB STRIPE

There will be a genuine gold leaf stripe provided on both sides of the cab in place of the chrome molding and on the cab face with shield.

CAB STRIPE

There will be a genuine gold leaf stripe on each side of the cab over the fender.

LETTERING

The lettering will be totally encapsulated between two (2) layers of clear vinyl.

LETTERING

One (1) to twenty (20) genuine gold leaf lettering, 3.00" high, with outline and shade will be provided.

BODY STRIPE

There shall be a genuine gold leaf stripe provided on each side of the body, over the fenders.

LETTERING

There will be genuine gold leaf lettering, 4.00" high, with outline and shade provided. There will be 12 letters provided.

LETTERING

One (1) to twenty (20) genuine gold leaf lettering, 6.00" high, with outline and shade will be provided.

LETTERING

There will be genuine gold leaf lettering, 10.00" high, with outline and shade provided. There will be four (4) letters provided.

LETTERING

There will be reflective lettering, 10.00" high, with outline and double shade provided. There will be six (6) letters provided.

LETTERING

There will be reflective lettering, 5.00" high, with outline and shade provided. There will be eight (8) letters provided.

LETTERING

There will be reflective lettering, 16.00" high, with outline and shade provided. There will be two (2) letters provided.

LETTERING

There will be reflective lettering, 18.00" high, with outline and shade provided. There will be three (3) letters provided.

CORNER SCROLL

eight (8) corner scrolls, comprised of genuine gold leaf, will be provided Boom panels.

MALTESE CROSS INSTALLATION

There will be one (1) pair of maltese crosses, comprised of genuine gold leaf material, provided and installed Basket.

MALTESE CROSS INSTALLATION

There will be one (1) pair of maltese crosses, comprised of genuine gold leaf material, provided and installed Cab doors.

EMBLEM

There will be two (2) emblem(s), approximately 15.00" - 17.00" wide in size, installed Cab area. The emblem will be modeled after the department submitted information (art, patch, etc).

CAB GRILLE DESIGN

A muted American flag with a thin red line design will be painted on the cab grille.

FIRE APPARATUS PARTS MANUAL

There will be one (1) custom parts manual(s) in USB flash drive format for the complete fire apparatus provided.

The manual(s) will contain the following:

- Job number
- Part numbers with full descriptions
- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly
- Parts section sorted in alphabetical order
- Instructions on how to locate parts

Each manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

Service Parts Internet Site

The service parts information included in these manuals are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

CHASSIS SERVICE MANUALS

There will be one (1) chassis service manuals on USB flash drives containing parts and service information on major components provided with the completed unit.

The manual will contain the following sections:

- Job number
- Table of contents
- Troubleshooting
- Front Axle/Suspension
- Brakes
- Engine
- Tires
- Wheels
- Cab
- Electrical, DC
- Air Systems

- Plumbing
- Appendix

The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

CHASSIS OPERATION MANUAL

The chassis operation manual will be provided on one (1) USB flash drive.

ONE (1) YEAR MATERIAL AND WORKMANSHIP

A Pierce basic apparatus limited warranty certificate, WA0008, is included with this proposal.

ENGINE WARRANTY

A Cummins **five (5) year** limited engine warranty will be provided. A limited warranty certificate, WA0181, is included with this proposal.

STEERING GEAR WARRANTY

A Sheppard **three (3) year** limited steering gear warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

FIFTY (50) YEAR STRUCTURAL INTEGRITY

The Pierce custom chassis frame limited warranty certificate, WA0013, is included with this proposal.

FRONT AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

The Pierce TAK-4 suspension limited warranty certificate, WA0050, is included with this proposal.

REAR AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

Pierce TAK-4® independent rear suspension will be provided with a three (3) year material and workmanship limited warranty. The manufacturer's warranty will provide that the independent rear suspension be free from any defect related to material and workmanship on the portion of the apparatus built by the manufacturer that would arise under normal use and service.

ABS BRAKE SYSTEM THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

A Meritor Wabco™ ABS brake system limited warranty certificate, WA0232, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce custom cab limited warranty certificate, WA0012, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce cab limited pro-rated paint warranty certificate, WA0055, is included with this proposal.

FIVE (5) YEAR MATERIAL AND WORKMANSHIP

The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.

COMPARTMENT LIGHT WARRANTY

The compartment lights will not offer an extended warranty.

TRANSMISSION WARRANTY

The transmission will have a **five (5) year/unlimited mileage** warranty covering 100 percent parts and labor. The warranty will be provided by Allison Transmission.

Note: The transmission cooler is not covered under any extended warranty you may be getting on your Allison Transmission. Please review your Allison Transmission warranty for coverage limitations.

TRANSMISSION COOLER WARRANTY

The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler). In addition, a collateral damage warranty will also be in effect for the first three (3) years of the warranty coverage and will not exceed \$10,000 per occurrence. A copy of the warranty certificate will be submitted with the bid package.

WATER TANK WARRANTY

A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

ROLLUP DOOR MATERIAL AND WORKMANSHIP WARRANTY

A R-O-M Corporation rollup door limited warranty will be provided. The mechanical components of the rollup door will be warranted against defects in material and workmanship for a period of seven (7) years. The door ajar switch will be warranted for a period of three (3) years and all other electrical components will be warranted for a period of one (1) year. A seven (7) year limited warranty will be provided on painted rollup doors.

The limited warranty certificate, WA0206, is included with this proposal.

PUMP WARRANTY

The Waterous pump will be provided with a Seven (7) year material and workmanship limited warranty.

A copy of the warranty certificate will be submitted with the bid package (no exception).

TEN (10) YEAR PUMP PLUMBING WARRANTY

The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

TWENTY (20) YEAR AERIAL DEVICE STRUCTURAL INTEGRITY WARRANTY

The Pierce device limited warranty certificate, WA0052, is included with this proposal.

AERIAL SWIVEL WARRANTY

An Amity five (5) year limited swivel warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

HYDRAULIC SYSTEM COMPONENTS WARRANTY

Aerial hydraulic system components will be provided with a five (5) year material and workmanship limited warranty.

HYDRAULIC SEAL WARRANTY

Aerial hydraulic seals will be provided with a three (3) year material and workmanship limited warranty.

A copy of the warranty certificates will be submitted with the bid package.

AERIAL WATERWAY WARRANTY

An Amity ten (10) year limited waterway warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

FOUR (4) YEAR PRO-RATED PAINT AND CORROSION

A Pierce aerial device limited pro-rated paint warranty certificate, WA0047, is included with this proposal.

FIVE (5) YEAR MATERIAL AND WORKMANSHIP

The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.

TWO (2) YEAR GENERATOR MATERIAL AND WORKMANSHIP WARRANTY

A Harrison Hydra-Gen generator two (2) year limited warranty will be provided.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

THREE (3) YEAR MATERIAL AND WORKMANSHIP

The Pierce Goldstar gold leaf lamination limited warranty limited warranty certificate, WA0018, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

ENGINE INSTALLATION CERTIFICATION

The fire apparatus manufacturer will provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification will be provided at the time of delivery.

POWER STEERING CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the power steering system as installed meets the requirements of the component supplier. The certification will be provided at the time of bid.

CAB INTEGRITY CERTIFICATION

The fire apparatus manufacturer will provide a cab crash test certification with this proposal. The certification will state that a specimen representing the substantial structural configuration of the cab has been tested and certified by an independent third party test facility. Testing events will be documented with photographs, real-time and high-speed video, vehicle accelerometers, cart accelerometers, and a laser speed trap. The fire apparatus manufacturer will provide a state licensed

professional engineer to witness and certify all testing events. Testing will meet or exceed the requirements below:

- European Occupant Protection Standard ECE Regulation No.29.
- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.
- SAE J2420 COE Frontal Strength Evaluation - Dynamic Loading Heavy Trucks.

Roof Crush

The cab will be subjected to a roof crush force of 22,500 lb. This value meets the ECE 29 criteria, and is equivalent to the front axle rating up to a maximum of ten (10) metric tons.

Side Impact

The same cab will be subjected to dynamic preload where a 13,275-lb moving barrier is slammed into the side of the cab at 5.50 mph, striking with an impact of 13,000 ft-lb of force. This test is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a rollover incident.

Frontal Impact

The same cab will withstand a frontal impact of 32,600 ft-lb of force using a moving barrier in accordance with SAE J2420.

Additional Frontal Impact

The same cab will withstand a frontal impact of 65,200 ft-lb of force using a moving barrier. (Twice the force required by SAE J2420)

The same cab will withstand all tests without any measurable intrusion into the survival space of the occupant area.

CAB DOOR DURABILITY CERTIFICATION

Robust cab doors help protect occupants. Cab doors will survive a 200,000 cycle door slam test where the slamming force exceeds 20 G's of deceleration. The bidder will certify that the sample doors similar to those provided on the apparatus have been tested and have met these criteria without structural damage, latch malfunction, or significant component wear.

WINDSHIELD WIPER DURABILITY CERTIFICATION

Visibility during inclement weather is essential to safe apparatus performance. Windshield wipers will survive a 3 million cycle durability test in accordance with section 6.2 of SAE J198 *Windshield Wiper Systems - Trucks, Buses and Multipurpose Vehicles*. The bidder will certify that the wiper system design has been tested and that the wiper system has met these criteria.

ELECTRIC WINDOW DURABILITY CERTIFICATION

Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the apparatus have been tested and have met these criteria without malfunction or significant component wear.

SEAT BELT ANCHOR STRENGTH

Seat belt attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat belt anchor design will withstand 3000 lb of pull on both the lap and shoulder belt in accordance with FMVSS 571.210 Seat Belt Assembly Anchorages. The bidder will certify that each anchor design was pull tested to the required force and met the appropriate criteria.

SEAT MOUNTING STRENGTH

Seat attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat mounting design will be tested to withstand 20 G's of force in accordance with FMVSS 571.207 Seating Systems. The bidder will certify, at time of delivery, that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.

PERFORMANCE CERTIFICATIONS**Cab Air Conditioning**

Good cab air conditioning temperature and air flow performance keeps occupants comfortable, reduces humidity, and provides a climate for recuperation while at the scene. The cab air conditioning system will cool the cab from a heat-soaked condition at 100 degrees Fahrenheit to an average of 78 degrees Fahrenheit in 30 minutes. The bidder will certify that a substantially similar cab has been tested and has met these criteria.

Cab Defroster

Visibility during inclement weather is essential to safe apparatus performance. The defroster system will clear the required windshield zones in accordance with SAE J381 Windshield Defrosting Systems Test Procedure And Performance Requirements - Trucks, Buses, And Multipurpose Vehicles. The bidder will certify that the defrost system design has been tested in a cold chamber and passes the SAE J381 criteria.

Cab Auxiliary Heater

Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. An auxiliary cab heater will warm the cab 77 degrees Fahrenheit from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify, at time of delivery, that a substantially similar cab has been tested and has met these criteria.

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus will provide the following:

- Documentation of the electrical system performance tests.
- A written load analysis, which will include the following:
 - The nameplate rating of the alternator.
 - The alternator rating under the conditions specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).

- The minimum continuous load of each component that is specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).



Fire and Rescue Apparatus

One (1) Year Material and Workmanship

Basic Apparatus

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	Twelve (12) months.
Conditions and Exclusions:	No specific exclusions apply
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Cummins Warranty

Worldwide

Fire Apparatus/Crash Trucks



Coverage

Products Warranted

This Warranty applies to new diesel Engines sold by Cummins and delivered to the first user on or after April 1, 2007, that are used in fire apparatus truck and crash truck* applications Worldwide.

Base Engine Warranty

The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and ends five years or 100,000 miles (160,935 kilometers), whichever occurs first, after the date of delivery of the Engine to the first user.

Engine aftertreatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under Base Engine Warranty.

Additional Coverage is outlined in the Emission Warranty section.

These Warranties are made to all Owners in the chain of distribution and Coverage continues to all subsequent Owners until the end of the periods of Coverage.

Cummins Responsibilities

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure.

Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure.

Cummins will pay reasonable costs for towing a vehicle disabled by a Warrantable Failure to the nearest authorized repair location. In lieu of the towing expense, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging when the repair is performed at the site of the failure.

Owner Responsibilities

Owner is responsible for the operation and maintenance of the Engine as specified in Cummins Operation and Maintenance Manuals. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure, Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items provided during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

Owner is responsible for a \$100 (U.S. Dollars) deductible per each service visit under this plan in the 3rd, 4th and 5th years of Base Engine Warranty. The deductible will not be charged during the first 2 years of the Base Engine Warranty.

Limitations

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel



exhaust fluid.

This Warranty does not apply to accessories supplied by Cummins which bear the name of another company. Such non-warranted accessories include, but are not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, vacuum pumps, power steering pumps, fan drives and air compressors. Cummins branded alternators and starters are covered for the first two years from the date of delivery of the Engine to the first user, or the expiration of the Base Engine Warranty, whichever occurs first.

Failures resulting in excessive oil consumption are not covered beyond the duration of the Coverage or 100,000 miles (160,935 kilometers) or 7,000 hours from the date of delivery of the Engine to the first user, whichever of the three occurs first. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are not covered beyond the first year from the date of delivery of the Engine to the first user or the duration of the Warranty, whichever occurs first.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

Cummins Inc. reserves the right to interrogate Electronic Control Module (ECM) data for purposes of failure analysis.

CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY AND THE EMISSION WARRANTY SET FORTH HEREINAFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Emission Warranty

Products Warranted

This Emission Warranty applies to new Engines marketed by Cummins that are used in the United States** in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the first user on or after September 1, 1992.

Coverage

Cummins warrants to the first user and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or 100,000 miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the first user or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

Limitations

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs or other losses resulting from a Warrantable Failure.

**CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL
OR CONSEQUENTIAL DAMAGES.**

* Airport operated crash trucks and fire department
operated trucks employed to respond to fires,
hazardous material releases, rescue and other
emergency-type situations.

** United States includes American Samoa, the
Commonwealth of Northern Mariana Islands, Guam,
Puerto Rico and the U.S. Virgin Islands.



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R. H. SHEPPARD CO., INC.
101 Philadelphia St.
Hanover, PA 17331
Pierce Manufacturing Inc.
2600 American Drive
Appleton, WI 54912

LIMITED WARRANTY: The R. H. Sheppard Co. Inc., ("Sheppard") warrants all M110PKG1 and M110SAU1 steering gears manufactured and sold to Pierce Manufacturing Inc. ("Pierce") for application on Pierce TAK-4 equipped vehicles to be free from defects of workmanship and material under normal use and service for a period of thirty six months from the in service date of the vehicle to its original owner.

Vehicle applications where Sheppard product is used require an application approval before production build. If Pierce uses Sheppard product for any purpose or application which has not been approved by Sheppard in advance, including aftermarket devices (defined as a device added to the steering system directly or indirectly affecting the performance or operation of the Sheppard product in its approved application) not tested and approved by Sheppard this limited warranty SHALL NOT APPLY AND SHALL BE VOID. SHEPPARD MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED. SHEPPARD EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

SHEPPARD SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES OR FOR LOSS OR DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF A PRODUCT. Pierce expressly acknowledges its obligation to inform all users (customers) of the above disclaimer.

CONDITIONS: Claims under this Limited Warranty may only be made by Pierce. In no event shall Sheppard be held liable for warranty charges by unauthorized persons. No allowance will be made for repairs or alterations, unless made with the written consent of Sheppard. Authorized Pierce dealers shall be the only authorized repair facility for Sheppard products applied to Pierce vehicles. Any warrantable repair made under this Limited Warranty must be made on or before 36 months of the in-service date for the Product to which the claim relates. Sheppard shall not be liable for claims made after such date. Sheppard product fitted to Pierce vehicles that are repaired at a repair facility other than an authorized Pierce dealer within the warranty period will be considered for payment under the guidelines of this agreement only by joint written consideration of Sheppard and Pierce warranty departments. It shall be the responsibility of the Pierce warranty department to notify Sheppard if and when this situation occurs. Sheppard will not be held responsible for damage to other steering components such as but not limited to pumps and reservoirs due to improper adjustment of steering gear relief plungers. Vehicle downtime and towing will not be considered under warranty.

REMEDIES: The sole and exclusive remedy of Pierce for Sheppard's breach of the foregoing warranty is limited to the return and repair or reimbursement as follows:

R. H. SHEPPARD CO., INC. WARRANTY
Pierce Manufacturing Inc.
Page 2

Warranty Support: In support of the Pierce dealer network, Sheppard will provide a toll-free “Hotline” service to assist in the diagnosis and troubleshooting of steering problems. The R. H. Sheppard Co., Inc. Field Service Department can be reached at 1-800-274-7437 for assistance. Sheppard will require that Pierce dealers contact this toll-free “Hotline” for approval before product is removed from a vehicle in a warranty situation. When contacted regarding a warranty situation, the Sheppard representative will provide an authorization number for removal of the product. This Returned Goods Authorization (RGA) number must be included in all warranty correspondence and attached to all returned goods.

Procedure: In the event of a warranty situation, the servicing dealer shall contact the Sheppard Hotline and receive an RGA number before replacing any steering gear. For M110PKG1 and M110SAU1 steering gear models, the dealer will first obtain an RGA number from Sheppard, and then order the replacement gear from Pierce. Replacement M110PKG1 and M110SAU1 steering gears shall be shipped from Pierce once those models are in full production. A warranty claim for both parts and labor will then be generated by the dealer and sent to Pierce. After reviewing the claim, Pierce will submit it to Sheppard for reimbursement.

Parts Reimbursement: Sheppard agrees to reimburse Pierce at Pierce’s purchase price plus 30% mark-up for parts found to be defective within the warranty period. Parts being returned for warranty consideration shall be sent to the R. H. Sheppard Company, 447 E. Middle St., Hanover, PA 17331 ATTN: Warranty Dept. Sheppard’s determination as to whether the part is covered by the foregoing warranty is final and conclusive. Sheppard requires the return of complete steering gears only. Individual seals replaced under warranty **should not** be returned unless specifically requested by Sheppard. All parts being returned for warranty consideration must be clearly tagged with all pertinent warranty information including, but not limited to (1) Returned Goods Authorization number (RGA); (2) claim number; (3) date in service; (4) date of failure; (5) mileage; (6) part number; (7) labor hours; (8) dealer labor rate and; (9) dollar amount claimed. Claims submitted without prior authorization are subject to rejection under this agreement.

Labor: Labor to repair Sheppard product found to be defective within the warranty period will be reimbursed at not more than 10 hours per vehicle. Labor shall be reimbursed at the rate of \$85.00 USD per hour for M110PGK1 and M110SAU1 steering gears.

Freight: Pierce will collect M110PGK1 and M110SAU1 warranty material at a designated collection point. Inbound freight to the Pierce collection point will be the responsibility of Pierce. All warranty material should be returned from the Pierce collection point to R. H. Sheppard Co. Freight Collect by a Sheppard-specified common carrier based on location of the Pierce collection point. Sheppard does not require the return of failed seals. Any freight charges incurred for the return of seals will be the responsibility of Pierce. Parts returned for warranty consideration without prior authorization are subject to rejection under this agreement and may be subject to a charge back of inbound freight charges. Parts rejected under this warranty will be returned to Pierce Freight Collect or scrapped by Sheppard at Pierce’s discretion.

R. H. SHEPPARD CO., INC. WARRANTY
Pierce Manufacturing Inc.
Page 3

Outside Purchases: Pierce authorized dealers shall be the only outlet for repair, warranty service and parts for Sheppard products applied to Pierce vehicles. Sheppard will not be responsible for consumables such as hoses, belts, fluids, fittings or miscellaneous shop material that may be required for the repair of the product.

Warranty Documentation: Warranty credit memos will be issued monthly to the Pierce Warranty Department. Monthly credit memos will include (1) claim number; (2) part number; (3) parts reimbursement; (4) labor reimbursement; (5) any applicable Pierce reference number and; (6) reason for rejection or acceptance of the claim. Credit memos will be issued in U.S. funds. Debits for warranty claims will not be accepted under this agreement. Claim disposition will constitute the final and conclusive resolution of warranty claims.

Parts Retention: Sheppard will retain parts submitted for warranty consideration for a period of sixty (60) days for any material found to be rejected for warranty. Sheppard will notify Pierce within sixty (60) days of receipt of Sheppard's determination as to whether any such part is covered by this warranty. Warranty reimbursement will be issued within thirty days of receipt of material at Sheppard.

Good-Will Requests: Good-Will requests will be considered jointly between Sheppard and Pierce for equitable compensation.

RECALLS: Sheppard retains the right to review information regarding federal motor vehicle recall and /or product repair programs if Sheppard products fitted to Pierce vehicles are alleged to be non-compliant with federal motor vehicle safety standards. Sheppard retains the right to review any claims of product defect or non-compliance before participating in reimbursement of expenses incurred as a result of alleged non-compliance or defect of its products. Sheppard agrees to negotiate in good faith for the reimbursement of expenses incurred by Pierce for all administrative, material and labor cost and expense associated with any recall where Sheppard product is found to be defective or non-compliant with federal motor vehicle standards.

MISCELLANEOUS: This writing constitutes the full complete and final statement of Sheppard's limited warranty for M110PKG1 and M110SAU1 products sold to Pierce. All prior oral or written correspondence, test data, negotiations, representations, understandings and the like regarding products are merged in this writing and extinguished by it. This limited warranty may not be altered, amended extended or modified except by a writing signed by the President or Vice President of Sheppard. No employee, vendor, dealer, distributor or other representative of Sheppard has authority to make statements to extend, expand, alter or amend the terms of this Limited Warranty. Sheppard expressly disclaims any statements contrary to the Limited Warranty. Sheppard's failure at any time to enforce any of the terms and conditions stated herein shall not constitute a waiver of any provisions herein. This Limited Warranty shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania.

R. H. SHEPPARD CO., INC. WARRANTY
Pierce Manufacturing Inc.
Page 4

Any legal actions which may arise as a result of disputes, controversies or claims arising out of or related to this limited warranty shall be in such forum as Sheppard and Pierce shall agree, or, in the absence of agreement, in a court of appropriate jurisdiction other than in the county in which either party is located. This Limited Warranty shall not be assigned by Pierce.

COOPERATIVE EFFORT: Sheppard and Pierce agree to work cooperatively toward expanding this warranty coverage to a period of sixty months from the in service date. These cooperative efforts shall focus on examining the effects of increased heat generated by 2007 model engines and its impact on the entire power steering system.

AGREEMENT: This agreement is effective April 3, 2006 and may be modified by mutual agreement between Sheppard and Pierce of a signed amendment to be attached to the original Limited Warranty. There are no third party beneficiaries to this Limited Warranty. This warranty agreement applies to Pierce authorized dealers only. It does not encompass any special arrangements that Pierce may now have or that Pierce may enter into, with any other segments of the trucking industry. This warranty agreement does not apply to non-conforming product removed at Pierce assembly plants.

This Limited Warranty agreement between the R. H. Sheppard Co., Inc and Pierce Manufacturing Inc. may be terminated by either party with thirty days written notice prior to termination.

Signed at Pierce Manufacturing Inc., Appleton, WI this _____ day of _____, 2006.

R. H. SHEPPARD CO., INC.

PIERCE MANUFACTURING INC.

Authorized Signature

Authorized Signature

Title

Title



Fire and Rescue Apparatus

Lifetime Fifty (50) Year Structural Integrity

Custom Chassis Frame

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Custom chassis frame rail manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Fifty (50) Years (Expected Life of Apparatus)
Conditions and Exclusions:	This warranty does not apply to damage caused by corrosion.
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Three (3) Year Material and Workmanship TAK-4 Independent Front Suspension

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The TAK-4 Front Independent Suspension and Steering Gears shall be free from defects in material and workmanship.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Years -or- 30,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty excludes brake pads, brake rotors, seal boots and shock absorbers.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Two (2) Year Material and Workmanship

Meritor Axles

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Meritor axle shall be covered by Meritor as indicated in the attached Meritor warranty coverage description
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Two (2) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor warranty description shall apply.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

MERITOR® COMMERCIAL VEHICLE SYSTEMS

WARRANTY/MODEL YEAR 2018 VEHICLES



MERITOR





WARRANTY INFORMATION CONTENTS

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How to Read Warranty Coverage

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor
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Notice:

Models or components that are approved for use by Meritor's vocational guidelines contained in Meritor Publication TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, which are not specifically listed, are warranted for one year, unlimited miles, parts only (1/Unl/P).

Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

Advantage Program

Purchasing additional coverage on select components will continue to safeguard your investment against major repair costs after the initial base coverage expires. You can find out more about the Advantage Program by visiting www.meritor.com or by contacting Meritor at 866-OnTrac1 (866-668-7221).



LINEHAUL WARRANTY INFORMATION

Linehaul Vehicles

- | | | | |
|------------------------|-------------------|--------------------|------------------------|
| ■ Auto Hauler | ■ Flatbed | ■ Livestock Hauler | ■ Refrigerated Freight |
| ■ Bulk Hauler | ■ General Freight | ■ Moving Van | ■ Tanker |
| ■ Chip Hauler (Truck)* | ■ Grain Hauler | ■ Pipe Hauler | ■ Triples |
| ■ Doubles | | | |

* Chip Hauler vehicles require specific axle models listed below and Linehaul condition to be eligible for Linehaul warranty consideration.

Linehaul Typically Is

- High mileage operation (over 60,000 miles/year)
- Well maintained major highways of concrete or asphalt construction
- Greater than 30 miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Non-Drive Steer Axles – 5/750/P&L

FD-965	FF-966	MFS-10-144A-N	MFS-12-132C-N	MFS-13-122C-N	MFS-14-143A-N
FF-941	FF-967	MFS-12-122A-N	MFS-12-143A-N	MFS-13-132B-N	
FF-942	FG-941	MFS-12-122B-N	MFS-12E-143A-N	MFS-13-132C-N	
FF-943	FG-943	MFS-12-122C-N	MFS-12-144A-N	MFS-13-143A-N	
FF-944	MFS-10-122A	MFS-12E-122A-N	MFS-13-122A-N	MFS-13-144A-N	
FF-961	MFS-10-143A-N	MFS-12-132B-N	MFS-13-122B-N	MFS-14-122A-N	

Rear Drive Single Axles – 5/750/P&L

RS-19-144/145/A	RS-21-160
MS-19-14X	RS-23-160
MS-21-144	RS-23-161
RS-21-145	RS-23-186

Rear Drive Tandem/Tridem Axles – 5/750/P&L

RT-34-144/P/A	MA-40-165	MT-40-943
RT-40-145/A	MA-40-175	MT-40-943-SP
RT-40-160/P ^{1,2}	MT-34-14X/P	RZ-166 ²
RT-46-160/P ^{1,2}	MT-40-14X/P	RZ-188
RT-46-164EH/P ^{1,2}	MT-40-14X/P	
RT-50-160/P ^{1,2}	MT-40-144/P	

Drivelines

RPL	5/500/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

¹ These models required for Chip Hauler and Linehaul warranty consideration.
² Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.



LINEHAUL WARRANTY INFORMATION

Brake Components

Cam Q Series Trailer Brakes	5/500/P, 1/100/L
LX500 Feature ¹	5/750/P&L
Q+ Drum Brake™	5/500/P, 1/Unl/P&L
ASA	5/500/P, 1/Unl/P&L
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™ ²	12-Years or Wearable Life/P
EX+ Air Disc Brake™	5/500/P, 1/Unl/L

¹ Includes: bushing, seal, cam, ASA lubrication and wear coverage of 3/500/P&L.

² Based on stamped wear diameter max.

Trailer Axles

Beam and Brackets	5/500/P, 1/100/L
Wheel End Systems ¹	
Standard System ²	1/100/P&L
PreSet by Meritor ³	5/500/P&L
AxlePak5 ⁴	5P/L
AxlePak7 ⁵	7P/L

¹ Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

² When installed by Meritor.

³ Requires approved hubcap stating PreSet by Meritor on hubcap face.

⁴ When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/500P, 3/500L.

⁵ When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/750P, 3/500L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

TAG/Pusher Axles¹

TQ, TQD, TR, TRD Beam and Brackets	5/750/P&L
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¹ For brake components and ABS Coverage, refer to appropriate product warranties.

Meritor Tire Inflation System by PSI

MTIS Components	3/500/P&L
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Trailer Air Suspension Systems

MPA38/40 (Tandem Axle Parallelogram) ¹	
Major Structural Components	5/500/P, 1/100/L
Curbing Damage Warranty ²	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/100/P&L
PinLoc Actuator	3/300/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs & Rebound Straps	2/200/P, 1/100/L
Bushings	5/500/P, 3/300/L

¹ Fastener torque coverage is limited to 2/Unl P&L when torqued by Meritor (For axle and ABS coverage, refer to appropriate product warranties.)

² "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.



GENERAL SERVICE WARRANTY INFORMATION

General Service Vehicles

■ Aerial Ladder Truck	■ Front Engine Commercial Chassis	■ Municipal Truck	■ Refrigerated Freight
■ Aerial Platform	■ Front Engine Integral Coach	■ Newspaper Delivery	■ School Bus
■ Ambulance	■ General Freight	■ Pick-Up and Delivery	■ Stake Truck
■ Auto Hauler	■ Intercity Coach	■ Pipe Hauler	■ Tanker
■ Beverage Truck	■ Intermodal Chassis	■ Platform Auto Hauler	■ Tanker Truck
■ Chip Hauler	■ Livestock Hauler	■ Pumper	■ Tour Bus
■ Cross Country Coach	■ Meat Packer	■ Rear Engine Integral Coach	■ Wrecker
■ Flatbed	■ Moving Van	■ Recreational Vehicles	

General Service Typically Is

- Lower mileage operations (less than 60,000 miles/year)
- Generally, on-road service (less than 10% off-road)
- An average of three (3) miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FH-941	MFS-7-153C-N	MFS-12E-122A-N	MFS-13-122C-N	MFS-18-135A-N
FF-941	FH-946 ¹	MFS-7-163C-N	MFS-12-122B-N	MFS-13-132B-N	MFS-18-193A-N
FF-942	FL-941	MFS-8-113B-N	MFS-12-122C-N	MFS-13-132C-N	MFS-20-133A-N
FF-943	FL-943	MFS-8-143A-N	MFS-12-132B-N	MFS-13-143A-N	MFS-20-135A-N
FF-944	MFS-6-151A-N	MFS-8-153B-N	MFS-12-132C-N	MFS-13-144A-N	MFS-20H-193A-N
FF-946	MFS-6-153B-N	MFS-8-163B-N	MFS-12-143A-N	MFS-14-122A-N	MFS-22H-135A-N
FF-961	MFS-6-162B-N	MFS-10-122A	MFS-12-144A-N	MFS-14-143A-N	MFS-22H-193A-N
FF-966	MFS-6-153C-N	MFS-10-143A-N	MFS-12E-143A-N	MFS-16-122A-N	
FF-967	MFS-6-162C-N	MFS-10-144A-N	MFS-13-122A-N	MFS-16-143A-N	
FG-941	MFS-7-113C-N	MFS-12-122A-N	MFS-13-122B-N	MFS-18-133A-N	

¹ Can also be used with reduced steer angles in tag position in Coach Applications.

Rear Drive Single Axles – 2/Unl/P&L

MS-17-13X	MS-21-144	RC-23-162 ¹	MS-26-616	79163
MS-17-14X	MS-23-17X	RC-23-165 ¹	MS-26-616-SP	
MS-19-13X	RS-21-145/A	RS-23-160	RS-30-185	
MS-19-14X	RS-21-160	RS-23-161	MS-30-616	
RS-17-144/145/A	RC-22-145	RS-23-186	MS-30-616-SP	
RS-19-144/145/A	RC-22-145/A	RS-24-160	RS-35-380	
MS-21-13X	RC-23-160	RC-25-160	71162	
MS-21-14X	RC-23-161	RS-26-185	71163	

¹ 3/Unl/P&L if PreSet by Meritor.

Rear Drive Tandem – 3/Unl/P&L

RT-40-160/P	RT-46-164EH/P
RT-46-160/P	RT-50-160/P

Drivelines

RPL	4/400/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	MT-44-14X/P	MT-58-616
RT-34-144/P/A	RT-44-145/P	RT-58-185 ¹
MT-40-14X/P	RT-46-169	MT-70-380
MT-40-144/P	MT-52-616	RZ-166
RT-40-145/A	RT-52-185 ¹	RZ-188

¹ Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.



GENERAL SERVICE WARRANTY INFORMATION

Brake Components

Cam Q Series Trailer Brakes	3/Unl/P, 1/Unl/L
LX500 Feature ¹	3/Unl/P&L
Cam P ³	2/200/P
Cam	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake™ ³	2/200/P&L
ASA	3/Unl/P
ASA ³	2/200/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™ ²	12-Years or Wearable Life/P
EX+ Air Disc Brake™	2/Unl/P&L

¹ Includes: bushing, seal, cam, ASA lubrication and wear coverage of 1/Unl/P.

² Based on stamped wear diameter max.

³ Applies to Tour Bus and Cross Country Coach only.

Trailer Axles

Beam and Brackets ¹	5/Unl/P, 1/Unl/L
Wheel End Systems ²	
Standard System ³	1/Unl/P&L
AxlePak5 ⁴	5P/L
AxlePak7 ⁵	7P/L

¹ 9000 Series is 3/Unl/P, 1/Unl/L

² Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

³ When installed by Meritor.

⁴ When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/500P, 3/500L.

⁵ When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/750P, 3/500L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

Chassis Axles (2000 Series/ChassiPak)

Beam & Brackets	6/Unl/P, 1/Unl/L
Wheel End Systems ¹	
Standard System	1/Unl/P&L
AxlePak7	7P/L
Beam and Brackets	7P/1L

¹ Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

Trailer Air Suspension Systems

MPA38/40 (Tandem Axle Parallelogram) ¹	
Major Structural Components	5/Unl/P, 1/Unl/L
Curbing Damage Warranty ²	5/500/P, 1/100/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/Unl/P&L
PinLoc Air Actuator	3/Unl/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs and Rebound Straps	2/Unl/P, 1/Unl/L
Bushings ³	5/Unl/P, 3/Unl/L

(For axle and ABS coverage, refer to appropriate product warranties.)

¹ Fastener torque coverage is limited to 2/Unl P&L when torqued by Meritor

² "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.

³ Raw wood applications 3/Unl/P, 1/Unl/L

TAG/Pusher Axles

TQ, TQD, TR, TRD Beam and Brackets ¹	3/Unl/P, 1/Unl/L
MC12002, MC14002, MC16003, FH946	2/Unl/P&L

(For brake components and ABS coverage, refer to appropriate product warranties.)

¹ 3/Unl/P&L if sold with PreSet by Meritor.

Meritor® Tire Inflation System by PSI

MTIS Components	3/500/P&L
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HEAVY SERVICE WARRANTY INFORMATION

Heavy Service Vehicles

■ Airport Rescue Fire (ARF)	■ Drill Rig	■ Michigan Special Gravel Trains	■ Shuttle Bus
■ Airport Shuttle	■ Dump	■ Michigan Special Log Hauler	■ Side Loader
■ Asphalt Truck	■ Emergency Service	■ Michigan Special Steel Hauler	■ Snowplow/Snowblower
■ Block Truck	■ Equipment Hauling	■ Michigan Special Waste Vehicle	■ Steel Hauling
■ Bottom Dump Trailer	■ Flatbed Trailer Hauler	■ Municipal Dump	■ Tanker
■ Combination	■ Flatbed Truck	■ Rapid Intervention Vehicle (RIV)	■ Tank Truck
■ Cementing Vehicle	■ Fracturing Truck	■ Rear Loader (Refuse)	■ Tractors with Pole Trailers
■ City Bus	■ Front Loader	■ Recycling Truck	■ Tractor/Trailer with Jeeps
■ Commercial Pick-Up	■ Geophysical Exploration	■ Residential Pick-Up (Refuse)	■ Transfer Dump
■ Concrete Pumper	■ Hopper Trailer Combinations	■ Rigging Truck	■ Transfer Vehicle
■ Construction Material Hauler	■ Landscaping Truck	■ Roll-Off	■ Transit Bus
■ Crash Fire Rescue (CFR)	■ Liquid Waste Hauler	■ Scrap Truck	■ Trolley
■ Mixer	■ Log Hauling	■ Semi-End Dump	■ Utility Truck
■ Demolition	■ Lowboy	■ Sewer/Septic Vacuum	■ Winch Truck

Heavy Service Typically Is

- Moderate mileage operation (less than 60,000 miles per year)
- On/Off road vocations (10% or more off-road)
- Moderate to frequent stops/starts (up to 10 stops per mile)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FH-941	MFS-8-113B-N	MFS-12-132C-N	MFS-13-155	MFS-22H-135A-N	MX-17-140
FF-941	FH-946	MFS-8-153B-N	MFS-12-143A-N	MFS-14-122	MFS-22H-193A-N	MX-19-140
FF-942	FL-941	MFS-8-163B-N	MFS-12-144A-N	MFS-14-143A-N	RF-16-145	MX-21-140
FF-943	FL-943	MFS-10-122A	MFS-12-155	MFS-16-122A-N	RF-21-160	MX-21-160
FF-944	MFS-6-151A-N	MFS-10-143A-N	MFS-13-122	MFS-16-143A-N	MX-10-120	MX-23-160
FF-946	MFS-6-153B	MFS-10-144A-N	MFS-13-122B-N	MFS-18-133A-N	MX-10-120 EVO	MX-810
FF-961	MFS-6-162B	MFS-12-122	MFS-13-122C-N	MFS-18-135A-N	MX-12-120	
FF-966	MFS-6-162C	MFS-12-122B-N	MFS-13-132B-N	MFS-18-193A-N	MX-12-120 EVO	
FF-967	MFS-7-113C-N	MFS-12-122C-N	MFS-13-132C-N	MFS-20-133A-N	MX-14-120	
FG-941	MFS-7-153C-N	MFS-12E-122	MFS-13-143A-N	MFS-20-135A-N	MX-16-120	
FG-943	MFS-7-163C-N	MFS-12-132B-N	MFS-13-144A-N	MFS-20H-193A-N	MX-18-120	

Drivelines

RPL	3/Unl/P, 1/Unl/P&L
92N	1/Unl/P&L
MXL	1/Unl/P&L

Rear Drive Single Axles – 2/Unl/P&L

MS-17-14X	RS-23-160	MS-30-616-SP
RS-17-144/145/A	RC-23-161	RS-30-185/380
MS-19-14X	RS-23-161	MS-35-380
RS-19-144	RS-23-186/380	RS-38-380
MS-21-114	RC-23-162	RC-25-160
MS-21-14X	RC-23-165	RC-26-633
RS-21-145	RS-24-160	MT-58-616
RS-21-145/A	RS-25-160	MT-58-616-SP
RS-21-160	MS-26-616	71162
RC-22-145	MS-26-616-SP	71163
RC-23-160	RS-26-185/380	79163
RH-23-160	MS-30-616	



HEAVY SERVICE WARRANTY INFORMATION

Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	RT-44-145/P	MT-58-616	RZ-166
RT-34-144/P/A	RT-46-169	MT-58-616-SP	RZ-188
MT-40-14X/P	MT-52-616	RT-58-185/380 ^{1,2}	
RT-40-145/A	MT-52-616-SP	RT-70-380	
MT-44-14X/P	RT-52-185/380 ^{1,2}	MT-70-380	

¹ Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.

² Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Brake Components

Cam P	3/Unl/P
Cam P ³	2/100/P
Cam Cast Plus™	2/100/P&L
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake™ ²	2/100/P&L
ASA	3/Unl/P
ASA ²	2/100/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
EX+ Air Disc Brake	2/100/P&L

¹ Based on stamped wear diameter max.

² Applies to City Bus, Trolley, Shuttle Bus and Airport Shuttle only.

³ Warranty for all non-Meritor ASAs supplied by Meritor for all Heavy Service vocations is 1/100/P.

Transfer Cases – 1/Unl/P

MTC-4208	MTC-4213	T-2119
MTC-4210	T-2111	

Rear Drive Tandem – 3/Unl/P&L

RT-40-160/P/A³
RT-46-160/P/A^{1,3}
RT-46-164EH/P/A^{2,3}
RT-50-160/P/A³

¹ U.S. only. Canadian warranty = 1/Unl/P for combination vehicles only.

² Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.

³ Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Meritor Tire Inflation System by PSI

MTIS Components	3/500/P&L
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Trailer Air Suspension Systems

MTA (Trailing Arm)	
Major Structural Components ¹	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings ¹	5/Unl/P, 3/Unl/L

¹ Raw wood applications 3/Unl/P, 1/Unl/L

(For axle and ABS coverage, refer to appropriate product warranties.)

Center Non-drive Axles – 2/Unl/P&L

MC26000
71063
79063

Trailer Axles

Beam and Brackets ¹	5/Unl/P, 1/Unl/L
Wheel End Systems ²	
Standard System ³	1/Unl/P&L

¹ 9000 Series is 3/Unl/P, 1/Unl/L.

² Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

³ When installed by Meritor.

(For brake components and ABS coverage, refer to appropriate product warranties.)



OFF-HIGHWAY SERVICE WARRANTY INFORMATION

Industrial And Off-Highway Service Vehicles

■ Load-On/Load-Off	■ Yard Jockey	■ Specialized Mining	■ Rail Car Mover
■ Port Tractor	■ All-Terrain Crane	■ Excavator	■ Loader
■ Rail Yard Spotter	■ Rough Terrain Crane	■ Compactor	■ Tow Tractor
■ Roll-On/Roll-Off	■ Forestry	■ Fertilizer Spreader	■ Pushback Tractor
■ Stevedoring Tractor	■ Material Handling	■ Snow Blower	
■ Trailer Spotter	■ Specialized Heavy Haul	■ Mining	

Industrial And Off-Highway Service Typically Is

- Low mileage operation
- Low speed vehicle speed restriction
- Vehicles are **not** typically licensed for highway use
- Six (6) starts/stops per mile (typical)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Drive Steer Axles – 1/Unl/P

MOR MOX MOC

Front Non-Drive Steer Axles – 1/Unl/P

FF - 941	MFS-12-143A-N	MFS-18-135A-N
FF - 943	MFS-12-144A-N	MFS-18-193A-N
FF - 961	MFS-13-143A-N	MFS-20-133A-N
FF - 966	MFS-13-144A-N	MFS-20-135A-N
FG - 941	MFS-14-143A-N	MFS-20H-193A-N
FG - 943	MFS-16-122A-N	MFS-22H-135A-N
FL - 941	MFS-16-143A-N	MFS-22H-193A-N
FL - 943	MFS-18-133A-N	MON-ZO FAMILY

Planetary Axles – 1/Unl/P

MOR MOX MOC MOT

Rear Drive Single Axles – 1/Unl/P

RS-23-186	RS-24-160-SP	RS-30-185
RS-23-380	MS-30-616	RS-30-380
RS-24-160	MS-30-616-SP	MS-35-380

Drivelines – 1/Unl/P

RPL MXL

Rear Drive Tandem Axles – 2/Unl/P

MT-44-14X/P	MT-58-616	RT-44-145/P	RT-50-160/P
MT-52-616	MT-58-616-SP	RT-46-160/P	RZ-166
MT-52-616-SP	MT-70-380	RT-46-164EH/P	

Brake Components

Cam P	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
ASA	3/Unl/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P



TERMS AND CONDITIONS

Coverage Exclusions

Product Description

All

The cost of any repairs, replacements or adjustments to a covered component (1) associated with noise; (2) resulting from the use or installation of non-genuine Meritor components or materials; (3) due to vibration associated with improper operation or misapplication of drivetrain components; and (4) damage resulting from corrosion.

For axle assemblies supplied by Meritor with suspension and interface brackets designed and/or attached by non-Meritor parties, Meritor warranty coverage does not apply to the brackets, bracket attachment methods, and field issues caused by brackets or bracket attachments to any covered component unless specified in a separate OEM agreement.

Front Axles

King Pin Bushings.

Rear Axles

Self-contained traction equalizers and oil filters. The use of NoSPIN differentials will result in the exclusion of axle shafts from warranty considerations. NoSPIN is a product of Eaton.

ASA

Boot and bushing. Bent, broken, over-torqued, missing or otherwise damaged pawl assemblies.

Cam Brake

Brake lining wear and brake shoe "rust-jacking."

Disc Brake

Pad wear, rotor wear.

Coverage Limitations

Product Description

All

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program. Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

Front Axles

Tie rod and tie rod ends limited to 3-year/300,000-mile or published vocational coverage, whichever is less. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

Rear Axles

Pinion and through shaft seals limited to 3-year/300,000-mile or published vocational coverage, whichever is less, if yoke is installed by Meritor. If yoke is not installed by Meritor, then Meritor does not warrant pinion seals. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

Rear Axles

The Meritor® breather part number A-2297-C-8765 with A-3196-J-1336 hose must be used for eligibility of any potential warranty consideration relating to contamination and/or loss of lube in axles.

Cam Brake

Limited to bracket, brake spider and camshaft structural integrity.

STEELite X30

Wearable life is up to the discard diameter of the drum.

Disc Brake

Warranty coverage for boots, seals, bushings and pins is 2/200/P. Warranty coverage for pads is 1/100/P.

Warranty coverage on vehicles with 1,850 lb-ft engine torque and over may be reduced on individual drivetrain components. Contact your Meritor representative for specific details.

TERMS AND CONDITIONS

(1) What is Covered by this Commercial Warranty?

Meritor Inc. warrants to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment in vehicles licensed for on-highway use, will be free from defects in material and workmanship. This warranty coverage begins only after the expiration of the OEM's vehicle warranty for the applicable covered components. Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed elsewhere in this warranty statement.

Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Components (whether new, used or remanufactured) installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

For certain components, coverage requires the use of specific extended drain interval or synthetic lubricants. For further information about lubrication and maintenance, see Meritor publication Maintenance Manual Number I and the applicable Meritor maintenance manual for the product in question. Other conditions and limitations applicable to this warranty are detailed below.

(2) Designation of Vocational Use Required.

To obtain warranty coverage, each Owner must notify Meritor through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the Meritor components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with Meritor directly. Failure to notify Meritor of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/Unl/P) from the initial in-service date.

A second Owner and each subsequent Owner must also notify Meritor as to the intended vocational use of the vehicle. This notification can be sent directly to Meritor or through the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use.

Coverage under Meritor's warranty requires that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

(3) What is the Cost of this Warranty?

There is no charge to the Owner for this warranty.

(4) What is not Covered by this Warranty?

This warranty does not cover normal wear and tear; nor does it cover a component that fails, malfunctions or is damaged as a result of (I) improper installation, adjustment, repair or modification (including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by Meritor), (II) accident, natural disaster, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the axle and/or driveline capacity), or (III) improper or insufficient maintenance (including deviation from approved lubricants, change intervals, or lube levels). This warranty does not cover any component or part that is not sold by Meritor. For vehicles that operate full or part time outside of the United States and Canada, a one year, unlimited mileage, parts only warranty (1/Unl/P) will apply.

(5) Remedy.

The exclusive remedy under this warranty shall be the repair or replacement of the defective component at Meritor's option. Meritor reserves the right to require that all applicable failed materials are available and/or returned to Meritor for review and evaluation.

(6) Disclaimer of Warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESSED, IMPLIED OR STATUTORY INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

(7) Limitation of Remedies.

In no event shall Meritor be liable for special, incidental, indirect, or consequential damages of any kind or under any legal theory, including, but not limited to, towing, downtime, lost productivity, cargo damage, taxes, or any other losses or costs resulting from a defective covered component.

(8) To Obtain Service.

If the Owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either Meritor or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM new truck and/or trailer dealer or authorized Meritor service location. The dealer will inspect the vehicle and contact Meritor for an evaluation of the claim. When authorized by Meritor, the dealer will repair or replace during the term of this warranty any defective Meritor component covered by this warranty.

(9) Entire Agreement.

This is the entire agreement between Meritor and the Owner about warranty and no Meritor employee or dealer is authorized to make any additional warranty on behalf of Meritor. This agreement allocates the responsibilities for component failure between Meritor and the Owner.

Vehicle models, brands and names depicted herein are the property of their respective owners, and are not in any way associated with Meritor, Inc., or its affiliates.



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Fire and Rescue Apparatus

Three (3) Year Material and Workmanship Meritor Wabco ABS Brake System Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Meritor Wabco ABS brake system shall be covered by Meritor Wabco as indicated in the attached Meritor Wabco warranty coverage description
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor Wabco warranty description shall apply.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

WARRANTY

MODEL YEAR 2021 VEHICLES



Warranty coverage is essential to protecting your investment. But understanding the full details of your coverage can be challenging. This straightforward approach allows you, our valued customer, to better understand how your specific vehicle applications will be covered in your region. Our component warranty coverage is provided according to vocation/usage categories listed below.

- Linehaul covers high mileage operation (over 60,000 miles/year) on well-maintained major highways of concrete or asphalt construction.
- General Service covers moderate mileage operations (less than 60,000 miles/year) on well-maintained public roads (less than 10 percent off-road) typically with less than three (3) stops per mile.
- Heavy Service (Vocational) covers vehicles with more than 10 percent off-road OR moderate to frequent starts/stops typically with more than three (3) stops per mile.
- Off-Highway Service covers lower mileage operations. Vehicles are not typically licensed for highway use.

How to Read Warranty Coverage (Example)

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor
3	300	P

- The standard aftermarket warranty for WABCO products - including WABCO Original parts, WABCO Reman Solutions, ProVia quality aftermarket parts and WABCO retrofit solutions - is one year, parts only from in-service date when purchased from ZF distributor networks or its affiliates and/or subsidiaries.

WABCO

WARRANTY - MODEL YEAR 2021 VEHICLES

LINEHAUL/GENERAL SERVICE WARRANTY INFORMATION

LINEHAUL/GENERAL SERVICE VEHICLES

- Aerial Ladder Truck
- Aerial Platform
- Ambulance
- Auto Hauler
- Beverage Truck
- Bulk Hauler
- Chip Hauler (Truck)
- Cross Country Coach
- Doubles
- Flatbed
- Front Engine Commercial Chassis
- Front Engine Integral Coach
- General Freight
- Grain Hauler
- Intercity Coach
- Intermodal Chassis
- Livestock Hauler
- Meat Packer
- Moving Van
- Municipal Truck
- Pipe Hauler
- Platform Auto Hauler
- Pumper
- Rear Engine Integral Coach
- Recreational Vehicles
- Refrigerated Freight
- School Bus
- Stake Truck
- Tanker
- Tanker Truck
- Triples
- Tour Bus
- Wrecker

LINEHAUL TYPICALLY IS

- High mileage operation (over 60,000 miles/year)
- Well maintained major highways of concrete or asphalt construction

GENERAL SERVICE TYPICALLY IS

- Moderate mileage operations (less than 60,000 miles/year)
- Well maintained public roads (less than 10% off-road)
- Less than three (3) stops per mile

WABCO Components ¹	
Air Management	
Air Brake Valves	1/100/P&L
Trailer Lift Axle Control Valve	
Trailer Control Line Filter ³	
Air Compressors (ALL) ²	2/200/P&L
Air Dryers (ALL)	3/300/P&L
Aerodynamics	
OptiFlow® TrailerSkirt	2/UnU/P
OptiFlow® Trailer Tail and AutoTail	2/UnI/P
Braking Systems	
ABS (Anti-Lock Braking System) Air	3/300/P&L
ABS (Anti-Lock Braking System) Hydraulic	
Electronic Braking System (EBS)	
Electronic Stability Control (ESC)	
Roll Stability Control (RSS)	
Trailer Roll Stability Support (RSS)	
Trailer ABS (Anti-Lock Braking System) ³	
Driveline Suspension Control	
Clutch Controls	2/200/P&L
Leveling Valves	1/100/P&L
OptiRide® Automated Manual Transmission (AMT)	
OptiRide® Electronically Controlled Air Suspension (ECAS)	3/300/P&L

WABCO Components ¹ (cont.)	
Safety	
OnGuardACTIVE®	3/300/P&L
OnLane®	
OnLaneALERT®	
OnSide®	
Trailer SafeStart™	
Trailer TailGUARD™	
Telematics	
TrailerCAST™ Telematics Device	3/300/P&L
Wheel End Solutions	
EasyFit™ Slack Adjuster	6/600/P
MAXXUS™ Truck Air Disc Brake	5/500/P&L
IVTM - Wheel Module	6/P
IVTM - All Other Products	2/P
Pan 17 and 19 Air Disc Brake	2/Unl/P and 1/Unl/L
Pan 22 Air Disc Brake	5/500/P and 1/L
TRISTOP™ D Actuator w/ IBV or IRB	6/600/P
TRISTOP™ D Actuator	3/300/P
UNISTOP™ Actuator	2/200/P
Trailer MAXX22T™ Air Disc Brake	5/500/P and 1/L

¹ ZF and WABCO branded components. ² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by ZF. Please contact your respective dealer/distributor of those engines for warranty and servicing. ³ An extended warranty of 4/400/P will apply when a WABCO Trailer Control Line Filter is used in combination with a WABCO Trailer ABS valve.

HEAVY SERVICE (VOCATIONAL) WARRANTY INFORMATION

HEAVY SERVICE VEHICLES

- Airport Rescue Fire (ARF)
- Airport Shuttle
- Asphalt Truck
- Block Truck
- Bottom Dump Trailer
- Combination
- Cementing Vehicle
- City Bus
- Commercial Pick-Up
- Concrete Pumper
- Construction Material Hauler
- Crash Fire Rescue (CFR)
- Mixer
- Demolition
- Drill Rig
- Dump
- Emergency Service
- Equipment Hauling
- Flatbed Trailer Hauler
- Flatbed Truck
- Fracturing Truck
- Front Loader
- Geophysical Exploration
- Hopper Trailer Combinations
- Landscaping Truck
- Liquid Waste Hauler
- Log Hauling
- Lowboy
- Michigan Special Gravel Trains
- Michigan Special Log Hauler
- Michigan Special Steel Hauler
- Michigan Special Waste Vehicle
- Municipal Dump
- Newspaper Delivery
- Package Delivery
- Pick-up and Delivery
- Rapid Intervention Vehicle (RIV)
- Rear Loader
- Recycling Truck
- Residential Pick-Up/Waste
- Rigging Truck
- Roll-Off
- Scrap Truck
- Semi-End Dump
- Sewer/Septic Vacuum
- Shuttle Bus
- Side Loader
- Snowplow/Snowblower
- Steel Hauling
- Tanker
- Tank Truck
- Tractors with Pole Trailers
- Tractor/Trailer with Jeeps
- Transfer Dump
- Transfer Vehicle
- Transit Bus
- Trolley
- Utility Truck
- Winch Truck

HEAVY SERVICE TYPICALLY IS

- On/Off road vocations (10% or more off-road) OR
- Moderate to frequent starts/stops typically more than three (3) stops per mile



WABCO Components ¹	
Air Management	
Air Brake Valves	1/100/P&L
Air Compressors (ALL) ²	
Air Dryers (ALL)	
Trailer Control Line Filter ³	
Braking Systems	
ABS (Anti-Lock Braking System) Air	3/300/P&L
ABS (Anti-Lock Braking System) Hydraulic	2/200/P&L
Electronic Braking System (EBS)	3/300/P&L
Electronic Stability Control (ESC)	
Trailer ABS Valve ³	
Roll Stability Control (RSS)	
Trailer Roll Stability Support (RSS)	
Driveline Suspension Control	
OptiRide® Electronically Controlled Air Suspension (ECAS)	2/200/P&L
Leveling Valves	1/100/P&L
Clutch Controls	2/200/P&L
Safety	
OnGuardACTIVE®	3/300/P&L
OnLane®	
OnLaneALERT®	
OnSide®	
Trailer SafeStart™	
Trailer TailGUARD™	
Telematics	
TrailerCAST™ Telematics Device	3/300/P&L
Wheel End Solutions	
EasyFit™ Slack Adjuster	2/200/P
MAXXUS™ Air Disc Brake	1/Unl/P&L
IVTM - Wheel Module	6/P
IVTM - All Other Products	2/P
Pan 22, 19 and 17 Air Disc Brake	1/Unl/P&L
Trailer MAXX22T™	1/Unl/P&L
TRISTOP™ D Actuator w/ IBV	3/Unl/P
TRISTOP™ D Actuator	2/200/P
UNISTOP™ Actuator	1/100/P

¹ ZF and WABCO branded components. ² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by ZF. Please contact your respective dealer/distributor of those engines for warranty and servicing. ³ An extended warranty of 4/400/P will apply when a WABCO Trailer Control Line Filter is used in combination with a WABCO Trailer ABS valve.

WARRANTY - MODEL YEAR 2021 VEHICLES

INDUSTRIAL/OFF-HIGHWAY SERVICE WARRANTY INFORMATION

INDUSTRIAL AND OFF-HIGHWAY SERVICE TYPICALLY IS

- Low mileage operation³
- Vehicles are not typically licensed for highway use

Market	Common Application Types
Agriculture	Fertilizer Spreader, Tractor, Heavy Duty Ag Trailers, Harvester, Sprayer, Skid Loader, Silage Bagger, Slurry Wagons, Grain Cart
Airport Support	Pushback Tractor, Towing Tugs, Aircraft Tow Tractor, Refueling Trucks, Food Service Trucks, Baggage Tractors, De-Icing Equipment, Runway Clearing Equipment
Construction	All-Terrain Crane, Rough Terrain Crane, Excavator, Compactor, Wheel Loader, Road Roller, Motor Grader, Articulated Dump Truck, Rubber Tire Road Roller, Backhoe Loaders, Haul Trucks, Scraper Rough Terrain Forklifts, Trenchers, Drills
Forestry	Logging Forwarder, Kidder, Loaders, Yard Forklifts, Harvesters Fellers
Material Handling	Port Tractor, Rail Yard Spotter, Stevedoring Tractor, Trailer Spotter, Yard Jockey, Scissor Lift, Straddle Carrier, Manlift, Forklift, Boom Lift Telehandlers, Aerial Work Platforms
Mining	Specialized Mining, Excavator, Haul Truck, Underground Loader, Service Trucks, Wheel Loaders, Scrapers, Load Haul Dumps, Personnel Transports, Bolters, Scalpers
Municipal	Street Sweeper, Utility Tractor, Utility Trucks, Tree Trimmers, Dump Trucks, Tow Trucks, Flat Bed Trucks, Winch Applications
Oil & Gas	Fracturing Trailer, Injector Heads, Top Drives, Jack/Lift Boats, Wireline Trucks, Load-On / Load-Off
Rail	Railcar Mover, Track Layers, Grinders, Platform Crane, Locomotive Railcars, Ballast Equipment, Winch Applications



WABCO Components ¹	
Air Management	
Air Brake Valves	2/Unl/P
Air Compressors (ALL)2	
Air Dryers (ALL)	
Brake Actuation	
Air/Hydraulic Actuators	2/Unl/P
Master Cylinders	
Remote Actuators	
Slave and Wheel Cylinders	
Two Fluid Actuators	
Brake Locks	
Brake Locks (ALL)	2/Unl/P
Electric Brake Locks	
Lever Locks	
Braking Systems	
ABS (Anti-Lock Braking System) Air	1/100/P&L
ABS (Anti-Lock Braking System) Hydraulic	
Driveline Suspension Control	
Clutch Controls	1/100/P&L
Leveling Valves	
Electrohydraulics & Controls	
Electronic Pedals	2/Unl/P
Electrohydraulic Brake Valves (EBV)	
Pressure Switches	
Hydraulic Braking Solutions	
Accumulator Charging Valves	2/Unl/P
Hydraulic Throttle Controls and Switches	
Modulating Brake Valves	
Wheel End Solutions	
EasyFit™ Slack Adjuster	2/200/P
Caliper Disc Brakes	2/Unl/P
MAXXUS™ Air Disc Brake	1/Unl/P&L
Multiple Disc Brakes	2/Unl/P
IVTM - Wheel Module	6/P
IVTM - All Other Products	2/P
Pan 22, 19 and 17 Air Disc Brake	1/Unl/P&L
TRISTOP™ D Actuator w/ IBV	3/Unl/P
TRISTOP™ D Actuator	2/200/P
UNISTOP™ Actuator	1/100/P

¹ ZF and WABCO branded components. ² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by ZF. Please contact your respective dealer/distributor of those engines for warranty and servicing. ³ Equivalent hours of service limit: 2,000 hours for all components.

TERMS AND CONDITIONS

COVERAGE EXCLUSIONS

PRODUCT DESCRIPTION

ALL PRODUCTS

This Warranty shall not apply to the following, but not limited to: (1) damage to the product or its component parts caused by incorrect use, installation, maintenance or repair, including without limitation (a) improper fit of mating components or brackets, damaged threads, cut, broken, chafed, pinched or otherwise damaged wiring (sensors, harnesses and connectors), (b) sensors damaged during removal when seized in block, or associated with sensor adjustments/ alignments, and (c) damage resulting from the use or installation of non-genuine WABCO components or materials; (2) damage to the product, its component parts, or diminished product or component part performance due to incorrect operation, deviation from approved conditions or misapplication; (3) any unauthorized disassembly of the product or its component parts including without limitation (a) obliterated, defaced or missing WABCO or WABCO name plate, serial numbers or label identifying the device as a ZF product or WABCO component, (b) changes to sealed adjusting screws, and (c) opening or attempted repair of non-serviceable components; (4) malfunction of the component due to internal contamination of the vehicle system including without limitation (a) water and other contamination damage that is due to the use of a non-genuine air dryer cartridge or (b) valve failures due to contamination in air system, (5) complaints associated with noise, (6) damage resulting from corrosion (including oxidation of electrical devices and connections).

AIR DRYERS

Mounting brackets (see vehicle OEM). Desiccant cartridge housing only.

AIR SYSTEM COMPONENTS

Normal wear items; Gladhand seals, dash valve knobs, valve actuation handles, treadles, pedals.

ABS, ELECTRONIC STABILITY CONTROL (ESC), ROLL STABILITY CONTROL (RSC), OPTIRIDE®, ONGUARD® AND ONLANE®, COLLECTIVELY “ELECTRONICS”

Failure of electronic components due to overvoltage condition, improper grounding, electrostatic discharge (ESD), improper shielding, electromagnetic interference (EMI), or other wiring or installation issues. Malfunctions and failure codes caused by other electronic subsystem failures (data bus, engine, transmission, dashboard, etc.)

HYDRAULIC COMPONENTS

For certain components, brake fluid DOT3 or DOT4 is used as the operating medium. Use of any other fluid will void all warranties associated with that component. For hydraulic braking applications the brake fluid is considered a maintenance item. Maintenance intervals are listed in TB-1367.

COVERAGE LIMITATIONS

PRODUCT DESCRIPTION

ALL PRODUCTS

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program.

Products purchased on an incomplete vehicle (glider) are limited to one year, 1/Unl/P.

For vehicles that operate full- or part-time outside of the United States and Canada, a 1-Year/Unlimited Miles parts only (1/Unl/P) will apply.

TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE

Proper diagnostics of WABCO Electronics may require the latest version of TOOLBOX PLUS™. Additional labor due to use of an outdated version of TOOLBOX™ software and/or the time to purchase or install the latest version of TOOLBOX PLUS™ are not covered under product warranty.

WARRANTY - MODEL YEAR 2021 VEHICLES

TERMS AND CONDITIONS

(1) What is Covered by this Commercial Warranty?

ZF CV Systems North America LLC and its North American subsidiaries and affiliates (ZF) warrant to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment will be free from defects in material and workmanship. This warranty coverage begins from the original in-service date to the limits provided and runs concurrently with any warranties provided by OEMs and/or any distribution agreements and/or any service contracts that cover the components listed in this publication, if any. If the components listed in this publication are covered by an OEM warranty and/or service contract, then the OEM's warranty and/or service contract shall supersede ZF's warranty and Owner shall comply with all OEM's warranty and/or service contract requirements for claims under such OEM's warranty and/or service contract until those agreements expire. Once those agreements expire and provided the ZF warranty has not expired under the terms stated above, the ZF warranty will be in effect until its expiration date.

Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed previously in this publication. Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Additional diagnostic time due to use of an outdated version of TOOLBOX™, time to purchase or install latest version of TOOLBOX™ are the responsibility of the authorized ZF distributor networks and are not covered under product warranty. Components installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

(2) Designation of Vocational Use Required. To obtain warranty coverage, each Owner must notify ZF through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the WABCO components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with ZF directly. Failure to notify ZF of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/Unl/P) from the initial in-service date. A second Owner and each subsequent Owner must also notify ZF as to the intended vocational use of the vehicle. This notification can be sent directly to ZF or through

the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use. Coverage under ZF's warranty requires that the application of products be properly approved pursuant to OEM and ZF, approvals.

- (3) What is the Cost of this Warranty? There is no charge to the Owner for this warranty.
- (4) What is not Covered by this Warranty? In addition to the items listed on "Coverage Exclusions," this warranty does not cover normal wear and tear, or service items; nor does it cover a component that fails, malfunctions or is damaged as a result of (a) improper handling, storage, installation, adjustment, repair or modification including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by ZF, (b) accident, fire or other casualty, natural disaster, road debris, negligence, misuse, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the brake system capacity), or (c) improper or insufficient maintenance (including deviation from maintenance intervals, approved lubricants, or lube levels). This warranty does not cover any component or part that is not sold by ZF.
- (5) To obtain service. If the owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either ZF or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM dealer or ZF distributor networks' servicer. The dealer or ZF authorized servicer will inspect the vehicle and contact ZF for an evaluation of the claim. When authorized by ZF, the dealer or ZF authorized servicer will repair or replace during the term of this warranty any defective WABCO component covered by this warranty.
- (6) Disclaimer of Warranty and Limitation of remedies. TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE LIMITED WARRANTY SET FORTH HEREIN IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR WARRANTY FOR HIDDEN OR LATENT DEFECTS, AND IN NO EVENT WILL ZF OR ANY OF ITS AFFILIATES BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, PROGRESSIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND.

- (7) Legal action. Any legal action or claim arising from or related to this Warranty, in contract or otherwise, must be commenced within one year from the accrual of that cause of action, or be barred forever. Any dispute arising in connection with this agreement shall be governed by and construed according to the laws of the State of Michigan and be brought, heard and determined exclusively in either the Circuit Court for the County of Oakland, State of Michigan or the United States District Court for the Eastern District of Michigan. The parties stipulate that the referenced venues are convenient.
- (8) Remedy. The exclusive remedy under this warranty shall be the repair or replacement of the defective component at ZF's option. ZF reserves the right to require that all applicable covered components are available and/or returned to ZF for review and evaluation. THE MAXIMUM LIABILITY, IF ANY, OF ZF FOR ALL DAMAGES, INCLUDING WITHOUT LIMITATION CONTRACT DAMAGES, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORT, IS LIMITED TO AN AMOUNT NOT TO EXCEED THE PURCHASE PRICE OF THE PRODUCT and where indicated in the product and application warranty information above, the inclusion of labor is limited to the standard repair time. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE LIMITATION OF DAMAGES PROVISION SET FORTH IN THIS PARAGRAPH SURVIVES BETWEEN THE ORIGINAL END USER AND ZF EVEN IF THE EXCLUSIVE REMEDY SET FORTH ABOVE IS DEEMED TO FAIL OF ITS ESSENTIAL PURPOSE. ZF may change the design or make improvements to its Products without incurring any warranty obligation for previously manufactured Product .
- (9) Entire Agreement. This is the entire agreement between ZF and the Owner about warranty and no, ZF employee, or dealer is authorized to make any additional warranty on behalf of ZF unless in writing and signed by an authorized representative of ZF.





**For further product details contact your distributor or the
WABCO Customer Care Center at 855-228-3203.**

About ZF Friedrichshafen AG

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. ZF allows vehicles to see, think and act. In the four technology domains Vehicle Motion Control, Integrated Safety, Automated Driving, and Electric Mobility, ZF offers comprehensive solutions for established vehicle manufacturers and newly emerging transport and mobility service providers. ZF electrifies different kinds of vehicles. With its products, the company contributes to reducing emissions and protecting the climate.

ZF, which acquired WABCO Holdings Inc. on May 29, 2020, now has 160,000 employees worldwide with approximately 260 locations in 41 countries. In 2019, the two then-independent companies achieved sales of €36.5 billion (ZF) and \$3.4 billion (WABCO). For more information, visit: www.wabco-na.com



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity Custom Cab

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Pierce Custom Cab shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the cab tubular support and mounting structures and other structural components of the cab of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion

Cab

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the cab painted by Pierce shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	<p>This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:</p> <p>Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25%</p> <p>Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25%</p> <p>Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10%</p> <p>Corrosion Perforation 0-120 months 100%</p> <p>This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty.</p> <p>Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship

Command Zone Electronics

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Command Zone control modules shall be free from failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Five (5) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty applies to all of the control modules for the Command Zone system, including the full color graphic displays. Related wire harnesses, cables and connectors are not covered under this limited warranty and are instead covered under the Pierce One Year Basic Apparatus Limited Warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship

Pierce 12V LED Strip Light

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	This limited warranty covers repairs to correct any defect related to materials or workmanship of the Pierce 12V LED strip lights installed on the apparatus occurring during the warranty period.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty does not apply to related wire harnesses, cables, and connectors, which are covered by the Pierce one (1) year basic apparatus limited warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

NEW PRODUCT WARRANTY


**PARTICIPATING OEM SALES
DISTRIBUTOR SALES**
**LIMITED WARRANTY ON NEW ALLISON AUTOMATIC TRANSMISSIONS
USED IN EMERGENCY VEHICLE APPLICATIONS**

Allison Transmission will provide for repairs or replacement, at its option, during the warranty period of each new Allison transmission listed below that is installed in an Emergency Vehicle in accordance with the following terms, conditions, and limitations.

WHAT IS COVERED

- **WARRANTY APPLIES** — This warranty is for new Allison transmission models listed below installed in an Emergency Vehicle and is provided to the original and any subsequent owner(s) of the vehicle during the warranty period.
- **REPAIRS COVERED** — The warranty covers repairs or replacement, at Allison Transmission's option, to correct any transmission malfunction resulting from defects in material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Allison Transmission determines most appropriate under the circumstances.
- **TOWING** — Towing is covered to the nearest Allison Transmission Distributor or authorized Dealer only when necessary to prevent further damage to your transmission.
- **PAYMENT TERMS** — Warranty repairs, including parts and labor, will be covered per the schedule shown in the chart contained in section "APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE."
- **OBTAINING REPAIRS** — To obtain warranty repairs, take the vehicle to any Allison Transmission Distributor or authorized Dealer within a reasonable amount of time and request the needed repairs. A reasonable amount of time must be allowed for the Distributor or Dealer to perform necessary repairs.
- **TRANSMISSION REMOVAL AND REINSTALLATION** — Labor costs for the removal and re-installation of the transmission, when necessary to make a warranty repair, are covered by this warranty.
- **WARRANTY PERIOD** — The warranty period for all coverages shall begin on the date the transmission is delivered to the first retail purchaser, with the following exception:

Demonstration Service - A transmission in a new truck or bus may be demonstrated to a total of 5000 miles (8000 kilometers). If the vehicle is within this limit when sold to a retail purchaser, the warranty start date is the date of purchase. Normal warranty services are applicable to the demonstrating Dealer. Should the truck or bus be sold to a retail purchaser after these limits are reached, the warranty period will begin on the date the vehicle was first placed in demonstration service and the purchaser will be entitled to the remaining warranty.

APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE

APPLICABLE MODELS	WARRANTY LIMITATIONS (Whichever occurs first)		ADJUSTMENT CHARGE TO BE PAID BY THE CUSTOMER	
	Months	Transmission Miles Or Kilometers	Parts	Labor
MT, MD 3000, 3200, 3500, 3700	0-24	No Limit	No Charge	No Charge
HT with Hydraulic Controls	0-24	No Limit	No Charge	No Charge
AT, 1000 Series™, 2000 Series™, 2400 Series™	0-36	No Limit	No Charge	No Charge
HT with Electronic Controls	0-60	No Limit	No Charge	No Charge
HD 1000 EVS, 2100 EVS, 2200 EVS 2350 EVS, 2500 EVS, 2550 EVS, 3000 EVS, 3500 EVS, 4000, 4000 EVS, 4500, 4500 EVS, 4700, 4700 EVS, 4800, 4800 EVS	0-60	No Limit	No Charge	No Charge

WHAT IS NOT COVERED

- **DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION** — Defects and damage caused as the result of any of the following are not covered:
 - Flood, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle;
 - Misuse of the vehicle;
 - Installation into unapproved applications and installations;
 - Alterations or modification of the transmission or the vehicle, and
 - Damage resulting from improper storage (refer to long-term storage procedure outlined in the applicable Allison Service Manual)
 - Anything other than defects in Allison Transmission material or workmanship

NOTE: This warranty is void on transmissions used in vehicles currently or previously titled as salvaged, scrapped, junked, or totaled.

- **CHASSIS, BODY, and COMPONENTS** — The chassis and body company (assemblers) and other component and equipment manufacturers are solely responsible for warranties on the chassis, body, component(s), and equipment they provide. Any transmission repair caused by an alteration(s) made to the Allison transmission or the vehicle which allows the transmission to be installed or operated outside of the limits defined in the appropriate Allison Installation Guideline is solely the responsibility of the entity making the alteration(s).
- **DAMAGE CAUSED by LACK of MAINTENANCE or by the USE of TRANSMISSION FLUIDS NOT RECOMMENDED in the OPERATOR'S MANUAL** — Defects and damage caused by any of the following are not covered:
 - Failure to follow the recommendations of the maintenance schedule intervals applicable to the transmission;
 - Failure to use transmission fluids or maintain transmission fluid levels recommended in the Operator's Manual.
- **MAINTENANCE** — Normal maintenance (such as replacement of filters, screens, and transmission fluid) is not covered and is the owner's responsibility.
- **REPAIRS by UNAUTHORIZED DEALERS** — Defects and damage caused by a service outlet that is not an authorized Allison Transmission Distributor or Dealer are not covered.
- **USE of OTHER THAN GENUINE ALLISON TRANSMISSION PARTS** — Defects and damage caused by the use of parts that are not genuine Allison Transmission parts are not covered.
- **EXTRA EXPENSES** — Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of vehicle use; inconvenience; storage; payment for loss of time or pay; vehicle rental expense; lodging; meals; or other travel costs.
- **"DENIED PARTY" OWNERSHIP** — Warranty repair parts and labor costs are not reimbursed to any participating or non-participating OEMs, dealers or distributors who perform warranty work for, or on behalf of, end users identified by the United States as being a "denied party" or who are citizens of sanctioned or embargoed countries as defined by the U.S. Department of Treasury Office of Foreign Assets Control. Furthermore, warranty reimbursements are not guaranteed if the reimbursement would be contrary to any United States export control laws or regulations as defined by the U.S. Department of Commerce, the U.S. Department of State, or the U.S. Department of Treasury.

OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED by the MAGNUSON-MOSS WARRANTY ACT

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Allison Transmission does not authorize any person to create for it any other obligation or liability in connection with these transmissions.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST WAGES OR VEHICLE RENTAL EXPENSES) RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.**

** Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

OTHER TERMS APPLICABLE TO OTHER END-USERS

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE ALLISON TRANSMISSION MODELS LISTED ABOVE AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLISON TRANSMISSION DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH TRANSMISSIONS. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

QUESTIONS

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact any Allison Transmission Distributor or Dealer or write to:

Allison Transmission, Inc.
P.O. Box 894
Indianapolis, IN 46206-0894
Attention: Warranty Administration PF-9



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship - Transmission Oil Cooler Three (3) Year Collateral Damage Coverage

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The transmission cooler shall be free from component or structural failures caused by defects in material and/or workmanship. Collateral damage up to \$10,000 per occurrence is available for the first three (3) years.
Warranty Begins:	The date of delivery to the first retail purchaser.
Warranty Period Ends After:	Five (5) Years on Oil Cooler and three (3) years on collateral damage coverage
Conditions and Exclusions: See Also Paragraphs 2 thru 4	<p>This warranty does not cover repair due to accidents, misuse, and excessive vibration, flying debris, storage damage (freezing), negligence or modification. This warranty is void if any modification or repairs are performed without authorization. This also voids any future warranty.</p> <p>This warranty does not cover cost of maintenance or repairs due to lack of required maintenance services as recommended. Performance of the required maintenance and use of proper fluids are the responsibility of the owner.</p> <p>Towing is covered to the nearest distributor or authorized dealer only when necessary to prevent further damage to your transmission.</p> <p>Labor costs for the removal and reinstallation of goods may be covered when necessary to make repairs. Please contact your OEM for authorization.</p> <p>Replacement of cooler during the warranty period is limited to 100% of reasonable labor costs up to a maximum of \$700 to remove, replace, or repair the oil cooler.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



LIFETIME SERVICE WARRANTY

United Plastic Fabricating, Inc. (hereinafter called "UPF") warrants each POLY-TANK®, Booster/Foam Tank POLYSIDE® Wetside Tank, Integrator Tank/Body, ELLIPSE™ Elliptical Tank, Ellip-T-Tank Tank and DEFENDER™ Skid Tank to be free from defects in material and workmanship for the service life of the original vehicle (vehicle must be actively used in an emergency response for fire suppression). All UPF Tanks must be installed and operated in accordance with the UPF Installation and Operating Guidelines. Failure to do so can void the warranty.

Every UPF Tank is inspected and tested before leaving our facility. Should your UPF Tank require service, please notify UPF via email, fax, in writing or by calling UPF at 1-978-975-4520. Please provide the serial number, a description of the service request, the location along with the phone number and name of the contact person. Our goal is to have scheduled work completed within a reasonable time period.

Under a valid warranty claim, UPF will cover the cost to repair the UPF Tank including the customary and reasonable costs to make the tank accessible such as the removal and reinstallation of the tank if authorized in advance (pre-approved) by UPF. The warranty will not cover tanks that have been improperly installed, operated, misused, abused, or modified from its intended or designed use. Serial number must not have been altered, defaced or removed. Tanks that are not stored or installed properly which results in the tank suffering UV damage will not be covered by this agreement.

Should UPF determine that the service claim is valid under this warranty for a tank located outside of the United States and Canada, UPF will assume the costs for labor and material for the warranty repair as described above plus all travel costs to the U.S. port of embarkation. Costs for airline travel outside of the U.S. and Canada will not be the responsibility of UPF.

In the event the tank shall become stationed in an area of the world that is considered to be a war zone or where unsafe conditions exist for the safe passage of United States Nationals, as reported by the United States Department of State, (<http://www.state.gov>), and a request to perform service or warranty repairs, UPF reserves the right to refuse to honor such requests. It is the purchaser's responsibility to relocate the tank to an area where such repairs can be performed without undue risk to UPF employees or their designee. UPF will make every reasonable effort to support our products through alternative means.

For Ellipse™ elliptical tanks, a separate five year warranty provided by the subcontractor is applied to the sub-frames, chute linings (rubber isolation strips) and metal components. The stainless steel wrap provided by UPF shall be warranted by the subcontractor performing the wrap installation in accordance with their warranty in place at the time of the installation. UPF will not be liable for any warranty costs associated with the wrap, sub-frames, chute linings (rubber isolation strips) and metal components but will assist with all claims on behalf of its customer.

For PolySide® wetsided tanks and Integrator™ Tank/Body units, all polypropylene components related to the tank shall carry the standard UPF lifetime

UNITED PLASTIC FABRICATING, INC.

WARRANTY

FOR: POLY-TANK®, POLYSIDE®, INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™

BOS 2022-01-19 p.729/1306

service warranty. Other polypropylene components, including but not limited to compartments, wheel wells, fenders and other body related components shall be warranted by UPF for a period of ten years. The warranty for the PolySide® and Integrator™ units excludes paint or hardware, which shall be covered by the manufacturer of the paint/hardware.

All UPF tanks 50 gallons or less utilized for non-fire applications and installed on specialty vehicles such as ATVs, trailers, boats, etc. are covered under a separate warranty policy available from UPF. Further, UPF Protector™ foam and water trailers are warranted under a separate warranty policy available from UPF.

This UPF warranty is transferable within the United States only with prior written approval by UPF (except an original apparatus manufacturer may assign this warranty to the first titled owner/lessee of the apparatus).

UPF will NOT reimburse any unnecessary work and/or work that has not been pre-approved. Any and all third party charges must be pre-authorized and approved in writing by UPF prior to commencing the work. Any unauthorized third party repairs, alterations, actions or modifications will not be covered and can void the warranty. UPF will be the sole determining authority as to whether a service claim will be valid and covered under this warranty.

In no event will UPF be liable for an amount in excess of the purchase price of the booster/foam tank at the time of manufacture or for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of failure of its product. Loss of contents (water, foam, etc.) shall not be the responsibility of UPF. Further, UPF is not responsible for costs associated with service repairs to chassis, sub-frames, bodies, valves, dumps, hoses, pressure vacuum vents, and other components (i.e. liquid level transducers, etc.). Further, UPF will not cover the cost for travel of the vehicle to and from a repair facility.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UPF neither assumes, nor authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation or incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATION OR LIABILITIES ON THE PART OF UPF.

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BULLETIN



TO: All Dealer Service Representatives

From: Kevin Hanegraaf

DATE: January 4, 2010

RE: UPF Tank Warranty Policy – Truck in Accident

Service Topic #292

To keep the UPF tank warranty valid on trucks that have been involved in a vehicular accident, it is UPF's policy that the customer must remove the tank from the truck and send it back to one of UPF's facilities for inspection. In the event that this does not take place, the warranty will be considered null and void.

The customer must remove and send the tank back to UPF for inspection in order to maintain the original warranty coverage, at which time it will be:

- *Filled with water*
- *Visually inspected*
- *Ultraviolet spark tested on articulating test stand in the dark*
- *Recommendation for repairs if necessary provided by UPF*
- *Fully evaluated and repaired by UPF*

If your customer chooses to leave the tank on the truck and wants a technician to inspect and/or repair the tank in the field, then **the warranty is no longer in effect.** This direction is upheld by UPF because the technician cannot inspect the entire tank when it is still installed on the truck.

Note: This memo is intended to relay the information Pierce has received on UPF's tank warranty for trucks that are in a vehicular accident. In the event of an actual claim, we direct you to consult with UPF's service Manager Maura Watts (800-638-8265 x253)



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity Apparatus Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The apparatus body shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the body tubular support and mounting structures and other structural components of the body of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Pierce Warranty Statement for Gortite Roll Up Doors Rev 2/24/2011

All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle. All parts covered under this warranty shall be to the original owner.

A&A manufacturing warrants that painted doors shall be free of blistering, peeling, bubbling, or any other adhesion defect caused by defective manufacturing methods or paint material selection. The time period for the coverage shall be 6 years from date of door shipment to Pierce. Satin anodized finish doors shall be warranted for 6 years against corrosion defects from date of door shipment to Pierce. Replacement of decals/Scotchlite is not covered.

The maximum amount A&A will reimburse for labor is \$60.00 per hour and the maximum amount of time allowed for repair is as follows:

Door	1.0 Hr.
Slat Replacement	1.0 Hr.
Pennant Plate Replacement	1.0 Hr.
Roller Replacement	.5 Hr.
Seal Replacement	.5 Hr.
Switch/Magnet Replacement	1.0 Hr.
Travel Time	4.0 Hr.

Waterous Five-Year Limited Warranty

WATEROUS warrants, to the original Buyer only, that products manufactured by WATEROUS will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date the product is first placed in service, or five and one-half (5-1/2) years from the date of shipment by WATEROUS, whichever period shall be the first to expire; provided the Buyer notifies WATEROUS, in writing, of the defect in said product within the warranty period, and said product is found by WATEROUS to be nonconforming with the aforesaid warranty. When required in writing by WATEROUS, defective products must be promptly returned by Buyer to WATEROUS at WATEROUS' plant at South St. Paul, Minnesota, or at such other place as may be specified by WATEROUS, with transportation and other charges prepaid. A Returned Material Authorization (RMA) is required for all products and parts and may be requested by phone, fax, email, or mail. The aforesaid warranty excludes any responsibility or liability of WATEROUS for:

- (a) damages or defects due to accident, abuse, misuse, abnormal operating conditions, negligence, accidental causes, use in non-firefighting applications, or improper maintenance, or attributable to written specifications or instructions furnished by Buyer;
- (b) defects in products manufactured by others and furnished by WATEROUS hereunder, it being understood and agreed by the parties that the only warranty provided for such products shall be the warranty provided by the manufacturer thereof which, if assignable, WATEROUS will assign to Buyer, if requested by Buyer;
- (c) any product or part, altered, modified, serviced or repaired other than by WATEROUS, without its prior written consent;
- (d) the cost of dismantling, removing, transporting, storing, or insuring the defective product or part and the cost of reinstallation; and
- (e) normal wear items (packing, strainers, filters, light bulbs, anodes, intake screens, mechanical seals, etc.).

ALL OTHER WARRANTIES ARE EXCLUDED, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER CAUSE OF ACTION, SHALL WATEROUS BE LIABLE FOR ANY PUNITIVE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR PERSONAL INJURY OR PROPERTY DAMAGES.

The exclusive remedy of Buyer and the sole liability of WATEROUS, whether based on contract, warranty, tort or any other basis of recovery whatsoever, is expressly limited at the election of WATEROUS to:

- (a) the replacement at the agreed point of delivery of any product or part, which upon inspection by WATEROUS or its duly authorized representative, is found not to conform to the limited warranty set forth above, or
- (b) the repair of such product or part, or
- (c) the refund or crediting to Buyer of the net sales price of the defective product or part.

BUYER'S REMEDIES CONTAINED HEREIN ARE EXCLUSIVE OF ANY OTHER REMEDY OTHERWISE AVAILABLE TO BUYER.

Waterous Company
125 Hardman Avenue South
South St. Paul, MN 55075 USA
www.waterousco.com



F-2113 (07/17/12)



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship Stainless Steel Piping Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Stainless steel piping shall be free from structural failures caused by defects in material and workmanship, or perforation caused by corrosion.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	<p>Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the stainless steel piping or components which Pierce determines to have failed due to defective material and workmanship, or perforation caused by corrosion.</p> <p>This warranty does not cover the use of fluoroprotein (FP) type foam. The sodium chloride within FP foam can cause long-term damage to system components if not thoroughly flushed immediately after use.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Twenty (20) Year Structural Integrity

Pierce Aerial Device

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Each new Pierce Aerial Device shall be free from defects in material and workmanship. Aerial Device Models Covered by this warranty include: Aerial Platforms Aerial Ladders SkyBoom
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Twenty (20) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the torque box, turntable, aerial sections and other structural components of the aerial device, as identified in the Pierce specifications for the aerial device. This warranty shall be void if, or to the extent that the aerial device is not maintained in strict compliance with NFPA Standard 1911 in effect at time of sale, including such periodic inspections and testing by qualified third parties as are required by that Standard as it may be in effect from time to time. Proof of such compliance shall accompany any claims under this warranty. Third party testing agencies known to Pierce to be qualified for such purposes may be obtained from the Pierce Customer Service Department This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



AMITY FIRE AND SAFETY, INC.

3750 CHESTNUT ROAD
ALBURTIS, PA 18011-0451
Phone: 610-966-3115
Fax: 610-965-6313

* STANDARD FIVE YEAR WARRANTY *

(standard warranty is in effect for parts shipped after 4/15/10)

Three Function Swivel

A. PRESHIPMENT TESTING The Three Function Swivel fabricated by Amity which is exposed to pressure during normal use is subject to final inspection using the following pressure minimums:

1. Hydrostatic applications will be tested to 400 PSI unless specified otherwise on approved drawings. Operating pressures on installed systems are not to exceed 250 PSI at any point in the system. Warranty will be voided and Amity will not be held liable for failure and/or damage occurring from Water Hammering or freezing of water in any system.
2. Hydraulic applications will be tested to 4000 PSI. System operating pressure in application to be 3000 PSI maximum.
3. Dielectric and Continuity Test all circuits. 30 Amp max current loading.

B. THREE FUNCTION SWIVEL MAINTENANCE – Our Three Function Swivel has been fully tested at assembly. Under no circumstances is there to be any maintenance performed internally or externally to the Three Function Swivel by Purchaser or any other third party other than an authorized representative of or Amity itself. The Three Function Swivel is sealed and must remain so. The Three Function Swivel is designed for a long maintenance free life. Should any problems occur or replacement be necessary, first contact Amity. There is to be no field maintenance performed on the Three Function Swivel .

C. MOUNTING REQUIREMENTS – The following are the mounting requirements for the Three Function Swivel:

1. Mounting points and methods are to be determined at the initial design stage. All drawings and applicable documentation must be signed off by both parties and filed for future reference. No deviation to the approved mounting is allowed without approval from Amity.
2. The Three Function Swivel is to be mounted concentric to the center of the turntable bearing.
3. All inlet and outlet plumbing to conform to swivel mounting, under no circumstances is the Three Function Swivel to be positioned to match connections. This will avoid putting excessive loads on the Three Function Swivel. All tubing or piping to be supported by means other than the Three Function Swivel.

D. LIMITED WARRANTY, LIMITATIONS, CONDITIONS AND PROCEDURES REQUIRED.

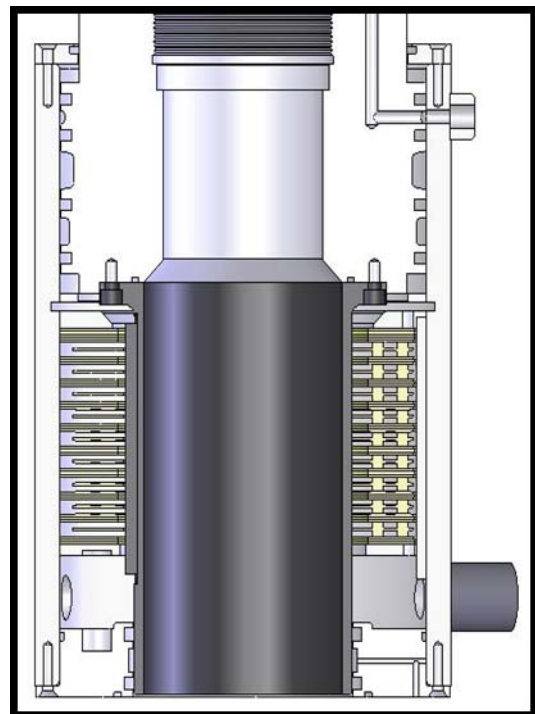
1. The Three Function Swivel is warranted to be free of defects in labor and/or materials for a period of five (5) years from the Date of Service. For purposes here, "Date of Service" shall mean the date when the Three Function Swivel, or the unit to which the Three Function Swivel is incorporated, passes final Underwriters Laboratory testing, or similarly compliant testing, and is certified for service. Evidence of such Date of Service shall be required in connection with any warranty claim by Purchaser.
2. The Three Function Swivel shall be repaired or replaced at the sole option and expense of the Amity provided the Three Function Swivel alleged to be defective was used for its intended normal use of operation and subject to the following qualifications and limitations.
3. Any alteration of the Three Function Swivel without consent from Amity is strictly forbidden and shall void warranty.
4. No welding shall be performed on finished Three Function Swivel.
5. No responsibility is assumed for any malfunctions or damages which are occasionally caused by foreign objects which may be ingested into water or hydraulic systems such as, but not limited to stones, sand or metal chips.
6. Amity assumes responsibility for our Three Function Swivel, which is defective only, and therefore, it will not assume responsibility for labor to either remove or install our Three Function Swivel unless it agrees in writing to assume such responsibility.
7. Unless otherwise approved in writing by the Amity all returns of defective Three Function Swivels (or allegedly defective Three Function Swivels) are at Purchaser's expense and must include a RGA number issued by the Amity.

8. All warranty claims must be presented at the time the problem occurs, or as soon as practical thereafter, either called or faxed to the Amity and include the numbers on the assembly's Amity's label with a detailed explanation of the difficulty in order for the matter to be appropriately evaluated and resolved.
9. Amity will not be held liable for damage incurred during shipment.
10. No responsibility shall be assumed for misuse or improper mounting, unreasonable use or abuse of the Three Function Swivel and or failure to provide or use improper maintenance, failure to follow written installation and use in instruction or any use other than the customary designed use.

THE REMEDIES PROVIDED IN THE ABOVE EXPRESS LIMITED WARRANTY AND ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE. NO OTHER EXPRESS WARRANTIES ARE MADE. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE ARE LIMITED IN DURATION AS SET FORTH ABOVE. IN NO EVENT SHALL THE AMITY ASSUME OR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THE WITHIN DESCRIBED WARRANTY SHALL ONLY BE AFFORDED TO THE ORIGINAL PURCHASER OR FOR INCORPORATION INTO ANOTHER UNIT AND TO FIRST PURCHASER AS PART OF COMPLETED UNIT, HOWEVER, THE WARRANTY PERIOD OF FIVE YEARS IS FROM THE DATE OF SERVICE WITH THE UNDERSTANDING IT IS INSTALLED WITHIN A REASONABLE TIME PERIOD.

Dated: _____, 20__





Fire and Rescue Apparatus

Five (5) Year Material and Workmanship Aerial Hydraulic System Components

Three (3) Year Material and Workmanship Aerial Hydraulic System Seals

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The aerial hydraulic system components and seals shall be free from component or structural failures caused by defects in material and/or workmanship.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Five (5) Years and Three (3) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	<p>Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the hydraulic lines, fittings, valves, seals, cylinders, filters, pumps, hydraulic motors, rotary actuators, or components which Pierce determines to have failed due to defective material and workmanship.</p> <p>This warranty shall not apply unless the aerial device is inspected in accordance with NFPA 1911 Standard for Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus and the applicable Pierce Operator and Maintenance Manuals.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



AMITY FIRE AND SAFETY, INC.

3750 CHESTNUT ROAD
ALBURTIS, PA 18011-0451
Phone: 610-966-3115
Fax: 610-965-6313

* STANDARD TEN YEAR WARRANTY *

(standard warranty is in effect for parts shipped after 4/15/10)

Telescopic Waterways

A. PRESHIPMENT TESTING All waterways fabricated by Amity are final inspected using the following pressure minimums:

1. Hydrostatic applications will be tested to 400 PSI unless specified otherwise on approved drawings. Operating pressures on installed systems are not to exceed 250 PSI at any point in the system. Warranty will be voided and Amity will not be held liable for failure and/or damage occurring from Water Hammering or freezing of water in any system.

B. COMPONENTS DESCRIPTION AND MAINTENANCE

1. All components are thoroughly greased at assembly. Since internally lubricated seals are used, regular greasing is not required. We recommend components not be greased at installation.
2. Slip Tube Assemblies may be greased at the Amity's regularly scheduled Aerial Inspections. The seals in the Slip Tube Assemblies are self-lubricating, so greasing is not mandatory. We do recommend a visual inspection of the Slip Tube Assembly while it is fully extended after initial installation, from that point on we recommend inspection every ten hours of aerial operation. If any deposits of aluminum appear, they are to be rubbed off using a Teflon scouring pad. Slip Tube Assemblies are designed to give long maintenance free service; however, like any product, problems may occur and periodic visual inspections will aid in determining if a potential problem exists and warrants a call to us. Care must be taken to keep debris off of extended tubes. We recommend wiping tubes with light oil (10 weight) or hydraulic oil after use, if tubes appear to have contamination on them. Under no circumstance are tubes to be cleaned with lacquer thinner, or any other solvent.

C. LIMITED WARRANTY, LIMITATIONS, CONDITIONS AND PROCEDURES REQUIRED.

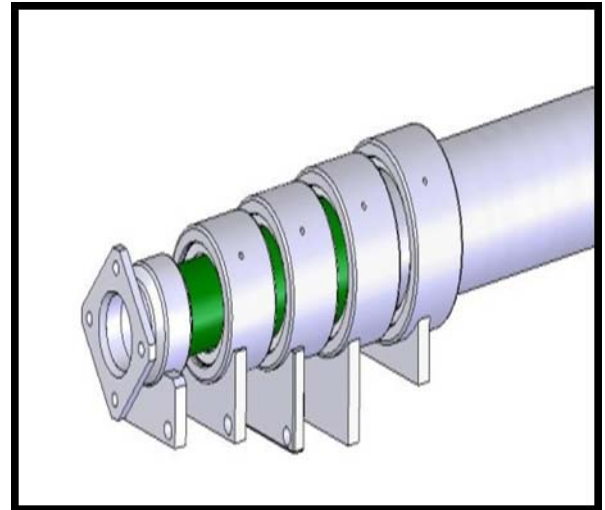
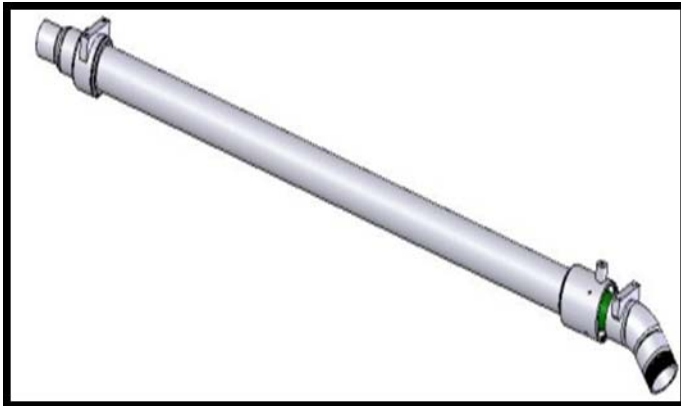
1. Products are warranted to be free of defects in labor and/or materials for a period of ten years from the date of purchase from the Amity and shall be repaired or replaced at the sole option and expense of the Amity provided the products alleged to be defective was used for its intended normal use operation and subject to the following qualifications and limitations.
2. Any alteration of product without consent from Amity is strictly forbidden and shall void warranty.
3. No welding shall be performed on finished product.
4. No responsibility is assumed for any malfunctions or damages which are occasionally caused by foreign objects which may be ingested into water system such as, but not limited to stones, sand or metal chips.
5. Amity assumes responsibility for our product, which is defective only, and therefore, it will not assume responsibility for labor to either remove or install our product unless it agrees in writing to assume such responsibility.
6. Unless otherwise approved in writing by the Amity all returns of defective (or allegedly defective products) are at Purchaser's expense and must include a RGA number issued by the Amity.
7. All warranty claims must be presented at the time the problem occurs, or as soon as practical thereafter, either called or faxed to the Amity and include the numbers on the assembly's Amity's label with a detailed explanation of the difficulty in order for the matter to be appropriately evaluated and resolved.
8. Amity will not be held liable for damage incurred during shipment.
9. No responsibility shall be assumed for misuse or improper mounting, unreasonable use or abuse of the Product and or failure to provide or use improper maintenance, failure to follow written installation and use in instruction or any use other than the customary designed use.

THE REMEDIES PROVIDED IN THE ABOVE EXPRESS LIMITED WARRANTY AND ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE. NO OTHER EXPRESS WARRANTIES ARE MADE. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR

FITNESS FOR A PARTICULAR PURPOSE OR USE ARE LIMITED IN DURATION AS SET FORTH ABOVE. IN NO EVENT SHALL THE AMITY ASSUME OR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THE WITHIN DESCRIBED WARRANTY SHALL ONLY BE AFFORDED TO THE ORIGINAL PURCHASER OR FOR INCORPORATION INTO ANOTHER UNIT AND TO FIRST PURCHASER AS PART OF COMPLETED UNIT, HOWEVER, THE WARRANTY PERIOD OF TEN YEARS COMMENCES UPON INSTALLATION INTO FINAL ASSEMBLY WITH THE UNDERSTANDING IT IS INSTALLED WITHIN SIX MONTHS OF PURCHASE.

Dated: _____, 20__





Fire and Rescue Apparatus

Four (4) Year Pro-Rated Paint and Corrosion Aerial Device

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Aerial device shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection for exterior surfaces.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Four (4) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	<p>This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:</p> <p>Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-24 months 100% 25-48 months 50%</p> <p>Integrity of Coating System: Adhesion, Blistering/Bubbling 0-24 months 100% 25-48 months 50%</p> <p>Corrosion: Dissimilar Metal and Crevice 0-24 months 100% 25-48 months 50%</p> <p>Corrosion Perforation 0-24 months 100% 25-48 months 50%</p> <p>This limited warranty applies only to exterior paint.</p> <p>Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship

Command Zone Electronics

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Command Zone control modules shall be free from failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Five (5) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty applies to all of the control modules for the Command Zone system, including the full color graphic displays. Related wire harnesses, cables and connectors are not covered under this limited warranty and are instead covered under the Pierce One Year Basic Apparatus Limited Warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion Custom Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the body shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	<p>This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:</p> <p>Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25%</p> <p>Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25%</p> <p>Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10%</p> <p>Corrosion Perforation 0-120 months 100%</p> <p>This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty.</p> <p>Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Three (3) Year Material and Workmanship

Goldstar® Gold Leaf Lamination

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Each Goldstar® gold leaf lamination shall be free from defects in material and workmanship.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0156

Statement of Compliance to NFPA 1901-2016

Vehicle Stability

Pierce fire apparatus comply with NFPA 1901 Section 4.13 Vehicle Stability using the tilt table method. As prescribed by the standard, each apparatus is compared to a substantially similar apparatus that has been loaded as required and tested on a tilt table per the SAE J2180 test procedure. If the apparatus configuration was not expected to meet the minimum tilt table criteria, then it will be equipped with the Electronic Stability Control option. A listing of all tested apparatus is maintained by the Research and Development lab and is available for inspection at the Appleton factory.



4.13 Vehicle Stability.

4.13.1* Rollover Stability. The apparatus shall meet the criteria defined in 4.13.1.1, or it shall be equipped with a stability control system in accordance with 4.13.1.2.

4.13.1.1 The apparatus shall meet the criteria defined in either of the following:

- (1)*The apparatus shall remain stable to 26.5 degrees in both directions when tested on a tilt table in accordance with SAE J2180, *A Tilt Table Procedure for Measuring the Static Rollover Threshold for Heavy Trucks*.
- (2) The calculated or measured center of gravity (CG) shall be no higher than 80 percent of the rear axle track width.

4.13.1.1.1 Compliance shall be certified by testing, calculating, or measuring the apparatus or by comparing the apparatus to a compliant, substantially similar example apparatus, and the certification shall be delivered with the fire apparatus.

4.13.1.1.2 The example apparatus shall be considered substantially similar if it includes a chassis with the same or higher CG height, the same or narrower rear axle track width, the same or greater water tank size and CG height, the same type of front and rear suspension, and the same type and size of aerial device.

4.13.1.1.3 For purposes of 4.13.1.1, the apparatus shall be loaded with fuel, fire-fighting agents, hose, ladders, a weight of 250 lb in each seating position, and weight equivalent to the miscellaneous equipment allowance as defined in Table 12.1.2.

4.13.1.1.3.1 If the apparatus is designed to meet a specified higher equipment loading or larger hose bed capacity or to carry additional ground ladders, these greater loads shall be included in the testing, calculating, or measuring.

4.13.1.1.3.2 The weight added to the fire apparatus for the purpose of test, calculation, or measurement shall be distributed to approximate typical in-service use of the fire apparatus while not exceeding the manufacturer's published individual compartment weight ratings.

4.13.1.2 If the apparatus is equipped with a stability control system, the system shall have, at a minimum, a steering wheel position sensor, a vehicle yaw sensor, a lateral accelerometer, and individual wheel brake controls.

VALIDATION TEST: Multiple Tests

Pierce Manufacturing, Inc.

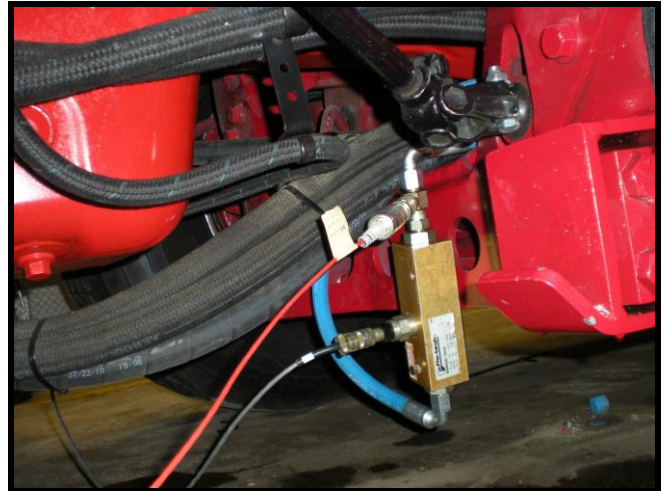
David W. Archer
Vice President of Engineering
June 1, 2017

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY

**Certification Document CD0098
Power Steering System**

Pierce Manufacturing, Inc. certifies that the power steering system as installed in our custom chassis meets the requirements of the component supplier, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce internal design standards.



VALIDATION TEST: RD1987, RD2055
RD2056, RD2057, RD2058, RD2059

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "David W. Archer".

David W. Archer
Director of Engineering
June 03, 2011

PIERCE MANUFACTURING INC.®

AN OSHKOSH TRUCK CORPORATION® COMPANY



Certification Document CD0011

Arrow XT®

Cab Integrity Certification

Pierce Manufacturing certifies the integrity of the Arrow XT® cab relative to occupant protection.

A specimen representing the substantial structural configuration of the Arrow XT® cab model has been successfully tested in accordance with the following standards.

- SAE J2422 Cab Roof Strength Evaluation – Quasi-Static Loading Heavy Trucks.
- European Occupant Protection Standard ECE Regulation No. 29.
- SAE J2420 COE Frontal Strength Evaluation – Dynamic Loading Heavy Trucks.

Side Impact: The test cab was subjected to dynamic preload where a 13,275 lb moving barrier was slammed into the side of the cab at 5.5 mph, striking with an impact of 13,000 ft-lbs of energy. This test is not required to meet the ECE 29 standard, but is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a roll-over incident.



Roof Crush: This same test cab was then subjected to a roof crush force of 22,050 lbs. This value meets the ECE 29 criteria, which must be equivalent to the front axle rating up to a maximum of 10 metric tons.



Additional Roof Crush: The same cab was then loaded with 60,000 lbs, 72000 lbs, 80,000 lbs, and finally 100,000 lbs on the roof, exceeding the ECE test by 4.5 times!



Frontal Impact: The test cab was struck by the 13,275 lb moving barrier at a speed sufficient to impart the required 32,600 ft-lbs of energy.

The cab survived this second blow without compromising the survival space of any occupant area.



Additional Frontal Impact: The same cab was then struck a third time at a higher speed to impart 65,200 ft-lbs of energy into the cab (twice the ECE 29 level of energy).

The cab survived this third blow, again without compromising the survival space of any occupant area.

Pass-Fail criteria of the SAE tests and the ECE 29 test is a measure of whether the “survival space” inside the cab is compromised during any of the test loads. The Pierce cab withstood all integrity tests on the same cab without any measurable intrusion into the survival space of the occupant area.

Witnessed and Certified by:

Pierce Manufacturing, Inc.




James Roger Lackore, PE
October 16, 2003

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0002

Arrow XT®

Cab Doors

Pierce Manufacturing certifies the integrity of the Arrow XT® cab doors.

Specimens representing the substantial structural configuration of the Arrow XT® cab front and crew doors have been successfully tested to meet the following objectives:

OBJECTIVES:

- Determine the door opening and closing forces before and after a 200,000-cycle door slam test.
- Determine if water leaks past the door seals after a 200,000-cycle door slam test.
- Evaluate components, structure, and mounting of the doors during the test for signs of fatigue.

CONCLUSIONS:

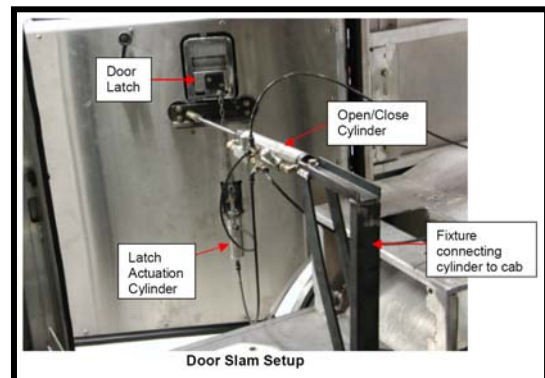
- Door closing forces met acceptable criteria before and after the test.
- Doorframe and door components did not show any signs of fatigue or excessive wear after the 250,000-cycle door slam test.
- The door seals prevented water penetration after 250,000 cycles.

VALIDATION TEST: RD0918

Pierce Manufacturing, Inc.




James Roger Lackore, PE
March 16, 2008



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0006
Arrow XT®
Windshield Wiper System

Pierce Manufacturing certifies the integrity of the Arrow XT® Windshield Wiper System.

Specimens representing the configuration of the Arrow XT® windshield wipers have been successfully tested to meet the following objectives:

OBJECTIVES:

- Complete 3,000,000 cycles of windshield wiper operation per SAE J198 § 6.2
- Inspect wiper motor, pivots, linkages, and mounts frequently to validate cumulative wiper system integrity.

CONCLUSIONS:

- The entire wiper system successfully met the goal of 3,000,000 cycles. The wiper motors and arms did not exhibit signs of unusual wear or damage.

VALIDATION TEST: RD0945

Pierce Manufacturing, Inc.

A handwritten signature in blue ink, appearing to read "James R. Lackore".



James Roger Lackore, PE
March 16, 2008



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0019

Arrow XT®

Seats and Seat Belts

Pierce Manufacturing certifies the conformance of the Arrow XT® cab seats and seat belts to Federal Motor Vehicle Safety Standards. Representative Arrow XT® Seat and Seat Belt designs have been tested successfully in accordance with FMVSS 207.

Physical testing was performed to qualify passenger seats to meet Federal Motor Vehicle Safety Standards (FMVSS) 207 and 210. This requires that a minimum of 3,000 lbf be applied to both the lap and shoulder belts via appropriate body blocks. A third force of twenty times the mass of the seat must be applied at the center-of-gravity (CG) of the seat. All three forces are applied at the same time, reached within thirty seconds of the start of the test, and be held for a minimum of ten seconds.

A force equal to twenty times the mass of the seat was applied to each seat in the direction opposite to the combination pull. A moment of 275 lb-ft was applied to the seat with reference to the H-point.

This testing ensures that the seat mounting and seat belt anchors are adequate to retain the seats and occupants in a crash. The Federal requirements are based on the high deceleration rates of passenger vehicles, so the design requirements are significantly more conservative considering the slower crash speeds of heavy trucks.

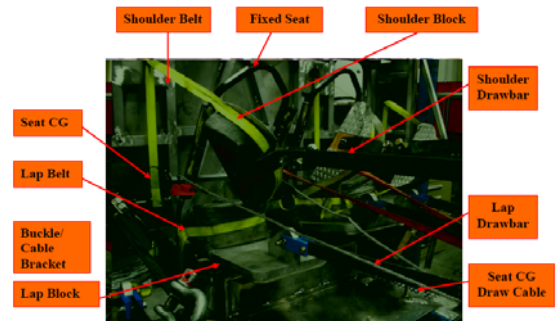


Photo 1
AXT Crew Cab PVO Fixed Seats - Pre-Test Setup

VALIDATION TESTS:

RD1327
RD0862
RD1428

Pierce Manufacturing, Inc.



James Roger Lackore, PE
June 17, 2008

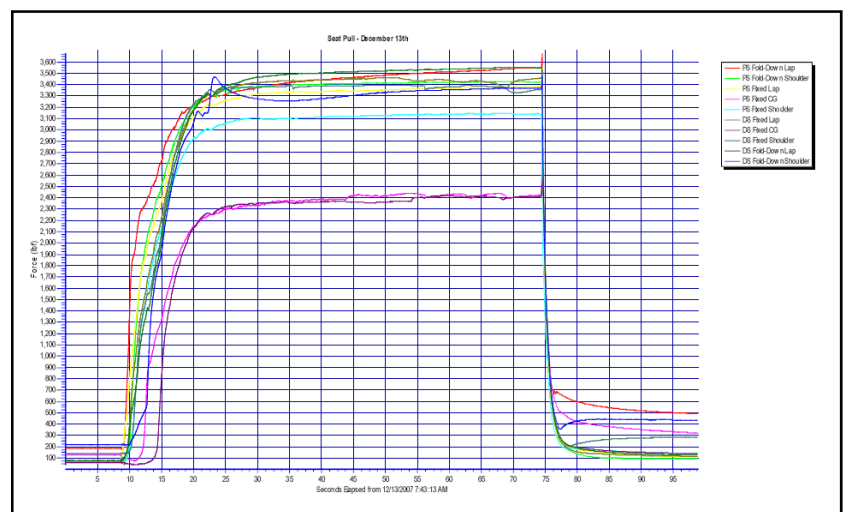


Chart 1 - December 13th Seat Pull Test

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0094

Arrow XT®

Cab Heater & Defrost

Pierce Manufacturing certifies the performance of the Arrow XT® cab heat and defroster systems.

The Arrow XT® Heater and Defroster System was tested successfully in an environmental chamber.

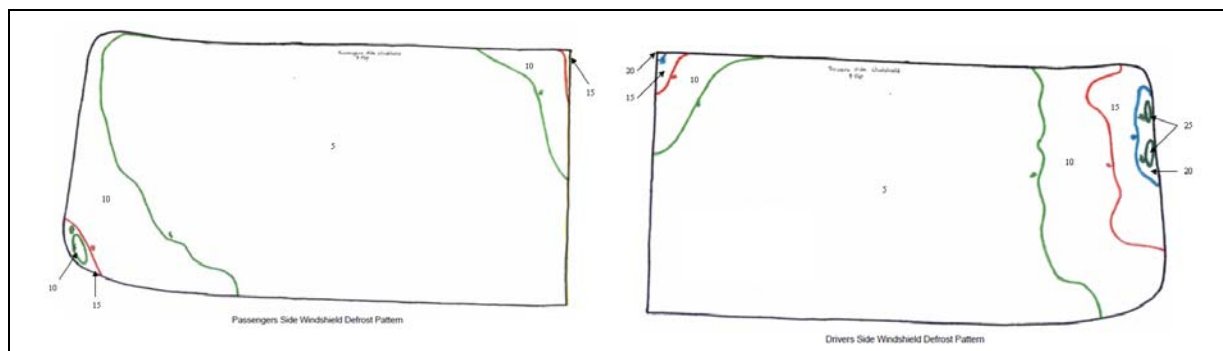
Defrosting

Defroster testing was performed in accordance with *SAE J381 Windshield Defrosting Systems Test Procedure and Performance Requirements-Trucks, Buses, and Multipurpose Vehicles*.

This SAE Recommended Practice establishes uniform test procedures and performance requirements for the defrosting system of enclosed cab trucks, buses, and multipurpose vehicles. Current engineering practice prescribes that for laboratory evaluation of defroster systems, an ice coating of known thickness be applied to the windshield and left- and right-hand side windows to provide more uniform and repeatable test results, even though under actual conditions such a coating would necessarily be scraped off before driving. The test condition, therefore, represents a more severe condition than the actual condition, where the defroster system must merely be capable of maintaining a cleared viewing area.

During the test, the vehicle is cold-soaked to 0° F in a cold chamber. A prescribed layer of ice is applied to the windshield. The defroster is then run and the advancing melt boundary marked as the test proceeds.

The Arrow XT windshield and side windows were 100% cleared within the specified 30 minute period. Approximately 97% of the front windshield area was cleared within 10 minutes. Wipers were not used during the test.



Heater:

Heater testing was performed using the coolant supply procedures from SAE J1612 Cab Heating Systems Test Procedure and Performance Requirements - - *Trucks and Multipurpose Vehicles*.

The average cab temperature increased 77° F from 3° F to 80° F within the prescribed 30 minutes. The cab was contained in a cold chamber at 0° to 5° F during the duration of the test.

VALIDATION TEST: RD1700

Pierce Manufacturing, Inc.



Jeremy Andringa
Chief Engineer - NPD and Production Cab Engineering
December 13, 2010

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0140

Arrow XT®

Air Conditioning

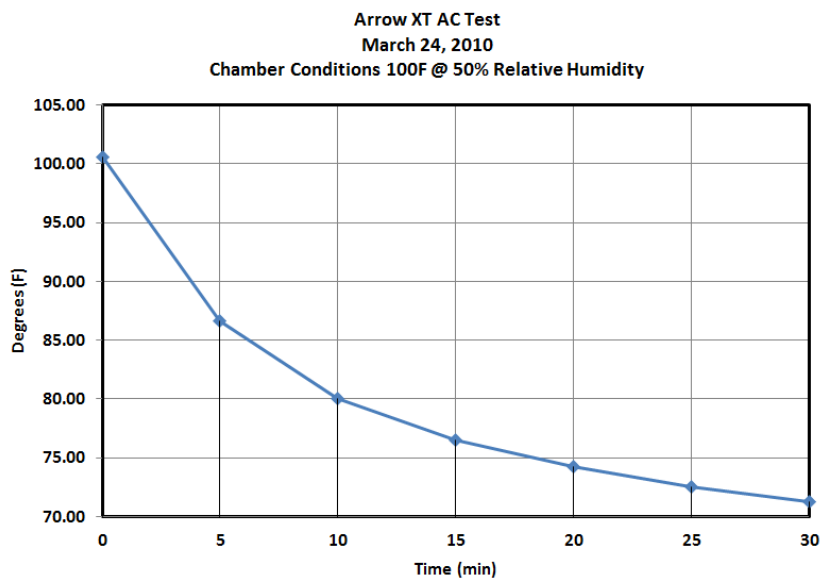
Pierce Manufacturing certifies the performance of the Arrow XT® cab air conditioning system.

The air conditioning system was tested successfully in an environmental chamber.

Air conditioning performance testing was conducted at an ambient of 100°F and 50 percent relative humidity. Engine speed was maintained at high idle rpm with the controls set to maximum cooling.

The vehicle was heat soaked in the environmental chamber. All temperature probes were monitored to confirm temperature stabilization. The transient test began when all the vehicle doors were closed and the air conditioning turned on.

The average cab temperature dropped to 72° F within 30 minutes.



VALIDATION TEST: RD2573

Pierce Manufacturing, Inc.

David W. Archer
 Vice President of Engineering

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0156

Statement of Compliance to NFPA 1901-2016

Vehicle Stability

Pierce fire apparatus comply with NFPA 1901 Section 4.13 Vehicle Stability using the tilt table method. As prescribed by the standard, each apparatus is compared to a substantially similar apparatus that has been loaded as required and tested on a tilt table per the SAE J2180 test procedure. If the apparatus configuration was not expected to meet the minimum tilt table criteria, then it will be equipped with the Electronic Stability Control option. A listing of all tested apparatus is maintained by the Research and Development lab and is available for inspection at the Appleton factory.



4.13 Vehicle Stability.

4.13.1* Rollover Stability. The apparatus shall meet the criteria defined in 4.13.1.1, or it shall be equipped with a stability control system in accordance with 4.13.1.2.

4.13.1.1 The apparatus shall meet the criteria defined in either of the following:

- (1)*The apparatus shall remain stable to 26.5 degrees in both directions when tested on a tilt table in accordance with SAE J2180, *A Tilt Table Procedure for Measuring the Static Rollover Threshold for Heavy Trucks*.
- (2) The calculated or measured center of gravity (CG) shall be no higher than 80 percent of the rear axle track width.

4.13.1.1.1 Compliance shall be certified by testing, calculating, or measuring the apparatus or by comparing the apparatus to a compliant, substantially similar example apparatus, and the certification shall be delivered with the fire apparatus.

4.13.1.1.2 The example apparatus shall be considered substantially similar if it includes a chassis with the same or higher CG height, the same or narrower rear axle track width, the same or greater water tank size and CG height, the same type of front and rear suspension, and the same type and size of aerial device.

4.13.1.1.3 For purposes of 4.13.1.1, the apparatus shall be loaded with fuel, fire-fighting agents, hose, ladders, a weight of 250 lb in each seating position, and weight equivalent to the miscellaneous equipment allowance as defined in Table 12.1.2.

4.13.1.1.3.1 If the apparatus is designed to meet a specified higher equipment loading or larger hose bed capacity or to carry additional ground ladders, these greater loads shall be included in the testing, calculating, or measuring.

4.13.1.1.3.2 The weight added to the fire apparatus for the purpose of test, calculation, or measurement shall be distributed to approximate typical in-service use of the fire apparatus while not exceeding the manufacturer's published individual compartment weight ratings.

4.13.1.2 If the apparatus is equipped with a stability control system, the system shall have, at a minimum, a steering wheel position sensor, a vehicle yaw sensor, a lateral accelerometer, and individual wheel brake controls.

VALIDATION TEST: Multiple Tests

Pierce Manufacturing, Inc.

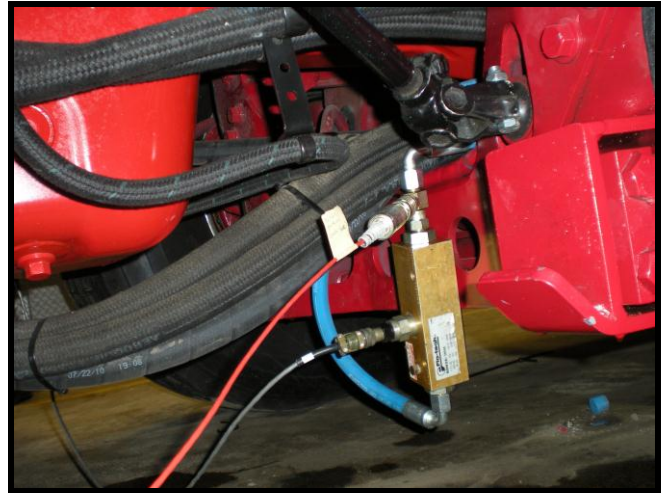
David W. Archer
Vice President of Engineering
June 1, 2017

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY

**Certification Document CD0098
Power Steering System**

Pierce Manufacturing, Inc. certifies that the power steering system as installed in our custom chassis meets the requirements of the component supplier, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce internal design standards.



VALIDATION TEST: RD1987, RD2055
RD2056, RD2057, RD2058, RD2059

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "David W. Archer".

David W. Archer
Director of Engineering
June 03, 2011

PIERCE MANUFACTURING INC.®

AN OSHKOSH TRUCK CORPORATION® COMPANY



Certification Document CD0011

Arrow XT®

Cab Integrity Certification

Pierce Manufacturing certifies the integrity of the Arrow XT® cab relative to occupant protection.

A specimen representing the substantial structural configuration of the Arrow XT® cab model has been successfully tested in accordance with the following standards.

- SAE J2422 Cab Roof Strength Evaluation – Quasi-Static Loading Heavy Trucks.
- European Occupant Protection Standard ECE Regulation No. 29.
- SAE J2420 COE Frontal Strength Evaluation – Dynamic Loading Heavy Trucks.

Side Impact: The test cab was subjected to dynamic preload where a 13,275 lb moving barrier was slammed into the side of the cab at 5.5 mph, striking with an impact of 13,000 ft-lbs of energy. This test is not required to meet the ECE 29 standard, but is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a roll-over incident.



Roof Crush: This same test cab was then subjected to a roof crush force of 22,050 lbs. This value meets the ECE 29 criteria, which must be equivalent to the front axle rating up to a maximum of 10 metric tons.



Additional Roof Crush: The same cab was then loaded with 60,000 lbs, 72000 lbs, 80,000 lbs, and finally 100,000 lbs on the roof, exceeding the ECE test by 4.5 times!



Frontal Impact: The test cab was struck by the 13,275 lb moving barrier at a speed sufficient to impart the required 32,600 ft-lbs of energy.

The cab survived this second blow without compromising the survival space of any occupant area.



Additional Frontal Impact: The same cab was then struck a third time at a higher speed to impart 65,200 ft-lbs of energy into the cab (twice the ECE 29 level of energy).

The cab survived this third blow, again without compromising the survival space of any occupant area.

Pass-Fail criteria of the SAE tests and the ECE 29 test is a measure of whether the “survival space” inside the cab is compromised during any of the test loads. The Pierce cab withstood all integrity tests on the same cab without any measurable intrusion into the survival space of the occupant area.

Witnessed and Certified by:

Pierce Manufacturing, Inc.




James Roger Lackore, PE
October 16, 2003

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0002

Arrow XT®

Cab Doors

Pierce Manufacturing certifies the integrity of the Arrow XT® cab doors.

Specimens representing the substantial structural configuration of the Arrow XT® cab front and crew doors have been successfully tested to meet the following objectives:

OBJECTIVES:

- Determine the door opening and closing forces before and after a 200,000-cycle door slam test.
- Determine if water leaks past the door seals after a 200,000-cycle door slam test.
- Evaluate components, structure, and mounting of the doors during the test for signs of fatigue.

CONCLUSIONS:

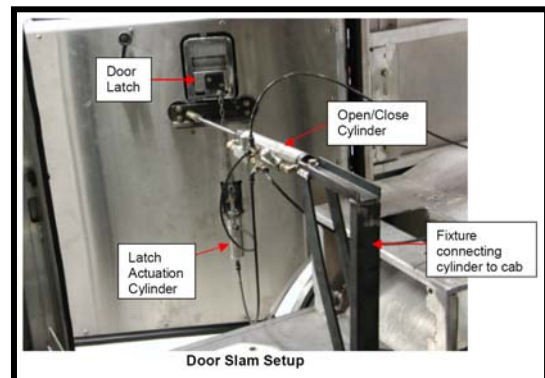
- Door closing forces met acceptable criteria before and after the test.
- Doorframe and door components did not show any signs of fatigue or excessive wear after the 250,000-cycle door slam test.
- The door seals prevented water penetration after 250,000 cycles.

VALIDATION TEST: RD0918

Pierce Manufacturing, Inc.




James Roger Lackore, PE
March 16, 2008



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0006
Arrow XT®
Windshield Wiper System

Pierce Manufacturing certifies the integrity of the Arrow XT® Windshield Wiper System.

Specimens representing the configuration of the Arrow XT® windshield wipers have been successfully tested to meet the following objectives:

OBJECTIVES:

- Complete 3,000,000 cycles of windshield wiper operation per SAE J198 § 6.2
- Inspect wiper motor, pivots, linkages, and mounts frequently to validate cumulative wiper system integrity.

CONCLUSIONS:

- The entire wiper system successfully met the goal of 3,000,000 cycles. The wiper motors and arms did not exhibit signs of unusual wear or damage.

VALIDATION TEST: RD0945

Pierce Manufacturing, Inc.

A handwritten signature in blue ink, appearing to read "James Lackore".



James Roger Lackore, PE
March 16, 2008



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0019

Arrow XT®

Seats and Seat Belts

Pierce Manufacturing certifies the conformance of the Arrow XT® cab seats and seat belts to Federal Motor Vehicle Safety Standards. Representative Arrow XT® Seat and Seat Belt designs have been tested successfully in accordance with FMVSS 207.

Physical testing was performed to qualify passenger seats to meet Federal Motor Vehicle Safety Standards (FMVSS) 207 and 210. This requires that a minimum of 3,000 lbf be applied to both the lap and shoulder belts via appropriate body blocks. A third force of twenty times the mass of the seat must be applied at the center-of-gravity (CG) of the seat. All three forces are applied at the same time, reached within thirty seconds of the start of the test, and be held for a minimum of ten seconds.

A force equal to twenty times the mass of the seat was applied to each seat in the direction opposite to the combination pull. A moment of 275 lb-ft was applied to the seat with reference to the H-point.

This testing ensures that the seat mounting and seat belt anchors are adequate to retain the seats and occupants in a crash. The Federal requirements are based on the high deceleration rates of passenger vehicles, so the design requirements are significantly more conservative considering the slower crash speeds of heavy trucks.

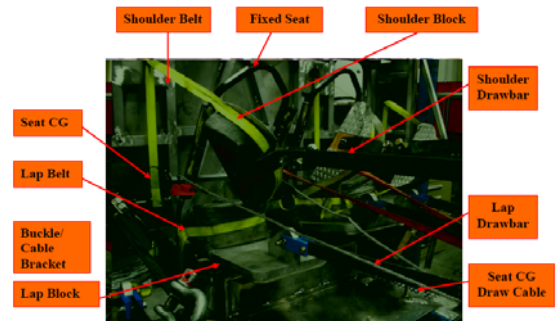


Photo 1
AXT Crew Cab PVO Fixed Seats - Pre-Test Setup

VALIDATION TESTS:

RD1327
RD0862
RD1428

Pierce Manufacturing, Inc.



James Roger Lackore, PE
June 17, 2008

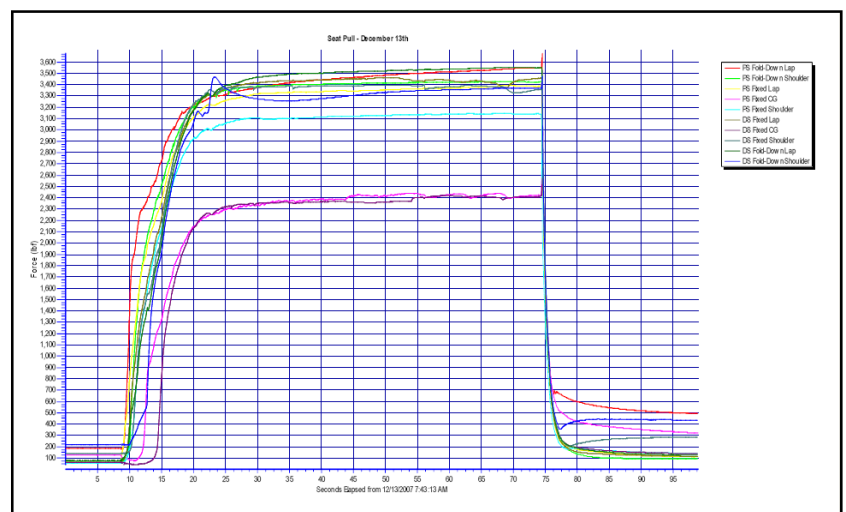


Chart 1 - December 13th Seat Pull Test

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0094

Arrow XT®

Cab Heater & Defrost

Pierce Manufacturing certifies the performance of the Arrow XT® cab heat and defroster systems.

The Arrow XT® Heater and Defroster System was tested successfully in an environmental chamber.

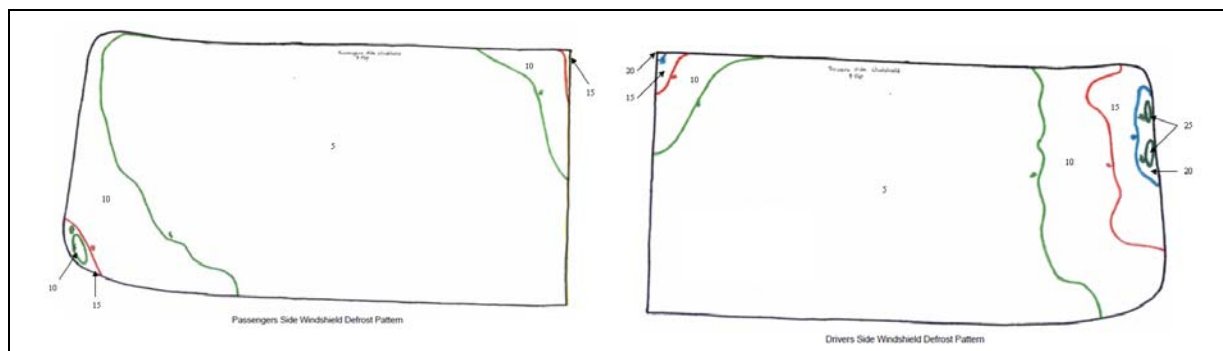
Defrosting

Defroster testing was performed in accordance with *SAE J381 Windshield Defrosting Systems Test Procedure and Performance Requirements-Trucks, Buses, and Multipurpose Vehicles*.

This SAE Recommended Practice establishes uniform test procedures and performance requirements for the defrosting system of enclosed cab trucks, buses, and multipurpose vehicles. Current engineering practice prescribes that for laboratory evaluation of defroster systems, an ice coating of known thickness be applied to the windshield and left- and right-hand side windows to provide more uniform and repeatable test results, even though under actual conditions such a coating would necessarily be scraped off before driving. The test condition, therefore, represents a more severe condition than the actual condition, where the defroster system must merely be capable of maintaining a cleared viewing area.

During the test, the vehicle is cold-soaked to 0° F in a cold chamber. A prescribed layer of ice is applied to the windshield. The defroster is then run and the advancing melt boundary marked as the test proceeds.

The Arrow XT windshield and side windows were 100% cleared within the specified 30 minute period. Approximately 97% of the front windshield area was cleared within 10 minutes. Wipers were not used during the test.



Heater:

Heater testing was performed using the coolant supply procedures from SAE J1612 Cab Heating Systems Test Procedure and Performance Requirements - - *Trucks and Multipurpose Vehicles*.

The average cab temperature increased 77° F from 3° F to 80° F within the prescribed 30 minutes. The cab was contained in a cold chamber at 0° to 5° F during the duration of the test.

VALIDATION TEST: RD1700

Pierce Manufacturing, Inc.



Jeremy Andringa
Chief Engineer - NPD and Production Cab Engineering
December 13, 2010

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0140

Arrow XT®

Air Conditioning

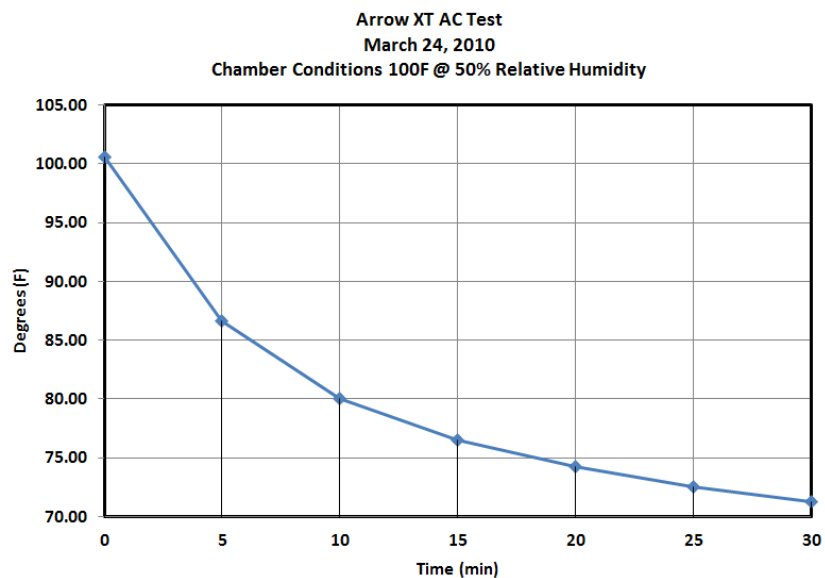
Pierce Manufacturing certifies the performance of the Arrow XT® cab air conditioning system.

The air conditioning system was tested successfully in an environmental chamber.

Air conditioning performance testing was conducted at an ambient of 100°F and 50 percent relative humidity. Engine speed was maintained at high idle rpm with the controls set to maximum cooling.

The vehicle was heat soaked in the environmental chamber. All temperature probes were monitored to confirm temperature stabilization. The transient test began when all the vehicle doors were closed and the air conditioning turned on.

The average cab temperature dropped to 72° F within 30 minutes.



VALIDATION TEST: RD2573

Pierce Manufacturing, Inc.

David W. Archer
 Vice President of Engineering

Appendix I

COUNTY OF FLUVANNA

GENERAL TERMS, CONDITIONS AND **INSTRUCTIONS TO BIDDERS AND** **CONTRACTORS**

GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

These General Terms, Conditions and Instructions to Bidders and Contractor (hereinafter referred to as the “General Conditions”) shall apply to all purchases and be incorporated into and be a part of each Solicitation (as defined below) and every Contract (as defined below) awarded by Fluvanna County, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the “County”) unless otherwise specified by the County in writing. Bidders, Offerors and Contractors or their authorized representatives are expected to inform themselves fully as to these General Conditions before submitting Bids or Proposals to and/or entering into any Contract with the County: failure to do so will be at the Bidder’s/Contractor’s own risk and except as provided by law, relief cannot be secured on the plea of error.

Subject to all Federal, State and local laws, policies, resolutions, regulations, rules, limitations and legislation, including the County’s Procurement Policies and Procedures, Bids or Proposals on all Solicitations issued by County will bind Bidders or Offerors, as applicable, and Contracts will bind Contractors, to all applicable terms, conditions, instructions, rules and requirements herein set forth unless otherwise SPECIFICALLY set forth by the County in writing in the Solicitation or Contract. All provisions of these General Conditions are material to any contract between the County and a Contractor.

INTRODUCTION

1. **VIRGINIA PUBLIC PROCUREMENT ACT AND ETHICS IN PUBLIC CONTRACTING:** The Virginia Public Procurement Act of Virginia Code §§ 2.2-4300 *et seq.* (hereinafter the “VPPA”) is incorporated herein by reference. Nothing in these General Conditions is intended to conflict with the VPPA and in case of any conflict, the VPPA controls. Specifically, the provisions of Article 6 of the VPPA (Virginia Code §§ 2.2-4367 through 2.2-4377) relating to ethics in contracting, shall be applicable to all Solicitations and Contracts solicited or entered into by the County. By submitting their Bids or signing any Contract, all Bidders and Contractors certify that they have not violated any of the provisions of Article 6 of the VPPA, including, but not limited to, that their Bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements.
2. **DEFINITIONS:** The definitions of Virginia Code §§ 2.2-4301, 2.2-4302.1 and 2.2-4302.2 are specifically incorporated herein by reference and as used in these General Conditions, whether capitalized or not, any of such defined terms have the same meaning as such terms have under the VPPA: such defined terms include: “Affiliate”, “Best Value”, “Business”, “Competitive Negotiation”, “Competitive Sealed Bidding”, “Construction”, “Construction Management Contract”, “Design-Build Contract”, “Employment Services Organization”, “Goods”, “Informality”, “Job Order Contracting”, “Multiphase Professional Services Contract”, “Nonprofessional Services”, “Potential Bidder or Offeror”, “Professional Services”, “Public Body”, “Public Contract”, “Responsible Bidder or Offeror”, “Responsive Bidder”, “Reverse Auctioning” and

“Services”. Additionally, as used in these General Conditions, the following terms, whether capitalized or not, have the following meanings:

- a. Bid/Proposal: The offer of a Bidder or Offeror to provide specific Goods or Services at specified prices and/or other conditions specified in the Solicitation. The term “Bid” is used throughout these General Conditions and where appropriate includes the term “Proposal” or any modifications or amendments to any Bid or Proposal.
- b. Bidder/Offeror/Vendor: Any individual(s), company, firm, corporation, partnership or other organization bidding or offering on any Solicitation issued by the County and/or offering to enter into Contracts with the County. The term “Bidder” is used throughout these General Conditions and where appropriate includes the term “Offeror” and/or “Vendor”.
- c. Contract: Any contract to which the County will be a party.
- d. Contractor: Any individual(s), company, firm, corporation, partnership, or other organization to whom an award is made by the County or whom enters into any contract to which the County is a party.
- e. County: The County of Fluvanna, a political subdivision of the Commonwealth of Virginia, including where applicable all agencies and departments of the County.
- f. County Administrator: The Fluvanna County Administrator.
- g. County Attorney: The Fluvanna County Attorney.
- h. Purchasing Agent: The County Administrator is the County’s Purchasing Agent and is responsible for the purchasing activity of Fluvanna County; and has signatory authority to bind the County to all contracts and purchases made lawfully under the Fluvanna County Small Purchasing Procedures. The Purchasing Agent has signatory authority to bind the County to all other contracts and purchases only after the contracts or purchases have been approved by a vote of the Fluvanna County Board of Supervisors.
- i. General Terms, Conditions and Instructions to Bidders and Contractors (also referred to herein as the “General Conditions”): These General Terms, Conditions and Instructions to Bidders and Contractors shall be attached to and made a part of all Solicitations by the County and all Contracts to which the County is party.
- j. His: Any references to “his” shall include his, her, their, or its as appropriate.
- k. Invitation to Bid (also referred to herein as an “IFB”): A request which is made to prospective Bidders for their quotation on Goods or Services desired by the County. The issuance of an IFB will contain or incorporate by reference the General Conditions and the other specifications and contractual terms and

conditions applicable to the procurement.

- l. Purchasing Officer: The Purchasing Officer employed by the County and to whom Bidders/Contractors can submit questions relating to any Bid or Contract.
 - m. Request for Proposal (also referred to herein as a “RFP”): A request for an offer from prospective Offerors which shall indicate the general terms which are sought to be procured from Offerors. The RFP will specify the evaluation factors to be used and will contain or incorporate by reference the General Conditions and other applicable contractual terms and conditions, including any unique capabilities or qualifications that will be required of the Contractor.
 - n. Small Purchasing Procedures: The County’s Small Purchasing Procedures, being Chapter 4 of the County’s Procurement Policies and Procedures, a method of purchasing not requiring competitive sealed bids or competitive negotiation for single or term contracts for goods and services other than professional services if the aggregate or the sum of all phases is not expected to exceed \$50,000; and also allowing for single or term contracts for professional services without requiring competitive negotiation, provided the aggregate or the sum of all phases is not expected to exceed \$50,000.
 - o. Solicitation: The process of notifying prospective Bidders or Offerors that the County wishes to receive Bids or Proposals on a set of requirements to provide Goods or Services. “Solicitation” includes any notification of the County requirements may consist of public advertising (newspaper, County’s website, or other electronic notification), the mailing of notices of Solicitation, any Invitation for Quotes (“IFQ”), Initiations to Bid (“IFB”), or Requests for Proposal (“RFP”), the public posting of notices, issuance of an Open Market Procurement (“OMP”), or telephone calls to prospective Bidders or Offerors.
 - p. State: The Commonwealth of Virginia.
3. **AUTHORITY**: The Purchasing Agent shall serve as the principal public purchasing official for the County, and shall be responsible for the procurement of goods, services, insurance and construction in accordance with the County’s Procurement Policies and Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every Solicitation, Contract and purchase order issued by the County under the County’s Small Purchasing Procedures. The Purchasing Agent has signatory authority to bind the County to all contracts and purchases made lawfully under the County’s Small Purchasing Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every other Solicitation, Contract and purchase order issued by the County except that the Purchasing Agent has signatory authority to bind the County to all other contracts and purchases ONLY after the contracts or purchases have been adopted and approved by a vote of the Fluvanna County Board of Supervisors (the “Board”).

Unless specifically delegated by the Board or the Purchasing Agent, and consistent with the limited authority granted thereto, no other County officer or employee is authorized to order supplies or Services, enter into purchase negotiations or Contracts, or in any way obligate the County for any indebtedness. Any purchase or contract made which is contrary to such authority shall be of no effect and void and the County shall not be bound thereby.

For convenience, the County's Purchasing Officer shall serve as an intermediary between the Purchasing Agent and the Bidder or Contractor and any Bidder or Contractor may direct communications regarding any purchase, Solicitation or Contract to the Purchasing Officer; however as stated *supra* only the Board or County's Purchasing Agent can bind the County and only upon the conditions stated *supra*.

CONDITIONS OF BIDDING

4. **COMPETITION INTENDED:** It is the County's intent to encourage and permit open and competitive bidding in all Solicitations. It shall be the Bidder's responsibility to advise the County in writing if any language, requirement, specification, etc., or any combination thereof, stifles competition or inadvertently restricts or limits the requirements stated in a Solicitation to a single source. The County must receive such notification not later than seven (7) business days prior to the deadline set for acceptance of the Bids. In submitting a Bid, the Bidder guarantees that he or she has not been a party with other Bidders to an agreement to bid a fixed or uniform price. Violation of this implied guarantee shall render the Bid of any Bidder involved void.
5. **DISCRIMINATION PROHIBITED:** Pursuant to Virginia Code § 2.2-4310, the County does not discriminate against Bidders, Offerors or Contractors because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. Whenever solicitations are made, the County shall include businesses selected from a list made available by the Department of Small Business and Supplier Diversity. Pursuant to Virginia Code § 2.2-4343.1, the County does not discriminate against "faith-based organizations", being a religious organization that is or applies to be a contractor to provide goods or services for programs funded by the block grant provided pursuant to the Personal Responsibility and Work Reconciliation Act of 1996, P.L. 104-193.
6. **CLARIFICATION OF TERMS:** Pursuant to Virginia Code § 2.2-4316, if any Bidder has questions or comments about the specifications or other Solicitation documents, the prospective Bidder should contact the County no later than seven (7) business days prior to the date set for the opening of Bids or receipt of Proposals. Any revisions to the Solicitation will be made only by written addendum issued by the County. Notifications regarding specifications may not be considered if received in less than seven (7) business days of the date set for opening of Bids/receipt of Proposals.
7. **MANDATORY USE OF COUNTY FORM AND TERMS AND CONDITIONS:** Unless otherwise specified in the Solicitation, all Bids must be submitted on the forms

provided by the County, including but not limited to, a Cover Sheet or Pricing Schedule, if applicable, properly signed in ink in the proper spaces and submitted in a sealed envelope or package. Unauthorized modification of or additions to any portion of the Solicitation may be cause for rejection of the Bid. However, the County reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject any Bid or Proposal which has been modified. These General Conditions are mandatory provisions of all Solicitations and all Contracts of the County.

8. LATE BIDS & MODIFICATION OF BIDS: Any Bid or modification thereto received at the office designated in the Solicitation after the exact time specified for receipt of the Bid is considered a late Bid or modification thereof. The County is not responsible for delays in the delivery of the mail by the U.S. Postal Service, private carriers or the inter-office mail system. It is the sole responsibility of the Bidder to ensure their Bid reaches County by the designated date and hour. The following rules apply to all Bids submitted to the County:

- a. The official time used in the receipt of Bids/Proposals is that time on the automatic time stamp machine in the Finance Department;
- b. Late Bids or modifications thereof will be returned to the Bidder UNOPENED, if Solicitation number, due date and Bidder's return address is shown on the container;
- c. If a Bid is submitted on time, however a modification thereto is submitted after the due date and time, then the County in its sole discretion may choose to consider the original Bid except that the County may not consider such original Bid if the Bid is withdrawn by the Bidder pursuant to Section 9 below; and
- d. If an emergency or unanticipated event or closing interrupts or suspends the County's normal business operations so that Bids cannot be received by the exact time specified in the Solicitation, then the due date/time specified for receipt of Bids will be deemed to be extended to the same time of day specified in the Solicitation on the first work day on which normal County business operations resume.

9. WITHDRAWAL OF BIDS:

- a. Pursuant to Virginia Code § 2.2-4330, a Bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his Bid from consideration if the price bid was substantially lower than the other Bids due solely to a mistake in the Bid, provided the Bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn.

If a Bid contains both clerical and judgment mistakes, a Bidder may withdraw his Bid from consideration if the price bid would have been substantially lower than the other Bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn. The Bidder shall give notice in writing to the County of his or her claim of right to withdraw his or her Bid within two (2) business days after the conclusion of the Bid opening procedure and shall submit original work papers with such notice.

- b. A Bidder for a Contract other than for public construction may request withdrawal of his or her Bid under the following circumstances:
 - i. Bids may be withdrawn on written request from the Bidder received at the address shown in the Solicitation prior to the time of opening.
 - ii. Requests for withdrawal of Bids after opening of such Bids but prior to award shall be transmitted to the County, in writing, accompanied by full documentation supporting the request. If the request is based on a claim of error, documentation must show the basis of the error. Such documentation may take the form of supplier quotations, Bidder work sheets, etc. If Bid bonds were tendered with the Bid, the County may exercise its right of collection.
- c. No Bid may be withdrawn under this Section 9 when the result would be the awarding of the Contract on another Bid of the same Bidder or of another Bidder in which the ownership of the withdrawing Bidder is more than five percent (5%).
- d. If a Bid is withdrawn under the authority of this Section 9 the lowest remaining Bid shall be deemed to be the low Bid.
- e. No Bidder who, is permitted to withdraw a Bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn Bid was submitted.
- f. The County shall notify the Bidder in writing within five (5) business days of its decision regarding the Bidder's request to withdraw its Bid. If the County denies the withdrawal of a Bid under the provisions of this Section 9, it shall State in such notice the reasons for its decision and award the Contract to such Bidder at the Bid price, provided such Bidder is a responsible and responsive Bidder. At the same time that the notice is provided, the County shall return all work papers and copies thereof that have been submitted by the Bidder.

- g. Under these procedures, a mistake shall be proved only from the original work papers, documents and materials delivered as required herein. The work papers, documents and materials submitted by the bidder shall, at the bidder's request, be considered trade secrets or proprietary information subject to the conditions of subsection F of Virginia Code § 2.2-4342.

10. ERRORS IN BIDS: When an error is made in extending total prices, the unit Bid price will govern. Erasures in Bids must be initialed by the Bidder. Carelessness in quoting prices, or otherwise in preparation of the Bid, will not relieve the Bidder. Bidders/Offerors are cautioned to recheck their Bids for possible error. Errors discovered after public opening cannot be corrected and the Bidder will be required to perform if his or her Bid is accepted.

11. IDENTIFICATION ON BID ENVELOPE: All Bids, Proposals and requested copies thereof submitted to the County shall be in a separate envelope or package, sealed and identified with the following information clearly marked on the outside of the envelope or package:

- a. Addressed as indicated on page 1 of the solicitation;
- b. Solicitation number;
- c. Title;
- d. Bid due date and time;
- e. Bidder's name and complete mailing address (return address); and
- f. Pursuant to Virginia Code § 2.2-4311.2, the Bidder's identification number issued by the State Corporation Commission, or if the bidder is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bids or proposal a statement describing why the bidder or offeror is not required to be so authorized.

If a Bid is not addressed with the information as shown above, the Bidder takes the risk that the envelope may be inadvertently opened and the information compromised, which may cause the Bid to be disqualified. Bids may be hand delivered to the designated location in the County's offices. No other correspondence or other Proposals/Bids should be placed in the envelope. Any Bidder or Offeror that fails to provide the information required in (f) above shall not receive an award unless a waiver is specifically granted by the County Administrator.

12. ACCEPTANCE OF BIDS: Unless otherwise specified, all formal Bids or Proposals submitted shall be valid for a minimum period of one hundred twenty (120) calendar days following the date established for opening or receipt, respectively, unless extend by mutual agreement of the parties. At the end of the one hundred twenty (120) calendar days the Bid/Proposal may be withdrawn at the written request of the Bidder. Thereafter, unless and until the Proposal is withdrawn, it remains in effect until an award is made or the Solicitation is canceled by the County. The County may cancel any Solicitation at any time by notice of such cancelation to the Bidders.

- 13. COMPLETENESS:** To be responsive, a Bid must include all information required by the Solicitation.
- 14. CONDITIONAL BIDS:** Conditional Bids are subject to rejection in whole or in part.
- 15. RESPONSE TO SOLICITATIONS:** In the event a Bidder cannot submit a Bid on a Solicitation, the Bidder is requested to return the Solicitation cover sheet with an explanation as to why the Bidder is unable to Bid on these requirements, or if there be no cover sheet for the Solicitation a letter to the County explaining the same.
- 16. BIDDER INTERESTED IN MORE THAN ONE BID AND COLLUSION:** More than one bid from an individual, firm, partnership, corporation or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for the work contemplated will cause rejection of all bids in which the bidder is interested. Any or all bids may be rejected if there is any reason for believing that collusion exists among the bidders. Participants in such collusion may not be considered in future bids for the same work. Each bidder, as a condition of submitting a bid, shall certify that he is not a party to any collusive action as herein defined. However, a party who has quoted prices on work, materials, or supplies to a Bidder is not thereby disqualified from quoting prices to other Bidders or firms submitting a Bid directly for the work, materials or supplies.
- 17. BID OPENING:** Pursuant to Virginia Code § 2.2-4301, all Bids received in response to an IFB will be opened at the date, time and place specified, and announced publicly, and made available for inspection as provided in Section 21 of these General Conditions. Proposals received in response to an RFP will be made available for inspection as provided in Section 21 of these General Conditions.
- 18. TAX EXEMPTION:** The County is exempt from the payment of any federal excise or any Virginia sales tax. The price bid must be net, exclusive of taxes. Tax exemption certificates will be furnished if requested by the Bidder.
- 19. DEBARMENT STATUS:** By submitting their Bids, Bidders certify that they are not currently debarred from submitting Bids on Contracts by the County, nor are they an agent of any person or entity that is currently debarred from submitting Bids or Proposals on Contracts by the County or any agency, public entity/locality or authority of the State.
- 20. NO CONTACT POLICY:** No Bidder shall initiate or otherwise have contact related to the Solicitation with any County representative or employee, other than the Purchasing Officer or Purchasing Agent, after the date and time established for receipt of Bids. Any contact initiated by a Bidder with any County representative, other than the Purchasing Officer or Purchasing Agent, concerning this Solicitation is prohibited and may cause the disqualification of the Bidder.

21. VIRGINIA FREEDOM OF INFORMATION ACT: As provided under Virginia Code § 2.2-4342, all proceedings, records, Contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act of Virginia Code §§ 2.2-3700 *et seq.*, except:

- a. Cost estimates relating to a proposed procurement transaction prepared by or for the County shall not be open to public inspection;
- b. Any competitive sealed bidding Bidder, upon request, shall be afforded the opportunity to inspect Bid records within a reasonable time after the opening of Bids but prior to award, except in the event that the County decides not to accept any of the Bids and to reopen the Contract. Otherwise, Bid records shall be open to public inspection only after award of the Contract;
- c. Any competitive negotiation Offeror, upon request, shall be afforded the opportunity to inspect Proposal records within a reasonable time after the evaluation and negotiations of Proposals are completed but prior to award except in the event that the County decides not to accept any of the Proposals and to reopen the Contract. Otherwise, Proposal records shall be open to the public inspection only after award of the Contract;
- d. Any inspection of procurement transaction records under this Section 21 shall be subject to reasonable restrictions to ensure the security and integrity of the records;
- e. Trade secrets or proprietary information submitted by a Bidder, Offeror or Contractor in connection with a procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the Bidder, Offeror or Contractor must invoke the protections of this Section 21 prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and State the reasons why protection is necessary; and
- f. Nothing contained in this Section 21 shall be construed to require the County, when procuring by “competitive negotiation” (RFP), to furnish a Statement of reasons why a particular Proposal was not deemed to be the most advantageous to the County.

22. CONFLICT OF INTEREST: Bidder/Contractor certifies by signing any Bid/Contract to/with the County that no conflict of interest exists between Bidder/Contractor and County that interferes with fair competition and no conflict of interest exists between Bidder/Contractor and any other person or organization that constitutes a conflict of interest with respect to the Bid/Contract with the County.

SPECIFICATIONS

23. OMISSIONS OR DISCREPANCIES: Any items or parts of any equipment listed in a Solicitation which are not fully described or are omitted from such specification, and which are clearly necessary for the completion of such equipment and its appurtenances, shall be considered a part of such equipment although not directly specified or called for

in the specifications. Should a Bidder find a discrepancy or ambiguity in, or an omission from, the Solicitation, including the drawings and/or specifications, he or she shall so notify the County within twenty-four (24) hours of noting the discrepancy, ambiguity or omission and in any event no less than five (5) days prior to the date set for the opening of Bids. If necessary, the County will send a written addendum for clarification to all Bidders no later than three (3) days before the date set for opening of Bids. Any notification regarding specifications received less than five (5) days prior to the date set for the opening of Bids may or may not be considered by the County in its sole discretion. The Bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission, but shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever the mention is made of any articles, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed as to the minimum requirements of these specifications.

24. BRAND NAME OR EQUAL ITEMS: Pursuant to Virginia Code § 2.2-4315, unless otherwise provided in the Solicitation, the name of a certain brand, make or manufacturer does not restrict Bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the County in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Bidder is responsible to clearly and specifically indicate the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the County to determine if the product offered meets the requirements of the Solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding, only the information furnished with the Bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a Bid non-responsive. Unless the Bidder clearly indicates in its Bid that the product offered is "equal" product, such Bid will be considered to offer the brand name product referenced in the Solicitation.

25. FORMAL SPECIFICATIONS: When a Solicitation contains a specification which states no substitutes, no deviation therefrom will be permitted and the Bidder will be required to furnish articles in conformity with that specification.

26. CONDITION OF ITEMS: Unless otherwise specified in the Solicitation, all items shall be new, in first class condition.

AWARD

27. RESPONSIBLE BIDDERS: In determining whether a Bidder is a responsible Bidder as defined herein, at minimum, the following criteria will be considered:

- a. The ability, capacity and skill of the Bidder to perform the Contract or provide the service required under the Solicitation;

- b. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
- c. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
- d. The quality of performance of previous Contracts or Services;
- e. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or Services;
- f. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service;
- g. The quality, availability and adaptability of the Goods or Services to the particular use required;
- h. The ability of the Bidder to provide future maintenance and service for the use of the subject of the Contract;
- i. The number and scope of the conditions attached to the Bid;
- j. Whether the Bidder is in arrears to the County on debt or Contract or is a defaulter on surety to the County or whether the Bidder's County taxes or assessments are delinquent; and
- k. Such other information as may be secured by the County, the Purchasing Agent or the Purchasing Officer having a bearing on the decision to award the Contract. If an apparent low Bidder is not awarded a Contract for reasons of nonresponsibility, the County shall so notify that Bidder and shall have recorded the reasons in the Solicitation or Contract file.

28. AWARD OR REJECTION OF BIDS; WAIVER OF INFORMALITIES: The County shall award the Contract to the lowest responsive and responsible Bidder complying with all provisions of the IFB, provided the Bid price is reasonable and it is in the best interest of the County to accept it. Awards made in response to a RFP will be made to the highest qualified Offeror whose Proposal is determined, in writing, to be the most advantageous to the County taking into consideration the evaluation factors set forth in the RFP. The County reserves the right to award a Contract by individual items, in the aggregate, or in combination thereof, or to reject any or all Bids and to waive any informality in Bids received whenever such rejection or waiver is in the best interest of the County. Award may be made to as many Bidders/Offerors as deemed necessary to fulfill the anticipated requirements of the County. The County also reserves the right to reject the Bid if a Bidder is deemed to be a non-responsible Bidder. Pursuant to Virginia Code § 2.2-4319, an IFB, a RFP, any other solicitation, or any and all bids or proposals, may be canceled or rejected by the County at any time. The reasons for cancellation or rejection shall be made part of the contract file. The County shall not cancel or reject an IFB, a RFP, any other solicitation, bid or proposal solely to avoid awarding a contract to a particular responsive and responsible bidder or offeror.

29. EXCLUSION OF INSURANCE BIDS PROHIBITED: Pursuant to Virginia Code § 2.2-4320, notwithstanding any other provision of law or these General Conditions, no insurer licensed to transact the business of insurance in the State or approved to issue surplus lines insurance in the State shall be excluded from presenting an insurance bid proposal to the County in response to a RFP or an IFB; excepting that the County may

debar a prospective insurer pursuant to its Debarment Policy, see Chapter 2 of the County's Procurement Policies and Procedures.

30. ANNOUNCEMENT OF AWARD: Upon the award or announcement of the decision to award a Contract as a result of this Solicitation, the County will publicly post such notice on the County's bulletin board located at 72 Main Street, 2nd Floor, Palmyra, Virginia 22963. Award results may also be viewed on the County's website.

31. QUALIFICATIONS OF BIDDERS OR OFFERORS: The County may make such reasonable investigations as deemed proper and necessary to determine the ability of the Bidder to perform the work/furnish the item(s) and the Bidder shall furnish to the County all such information and data for this purpose as may be requested. The County reserves the right to inspect Bidder's physical facilities prior to award to satisfy questions regarding the Bidder's capabilities. The County further reserves the right to reject any Bid or Proposal if the evidence submitted by or investigations of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work/furnish the item(s) contemplated therein.

32. TIE BIDS AND PREFERENCE FOR VIRGINIA PRODUCTS WITH RECYCLED CONTENT AND FOR VIRGINIA FIRMS:

- a. Pursuant to Virginia Code § 2.2-4328, in the case of a tie bid on an IFB only, the County may give preference to Goods, Services and construction produced in Fluvanna County or provided by persons, firms or corporations having principal places of business in Fluvanna County. If such choice is not available, preference shall then be given to Goods produced in Virginia, or for goods, services or construction provided by Virginia persons, firms, corporations, pursuant Virginia Code § 2.2-4324. If no County or State choice is available, the tie shall be decided publicly by lot. The decision by the County to make award to one or more such Bidders shall be final.
- b. Whenever the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a percentage preference, a like preference shall be allowed to the lowest responsive and responsible bidder who is a resident of Virginia and is the next lowest bidder. If the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a price-matching preference, a like preference shall be allowed to responsive and responsible bidders who are residents of Virginia. If the lowest bidder is a resident contractor of a state with an absolute preference, the bid shall not be considered. The Department of General Services shall post and maintain an updated list on its website of all states with an absolute preference for their resident contractors and those states that allow their resident contractors a percentage preference, including the respective percentage amounts. For purposes of compliance with this Section 32, the County may rely upon the accuracy of the information posted on this website.
- c. Notwithstanding the provisions of subsections a and b, in the case of a tie bid in instances where goods are being offered, and existing price preferences have

already been taken into account, preference shall be given to the bidder whose goods contain the greatest amount of recycled content.

- d. For the purposes of this Section 32, a Virginia person, firm or corporation shall be deemed to be a resident of Virginia if such person, firm or corporation has been organized pursuant to Virginia law or maintains a principal place of business within Virginia.

33. NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER: Pursuant to Virginia Code § 2.2-4318, unless cancelled or rejected, a responsive Bid from the lowest responsible Bidder shall be accepted as submitted, except that if the Bid from the lowest responsible Bidder exceeds available funds, the County may negotiate with the apparent low Bidder to obtain a Contract price within available funds. However, the negotiation may be undertaken only under conditions and procedures described in writing and approved by the County prior to issuance of the IFB and summarized therein.

CONTRACT PROVISIONS

34. APPLICABLE LAW AND COURTS: Any Bid or Contract resulting from a Solicitation and its terms, including, but not limited to, the parties' obligations under it, and the remedies available to each party for breach of it, shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Virginia, and exclusive jurisdiction and venue of any dispute or matters involving litigation between the parties hereto shall be in the courts of Fluvanna County, Virginia. Any jurisdiction's choice of law, conflict of laws, rules, or provisions, including those of the Commonwealth of Virginia, that would cause the application of any laws other than those of the Commonwealth of Virginia, shall not apply. The Contractor shall comply with applicable federal, State and local laws, ordinances, rules and regulations in performance of the Contract.

35. PROVISION AND OWNERSHIP OF INFORMATION: The County shall make a good faith effort to identify and make available to the Contractor all non-confidential technical and administrative data in the County's possession which the County may lawfully release including, but not limited to Contract specifications, drawings, correspondence, and other information specified and required by the Contractor and relating to its work under any Contract. The County reserves its rights of ownership to all material given to the Contractor by the County and to all background information documents, and computer software and documentation developed by the Contractor in performing any Contract.

36. DOCUMENTS: All documents, including but not limited to data compilations, drawings, reports and other material, whether in hard copy or electronic format, prepared, developed or furnished by the Contractor pursuant to any Contract shall be the sole property of the County. At the direction of the County, the Contractor shall have the right to make copies of the documents produced available to other parties. The County shall be entitled to delivery of possession of all documents, upon payment in accordance with the terms of any Contract for the service incurred to produce such documents.

37. CONFIDENTIALITY: Contractor shall not publish, copyright or otherwise disclose or permit to be disclosed or published, the results of any work performed pursuant to this contract, or any particulars thereof, including forms or other materials developed for the County in connection with the performance by Contractor of its services hereunder, without prior written approval of the County. Contractor, cognizant of the sensitive nature of much of the data supplied by the County, shall not disclose any information (other than information which is readily available from sources available to the general public) obtained by it in the course of providing services hereunder without the prior written approval of the County, unless disclosure of such information by it is required by law, rule or regulation or the valid order of a court or administrative agency.

38. INDEPENDENT CONTRACTOR: The Contractor and any agents, or employees of the Contractor, in the performance of any Contract shall act as an independent contractor and not as officers, employees or agents of the County.

39. INSURANCE: The Contractor agrees that, during the period of time it renders services to the County pursuant to any Contract, it shall carry (and provide the County with evidence of coverage) the following minimum amounts of insurance:

Automobile	\$500,000	Liability Medical Payment Comprehensive Collision
Public Liability	\$1,000,000	
Professional Liability	\$1,000,000	
Excess Liability	\$2,000,000	Aggregate Over Above Policy Limits (Excluding Professional Liability)
Worker's Compensation	Amount required by Virginia law	

The Contract may specifically require the Contractor to carry higher minimum amounts of insurance.

In addition, the Contractor shall require, and shall include in every subcontract, that any subcontractor providing any goods or services related to such Contract obtain, and continue to maintain for the duration of the work, workers' compensation coverage in the amount required by Virginia law.

40. KEY PERSONNEL: For the duration of any Contract, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment, or as expressly approved by the County. The Contractor

shall notify the County within five (5) calendar days after the occurrence of any of these events and provide the information required by the paragraph below.

The Contractor shall provide a detailed explanation of the circumstances necessitating any proposed substitution, complete resumes for the proposed substitute, and any additional information requested by the County. The proposed substitute should have comparable qualifications to those of the person being replaced. The County will notify the Contractor within fifteen (15) calendar days after receipt of all required information of its approval or disapproval of the proposed substitution.

- 41. SEVERABILITY:** If any term, covenant or provision of these General Conditions or any Contract shall be held to be invalid, illegal or unenforceable in any respect, these General Conditions and any Contract shall remain in effect and be construed without regard to such provision.
- 42. TITLES:** The titles and section headings herein and in any Contract are inserted solely for convenience and are not to be construed as a limitation on the scope of the provisions to which they refer.
- 43. ATTORNEYS' FEES:** In the event of a dispute between the County and Contractor under any Contract which cannot be amicably resolved, in addition to all other remedies, the party substantially prevailing in any litigation shall be entitled to recover its reasonable expenses, including, but not limited to, reasonable attorneys' fees.
- 44. NO WAIVER:** Neither any payment for, nor acceptance of, the whole or any part of the services by the County, nor any extension of time, shall operate as a waiver of any provision of any Contract, nor of any power herein reserved to the County, or any right to damages herein provided, nor shall any waiver of any breach of any Contract be held to be a waiver of any other or subsequent breach. Failure of the County to require compliance with any term or condition of any Contract shall not be deemed a waiver of such term or condition or a waiver of the subsequent enforcement thereof.
- 45. NO FINANCE CHARGES:** No finance charges shall be paid by the County.
- 46. ANTITRUST:** By entering into a Contract, the Contractor conveys, sells, assigns, and transfers to the County all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust law of the United States or the State, relating to the particular Goods or Services purchased or acquired by the County under said Contract. Consistent and continued tie bidding could cause rejection of Bids by the County and/or investigation for antitrust violations.
- 47. PAYMENT:** Pursuant to Virginia Code § 2.2-4352, unless more time is provided in the Solicitation or Contract, payment will be made forty-five (45) days after receipt by the County of a proper invoice, or forty-five (45) days after receipt of all Goods or acceptance of work, whichever is later. The County reserves the right to withhold any or all payments or portions thereof for Contractor's failure to perform in accordance with the

provision of the Contract or any modifications thereto. Within twenty (20) days of receipt of proper invoice or of goods or services, the County shall notify the Contractor if any defect or impropriety that would prevent payment by the payment date. The following provisions apply to such payments:

- a. Invoices for items/Services ordered, delivered/performed and accepted shall be submitted by the Contractor in duplicate directly to the payment address shown on the purchase order, Solicitation or Contract, as applicable. All invoices shall show the Contract number, purchase order number, or Solicitation number, as applicable, and as required under Virginia Code § 2.2-4354, either the individual Contractor's social security number or the Contractor's federal employer identification number, whichever is applicable.
- b. Any payment terms requiring payment in less than forty-five (45) days will be regarded as requiring payment forty-five (45) days after receipt of proper invoice or receipt of all Goods or acceptance of work, whichever occurs later. Notwithstanding the foregoing, offers of discounts for payment in less than forty-five (45) days are valid and enforceable.
- c. Pursuant to Virginia Code § 2.2-4353, the date any payment shall be deemed the date of postmark in all cases where payment is made by mail.
- d. The County's fiscal year is July 1 to June 30. Contractors are advised to submit invoices, especially for Goods and/or Services provided in the month of June, for the entire month (i.e. June 1 - June 30), so that expenses are recognized in the appropriate fiscal year.
- e. Any payment made by the Contractor to the County shall only be made in U.S. Dollars. If payment is received in foreign currency the County may, in its sole discretion, reject such payment and require immediate compensation in U.S. Dollars.

48. SUBCONTRACTORS: Pursuant to Virginia Code § 2.2-4354, in the event that any subcontractors are used by Contractor in connection with the work, Contractor shall:

- a. Within seven (7) days after receipt of amounts paid to the Contractor for work performed by a subcontractor, either:
 - i. Pay the subcontractor for the proportionate share of the total payment received attributable to the work performed by the subcontractor under any Contract; or
 - ii. Notify the County and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

- b. Contractor shall require each subcontractor to provide either (i) for an individual, their social security numbers, or (ii) for proprietorships, partnerships, and corporations to provide their federal employer identification numbers.
- c. The Contractor shall pay interest to any subcontractor on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from the County for work performed by the subcontractor under any Contract, except for amounts withheld as allowed in subdivision (a)(II) above. Unless otherwise provided under the terms of any Contract, interest shall accrue at the rate of one percent (1%) per month.
- d. The Contractor shall include in each of its subcontracts under any Contract a provision requiring each subcontractor to include or otherwise be subject to the above payment and interest requirements (a), (b) and (c) with respect to each lower tier subcontractor.
- e. The Contractor's obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this Section 48 shall not be construed to be an obligation of the County. No Contract modification may be made for the purpose of providing reimbursement for such interest charge. No cost reimbursement claim may include any amount for reimbursement for such interest charge.

49. RETAINAGE ON CONSTRUCTION CONTRACTS: Pursuant to Virginia Code 2§ 2.2-4333, if a Contract for construction provides for progress payments in installments based upon an estimated percentage of completion, then the contractor shall be paid at least ninety-five percent (95%) of the earned sum when payment is due, with no more than five percent (5%) being retained to ensure faithful performance of the contract. All amounts withheld may be included in the final payment. Any subcontract related to work on a Contract that provides for similar progress payments shall be subject to the provisions above and the Contractor agrees to include such provisions in every subcontract.

50. SUCCESSORS AND ASSIGNS: The County and the Contractor bind themselves and their respective successors and assigns to any Contract. The foregoing notwithstanding, the Contractor shall not assign, sublet or transfer its interest in any Contract without the prior written consent of the County, which may be granted or withheld in the County's sole discretion. Nothing hereinafter mentioned shall be construed as creating any personal liability on the part of any officer, agent or employee of the County, nor shall it be construed as giving any benefits hereunder to anyone other than the County and the Contractor.

51. DEFAULT: Failure of a Contractor to deliver Goods or Services in accordance with Contract terms and conditions and/or within the time specified, or within reasonable time as interpreted by the County in its sole discretion, or failure to make replacements/corrections of rejected articles/services when so requested, immediately or as directed by the County, or failure of the Contractor to act in accordance with the Contract in any material respect, as reasonably determined by the County, shall constitute

a “default” by the Contractor and shall further authority for the County to purchase in the open market articles/services of comparable grade/quality to replace the services, articles rejected, and/or not delivered. On all such purchases, the Contractor shall reimburse the County, within a reasonable time specified by the County, for any expense incurred in excess of Contract prices including, but not limited to, any purchase and administrative costs. Such purchases shall be deducted from the Contract quantities, if applicable. Should public necessity demand it, the County reserves the right to use or consume articles delivered or services performed which are substandard in quality, subject to an adjustment in price to be determined by the County. In case of any default, the County, after due oral or written notice if required in accordance with the Contract, may terminate the Contract at its option in its sole discretion effective immediately. These remedies shall be in addition to any other remedies which the County may have, including but not limited to, any remedies at law, under the Contract or in equity.

Notwithstanding the foregoing, the Contractor shall not be liable for damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, act of God, act of Government, act of an alien enemy or by any other circumstances which, in the County's opinion, are beyond the control of the Contractor. Under such circumstances, however, the County may, at its sole discretion, terminate or cancel the Contract effective immediately.

52. NON-DISCRIMINATION ASSURANCES: The Contractor shall conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Act of 1975, as amended, where applicable, and § 2.2-4311 of the Virginia Procurement Act:

- a. During the performance of any Contract, the Contractor agrees as follows: the Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. The Contractor, in all Solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer. Notices, advertisements and Solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this Section 52.
- b. The Contractor shall include the provisions of paragraph (a) above in every subcontract or purchase over \$10,000.00 so that the provisions will be binding upon each subcontractor or Vendor.

53. MODIFICATION:

- a. Pursuant to Virginia Code § 2.2-4309, these General Conditions and any Contract entered into by the County and any Contractor shall not be subject to change, modification, or discharge except by written instrument signed by the County and Contractor, but no fixed-price contract may be increased by more than twenty-five percent (25%) of the amount of the contract or \$50,000, whichever is greater, without the advance written approval of the County's Board. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of an offeror from the consequences of an error in its bid or offer.
- b. The County may, but is not obligated to, extend the term of an existing contract for services to allow completion of any work undertaken but not completed during the original term of the contract.
- c. Nothing in this Section 53 shall prevent the County from placing greater restrictions on contract modifications.

54. INDEMNIFICATION: Contractor agrees to indemnify, keep and save harmless the County, its officers, agents, officials, employees and volunteers against any and all claims, claims of injuries, death, damage to property, patent claims, suits, liabilities, judgments, losses, costs and expenses, including but not limited to costs of investigation, all reasonable attorneys' fees (whether or not litigation results), and the cost of any appeal, occurring or arising in connection with the Contractor's, its agents', subcontractors', employees', or volunteers' negligence or wrongful acts or omissions in connection with its performance of any Contract. The Contractor shall, at his or her own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and if any judgment shall be rendered against the County in any such action, the Contractor shall, at his or her own expenses, satisfy and discharge the same. Contractor expressly understands and agrees that any performance bond or insurance protection required by any Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County as herein provided. Nothing contained in this Solicitation or the Contract shall be deemed to be a waiver of the County's sovereign immunity.

55. DRUG-FREE WORKPLACE: Pursuant to Virginia Code § 2.2-4312, in every Contract over \$10,000.00 the following provisions apply: During the performance of any Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a Statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all Solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the

foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this Section, “*drug-free workplace*” means a site for the performance of work done in connection with a specific Contract awarded to a Contractor in accordance with this the VPPA and the County’s Procurement Procedures, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Contract.

56. TERMINATION: Contracts will remain in force for full periods specified and/or until all articles ordered before date of termination shall have been satisfactorily delivered and accepted and thereafter until all requirements and conditions shall have been met, unless:

- a. Terminated prior to expiration date by satisfactory deliveries of entire Contract requirements;
- b. Terminated by the County upon thirty (30) days written notice to the Contractor at the County’s convenience in the County’s sole discretion (“termination for convenience”), unless a termination for convenience is specifically and expressly prohibited by the Contract. Any Contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of the termination;
- c. Terminated by the County for cause, default or negligence on the part of the Contractor. However, pursuant to Section 51 of these General Conditions, the County may hold the Contractor responsible for any resulting additional purchase and administrative costs. There is no advance notice requirement in the event of Termination for Cause and termination is effective immediately upon notice to Contractor of the termination for cause;
- d. Extended upon written authorization of County and accepted by Contractor, to permit ordering of unordered balances or additional quantities at Contract prices and in accordance with Contract terms.

57. APPROPRIATIONS: Notwithstanding any other provision of any Contract, the payment of the County's obligations under any Contract shall be subject to annual appropriations by the Board of Supervisors of the County in each fiscal year of monies sufficient to satisfy the same.

58. REFERENCES TO VIRGINIA LAW: Any reference in these General Conditions to the Code of Virginia or other relevant Federal, State or local law is incorporated in whole herein by reference as in effect at the time of the Solicitation or Contract as such statutory provisions may be amended or replaced by any statute dealing with the same or similar subject matter.

59. COOPERATIVE PROCUREMENT: Except as prohibited by the current Code of Virginia, all resultant Contracts will be extended to other Public Bodies of the Commonwealth of Virginia, to permit their ordering of Goods, supplies and/or Services at the prices and terms of the resulting Contract (“cooperative procurement”). By submitting any Bid or entering into any Contract with the County a Bidder/Contractor expressly authorizes cooperative procurement under Virginia Code § 2.2-4304 to the full extent permitted by law. If any other public body decides to use any Contract, the Contractor must deal directly with that public body concerning all matters relating thereto, including but not limited to, the placement or orders, issuance of the purchase order, contractual disputes, invoicing and payment. The County acts only as the “Contracting Agent” for these public bodies. Any resulting contract with other public bodies shall be governed by the laws of that specific entity. It is the Contractor’s responsibility to notify the public bodies of the availability of the Contract. Fluvanna County shall not be held liable for any direct or indirect costs, damages or other claim of any kind incurred by another public body or any Contractor as a result of any cooperative procurement.

60. AUDIT: The Contractor hereby agrees to retain all books, records and other documents relative to any Contract for five (5) years after final payment, or until audited by the County, whichever is sooner. The County, its authorized agents, and/or County auditors shall have full access to and right to examine any of said materials during said period.

61. GUARANTIES AND WARRANTIES: All guarantees, representations and warranties required shall be furnished by the Contractor and shall be delivered to the Purchasing Agent before final payment on any Contract is made. In addition to any guarantees, representations and warranties required under the Contract, the Contractor agrees to:

- a. Save the County, its agents and employees harmless from liability of any nature or kind for the use of any copyrighted or un-copyrighted composition; secret process, patented or unpatented; invention; article or appliance furnished or used in the performance of a Contract for which the Contractor is not the patentee, assignee, licensee or owner;
- b. Protect the County against latent defective material or workmanship and to repair or replace any damages or marring occasioned in transit or delivery;
- c. Furnish adequate protection against damage to all work and to repair damages of any kind to the building or equipment, to the Contractor’s own work or to the work of other contractors, for which the Contractor’s workers are responsible;
- d. Pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the County; and
- e. Protect the County from loss or damage to County owned property while it is in the custody of the Contractor;

- f. At minimum supply all Goods or Services with the manufacturer's standard warranty, if applicable; and
 - g. For any Contract involving Services of any nature, the Contractor further agrees to:
 - i. Enter upon the performance of Services with all due diligence and dispatch, assiduously press to its complete performance, and exercise therein the highest degree of skill and competence;
 - ii. Allow Services to be inspected or reviewed by an employee of the County at any reasonable time and place selected by the County;
 - iii. Acknowledges that the County shall be under no obligation to compensate Contractor for any Services not rendered in strict conformity with the Contract; and
 - iv. Stipulates that the presence of a County Inspector shall not lessen the obligation of the Contractor for performance in accordance with the Contract requirements, or be deemed a defense on the part of the Contractor for infraction thereof. The Inspector is not authorized to revoke, alter, enlarge, relax, or release any of the requirements of any Contract. Any omission or failure on the part of the Inspector to disapprove or reject any work or material shall not be construed to be an acceptance of any such defective work or material.
- 62. PRICE REDUCTIONS:** If at any time after the date of the Bid/Contract the Contractor makes a general price reduction in the comparable price of any material covered by the Contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to any Contract for the duration of the Contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. For purpose of this provision, a "general price reduction" shall mean any horizontal reduction in the price of an article or service offered (1) to Contractor's customers generally, or (2) in the Contractor's price schedule for the class of customers, i.e., wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this Solicitation. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a "general price reduction" under this provision. The Contractor shall submit his or her invoice at such reduced prices indicating on the invoice that the reduction is pursuant to the "Price Reduction" provision of the Contract documents. The Contractor in addition will within ten (10) days of any general price reduction notify the County of such reduction by letter. FAILURE TO DO SO IS A DEFAULT UNDER THE CONTRACT AND MAY RESULT IN TERMINATION OF THE CONTRACT IN THE COUNTY'S DISCRETION. The Contractor, if requested, shall furnish, within ten (10) days after the end of the Contract period, a statement certifying either (1) that no general price reduction, as defined above, was made after the date of the Bid or Contract, or (2) if any such general price reductions were made, that as provided above, they were reported to the County within ten (10) days and the County was billed at the reduced prices. Where one or more such general price reductions were made, the statement furnished by

the Contractor shall include with respect to each price reduction (1) the date when notice of any such reduction was issued, (2) the effective date of the reduction, and (3) the date when the County was notified of any such reduction.

63. COMPLIANCE WITH IMMIGRATION LAW: Pursuant to Virginia Code § 2.2-4311.1, in every Contract the following provision applies: the Contractor does not, and shall not during the performance of the Contract, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

64. VIRGINIA STATE CORPORATION COMMISSION: Pursuant to Virginia Code § 2.2-4311.2, Any Bidder or Contractor organized as a stock or non-stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia, or as otherwise required by law, at the time of the Bid, Proposal or any response to Solicitation and during the term of the Contract and any Contract renewal. The Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required, to be revoked or cancelled at any time during the term or any renewal of the Contract. If the Contractor fails to remain in compliance with the provisions of this Section 64, the Contract may become void at the option of the County.

65. CLAIMS PROCEDURE:

- a. The procedure for consideration by the County of contractual claims for any Contract shall be that set forth in Virginia Code § 15.2-1243, *et seq.*
- b. In addition, pursuant to Virginia Code § 2.2-4364, contractual claims, whether for money or other relief, shall be submitted in writing to the County Administrator no later than sixty (60) days after final payment; however, written notice of the Contractor's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. Nothing herein shall preclude a Contract from requiring submission of an invoice for final payment within a certain time after completion and acceptance of the work or acceptance of the Goods. Pendency of claims shall not delay payment of amount agreed due in the final payment.
- c. No written decision denying a claim or addressing issues related to the claim shall be considered a denial of the claim unless the written decision is signed by the Board or the County Administrator. The contractor may not institute legal action prior to receipt of the final written decision on the claim unless the County fails to render a decision within ninety (90) days of submission of the claim. Failure of the County to render a decision within ninety (90) days shall not result in the contractor being awarded the relief claimed or in any other relief or penalty. The sole remedy for the County's failure to render a decision within 90 days shall be the contractor's right to institute immediate legal action.

- d. A Contractor may not institute legal action, prior to receipt of the County's decision on the claim, unless the County fails to render such decision within the time specified by law. A failure by the County to render a decision within the time provided by law shall be deemed a final decision denying the claim by the County.
 - e. The decision of the Board or the County Administrator shall be final and conclusive unless the Contractor appeals within six (6) months of the date of the final written decision by instituting legal action as provided in Virginia Code § 2.2-4364.
 - f. No administrative appeals procedure pursuant to Virginia Code § 2.2-4365 has been adopted for contractual claims by the County.
 - g. Nothing herein shall be construed to prevent the County from instituting legal action against any Contractor or Bidder.
- 66. NOTICES:** All written notices required or permitted under any Solicitation, Bid or Contract shall be deemed sufficient if delivered in person to the County Purchasing Agent or Bidder/Contractor, as applicable, or sent by first class mail to the County or Bidder/Contractor at the addresses set forth in the Solicitation, Bid or Contract or at such other address as a party may designate from time to time by notice given in accordance with the terms of this Section 66; except that where a Solicitation, Bid or Contract expressly requires notice to a specific individual or at a specific location, such shall control. Such notices are deemed received when actually delivered to the party or its representative or agent if hand delivered, or one (1) business day after deposited into the United States mail, if mailed.

DELIVERY

- 67. SHIPPING INSTRUCTIONS-CONSIGNMENT:** Unless otherwise specified in the Solicitation or Contract, as applicable, each case, crate, barrel, package, etc., delivered under the Contract must be plainly stenciled or securely tagged, stating the Contractor's name, purchase order number, and delivery address as indicated in the order. Where shipping containers are to be used, each container must be marked with the purchase order number, name of the Contractor, the name of the item, the item number, and the quantity contained therein. Deliveries must be made within the hours of 8:00 a.m. – 3:00 p.m. Deliveries at any other time will not be accepted unless specific arrangements have been previously made with the designated individual at the delivery point. No deliveries will be accepted on Saturdays, Sundays and holidays unless previous arrangements have been made. It shall be the responsibility of the Contractor to insure compliance with these instructions for items that are drop-shipped.
- 68. RESPONSIBILITY FOR SUPPLIES TENDERED:** The Contractor shall be responsible for the materials or supplies covered by the Contract until they are delivered

at the designated point. The Contractor shall additionally bear all risk on rejected materials or supplies after notice of rejection is tendered by the County. Rejected materials or supplies must be removed by and at the expense of the Contractor promptly after notification of rejection, unless public health and safety require immediate destruction or other disposal of rejected delivery. If rejected materials are not removed by the Contractor within ten (10) days after date of notification, the County may return the rejected materials or supplies to the Contractor at the Contractor's risk and expense or dispose of them as abandoned property.

- 69. INSPECTIONS:** The County reserves the right to conduct any test/inspection it may deem advisable to assure supplies and Services conform to the specification in the Solicitation, Bid or Contract, as applicable. Inspection and acceptance of materials or supplies will be made after delivery at destinations herein specified unless otherwise stated. Unless otherwise specified in the Contract, if inspection is made after delivery at the destination specified, the County will bear the expense of inspection except for the value of samples used in case of rejection. Final inspection shall be conclusive except in regard to latent defects, fraud or such gross mistakes as to amount to fraud. Final inspection and acceptance or rejection of the materials or supplies will be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the County for such materials or supplies as are not in accordance with the specifications.
- 70. COMPLIANCE:** Delivery must be made as ordered and in accordance with the Solicitation, Bid or Contract, as applicable, or as directed by the County when not in conflict with the Bid/Contract. The decision as to reasonable compliance with delivery terms shall be final. Burden of proof of delay in receipt of Goods by the purchaser shall rest with the Contractor. Any request for extension of time of delivery from that specified must be approved by the County, such extension applying only to the particular item or shipment affected. Unless otherwise specified in the Contract, should the Contractor be unreasonably delayed by the County, there shall be added to the time of completion a time equal to the period of such delay caused by the County. However, the Contractor shall not be entitled to claim damages or extra compensation for such delay or suspension. These conditions may vary for construction Contracts.
- 71. POINT OF DESTINATION:** All materials shipped to the County must be shipped F.O.B. DESTINATION unless otherwise stated specifically in the Solicitation, Bid or Contract, as applicable. The materials must be delivered to the "Ship To" address indicated on the purchase order or Solicitation, as applicable.
- 72. REPLACEMENT:** Materials or components that have been rejected by the County, in accordance with the terms of the Contract, shall be replaced by the Contractor at no cost to the County.
- 73. DAMAGES:** Any and all damages to property of the "County" that is the direct result of the Contractor, the employees of the Contractor and/or its subcontractors, agents, licensees, successors, or assigns, shall be the sole responsibility of the Contractor. The

property shall be repaired to its last known condition prior to the damages and/or replaced at no cost to the County. The County shall approve any and all repairs/replacements prior to acceptance of the repairs/replacement.

74. PACKING SLIPS OR DELIVERY TICKETS: All shipments shall be accompanied by Packing Slips or Delivery Tickets and shall contain the following information for each item delivered:

- a. Purchase Order Number;
- b. Name of Article and Stock Number;
- c. Quantity Ordered;
- d. Quantity Shipped;
- e. Quantity Back Ordered; and
- f. The Name of the Contractor.

Contractors are cautioned that failure to comply with these conditions shall be considered sufficient reason for refusal to accept the Goods.

75. ADDITIONAL CHARGES: No delivery charges of any kind shall be added to any invoice; except that (i) if Goods are expressly bought F.O.B. "shipping point" under the Contract and the Contractor prepays transportation, then delivery charges shall be added to invoices; and (ii) if express delivery is authorized and substituted by the County on orders for the method specified in the Contract, then the difference between freight or mail and express charges may be added to invoice.

76. METHOD AND CONTAINERS: Unless otherwise specified, Goods shall be delivered in commercial packages in standard commercial containers, so constructed as to ensure acceptance by common or other carrier for safe transportation to the point of delivery. Containers become the property of the County unless otherwise specified by bidder.

VENDOR DATA SHEET

Note: The following information is required as part of your response to this solicitation. Failure to complete and provide this sheet may result in finding your bid nonresponsive.

1. Qualification: The vendor must have the capability and capacity in all respects to satisfy fully all of the contractual requirements.

2. Vendor's Primary Contact:

Name: Kevin Sandridge Phone: 434-953-5153

3. Years in Business: Indicate the length of time you have been in business providing this type of good or service;

11 Years 4 Months

4. Vendor Information:

FIN or FEI Number: 27-3187193 If Company, Corporation, or Partnership

5. Indicate below a listing of at least four (4) current or recent accounts, either commercial or governmental, that your company is servicing, has serviced, or has provided similar goods. Include the length of service and the name, address, and telephone number of the point of contact.

Company: Henrico County Virginia	Contact: Dave Wood
Phone: 804-349-2213	Email: woo36@co.henrico.va.us
Dates of Service: 3-25-2020	\$\$ Value: \$2,799,206.00

Company: Goochland County, VA	Contact: Wanda Tomey
Phone: 804-556-5802	Email: wtomey@goochlandva.us
Dates of Service: 8-12-21	\$\$ Value: \$1,400,577.00

Company: County of Albemarle, VA	Contact: Chip Walker
Phone: 434-825-8432	Email: jwalker2@albemarle.org
Dates of Service: 8-3-21	\$\$ Value: \$886,125.00

Company: Louisa County, VA	Contact: Fire Chief Robert Dube
Phone: 540-967-3491	Email: rdube@louisa.org
Dates of Service: 1-7-21	\$\$ Value:

I certify the accuracy of this information.

Signed: 1-12-22  Title: Vice President Date: _____

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment A)

PROOF OF AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

THIS FORM MUST BE SUBMITTED WITH YOUR PROPOSAL/BID. FAILURE TO INCLUDE THIS FORM MAY RESULT IN REJECTION OF YOUR PROPOSAL/BID

Pursuant to Virginia Code §2.2-4311.2, an Offeror/Bidder organized or authorized to transact business in The Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its proposal/bid the identification number issued to it by the State Corporation Commission ("SCC"). Any Offeror/Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its proposal/bid a statement describing why the Offeror/Bidder is not required to be so authorized. Any Offeror/Bidder described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the County Administrator, as applicable. If this quote for goods or services is accepted by the County of Fluvanna, Virginia, the undersigned agrees that the requirements of the Code of Virginia Article IV.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applies and providing the requested information. **PLEASE NOTE: The SCC number is NOT your federal ID number or business license number.**

A. ☒ Offeror/Bidder is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is 07262991.

B. ☐ Offeror/Bidder is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is _____.


C. ☐ Offeror/Bidder does not have an Identification Number issued to it by the SCC and such vendor is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

Please attach additional sheets if you need to explain why such Offeror/Bidder is not required to be authorized to transact business in Virginia.

Legal Name of Company (as listed on W-9) AtlantiE Emergency Solutions

Legal Name of Offeror/Bidder AtlantiE Emergency Solutions

Date 01/13/2022

Authorized Signature 

Print or Type Name and Title Jack Jackson, Secretary

PLEASE RETURN THIS PAGE WITH BID SUBMISSION (Attachment B)

CERTIFICATION OF NO COLLUSION

The undersigned, acting on behalf of Atlantic Emergency Solutions, does hereby certify in connection with the procurement and bid to which this Certification of No Collusion is attached that:

This bid is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce; nor is this bid the result of, or affected by, any act of fraud punishable under Article 1.1 of Chapter 12 of Title 18.2 Code of Virginia, 1950 as amended (&&18.2-498.1 et seq.)

[Signature], Secretary
Signature of Company Representative

Atlantic Emergency Solutions
Name of Company

01/13/2022
Date

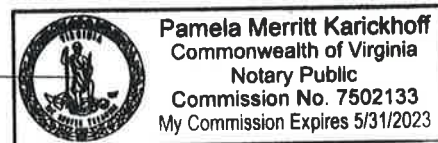
ACKNOWLEDGEMENT**STATE OF VIRGINIA**

York ~~FLUVANNA~~ COUNTY, to wit:

The foregoing Certification of No Collusion bearing the signature of Jack Jackson and dated January 13, 2022 was subscribed and sworn to before the undersigned notary public by Pamela Merritt Karickhoff on January 13, 2022.

[Signature]
Notary Public

My commission expires: May 31, 2023

**CODE OF VIRGINIA**

& 18.2-498.4. Duty to provide certified statement:

A. The Commonwealth, or any department or agency thereof, and any local government or any department or agency thereof, may require that any person seeking, offering or agreeing to transact business or commerce with it, or seeking, offering or agreeing to receive any portion of the public funds or moneys, submit a certification that the offer or agreement or any claim resulting thereon is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce, or any act of fraud punishable under this article.

B. Any person required to submit a certified statement as provided in paragraph A, above who knowingly makes a false statement shall be guilty of a Class 6 felony. (1980, c.472)

a false statement shall be guilty of a Class 6 felony. (1980, c.472)

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment C)

OFFEROR STATEMENT

Undersigned Bidder hereby certifies that he/she has carefully examined all conditions and specifications of this invitation for Bid and hereby submits this bid pursuant to such instructions and instructions.

Jack Jackson, Secretary

Type or Print Name & Title of Authorized Person

[Signature]

Signature of Authorized Person Submitting This Bid

01/13/2022

Date

SUBSCRIBED AND SWORN to before me by the above named

Jack Jackson on the 13 day of January, 2013 2022

Pamela Merritt Karickhoff

Notary Public in and for the State of Virginia

My commission expires: May 31, 2022



Pamela Merritt Karickhoff
Commonwealth of Virginia
Notary Public
Commission No. 7502133
My Commission Expires 5/31/2022

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment D)

KNOW ALL MEN BY THESE PRESENT:

That, _____ the Contractor ("Principal") whose principal place of business is located at _____ and _____ ("Surety") are held and firmly bound unto the County of Fluvanna, Virginia, the Owner ("Obligee") in the amount of Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated the ____ day of _____, 20__ entered into a contract with Obligee for which contract (the "Contract") is by reference expressly made a part hereof;

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly and faithfully perform said Contract in strict conformity with the plans, specifications and conditions of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Provided, that any alterations which may be made in the terms of the Contract, or in the Work to be done under it, or the giving by the Obligee of any extension of the time for the performance of the Contract, or any other alterations, extensions or forbearance on the part of either or both of the Obligee or the Principal to the other shall not in any way release the Principal and the Surety, or either of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety of any such alterations, extension, or forbearance being hereby waived.

No action shall be brought on this bond unless brought within one year after: (a) completion of the Contract and all Work thereunder, including expiration of all warranties and guarantees, or (b) discovery of the defect or breach of warranty or guarantee if the action be for such. The Surety represents to the Principal and to the Obligee that it is legally authorized to do business in the Commonwealth of Virginia. Exclusive venue and jurisdiction for any dispute arising hereunder shall be in the courts of the County of Fluvanna, Virginia.

Signed and sealed this ____ day of _____, 20__ .

Principal

Surety (must be signed by a Virginia Resident Agent of Surety)

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

Address: _____

Approved as to form:

Fluvanna County Attorney

Bond No.: _____

AMENDMENT No. 1 to CONTRACT No. FS12-19**For**

Fire Service Apparatus (All Types)

Between**HOUSTON-GALVESTON AREA COUNCIL****And****Siddons Martin Emergency Group LLC**

THIS AMENDMENT modifies the above referenced Contract as follows:

This contract is extended through May 31, 2022 Midnight CT.

Unless otherwise noted, this amendment goes into effect on the date signed by **H-GAC**. All other terms and conditions of this Contract shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized representatives.

Signed for **Houston-Galveston Area Council**,
Houston, Texas

DocuSigned by:



82EC270D5D61423...

Chuck Wemple, Executive Director

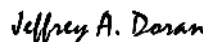
8/30/2021

Date: _____

Signed for: **Siddons Martin Emergency Group LLC**

Printed Name & Title:

DocuSigned by:



B2D885F9B5D14E7...

Jeffrey A. Doran Director - Order Mngement

8/27/2021

Date: _____

AMENDMENT No. 1 to CONTRACT No. FS12-19**For**

Fire Service Apparatus (All Types)

Between**HOUSTON-GALVESTON AREA COUNCIL****And****Pierce Manufacturing, Inc.**

THIS AMENDMENT modifies the above referenced Contract as follows:

This contract is extended through May 31, 2022 Midnight CT.

Unless otherwise noted, this amendment goes into effect on the date signed by **H-GAC**. All other terms and conditions of this Contract shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized representatives.

Signed for **Houston-Galveston Area Council**,
Houston, Texas

DocuSigned by:




Chuck Wemple, Executive Director

9/1/2021

Date:

DocuSigned by:



Jeff Trelka Vice President, Finance

Signed for: **Pierce Manufacturing, Inc**

Printed Name & Title:

9/1/2021

Date:



HOUSTON-GALVESTON AREA COUNCIL

January 6, 2021

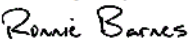
Mr. Jeffrey A. Doran
Director of Order Management
Siddons Martin Emergency Group, LLC
1362 East Richey
Houston, TX 77073

RE: Contract Changes on Contract FS12-19 for the Supply of Fire Service Apparatus (All Types)

Dear Mr. Doran:

The Houston-Galveston Area Council has reviewed your request for contract changes in the above referenced contract (see attachments). We have determined that the changes are reasonable and conform to the provisions of the contract. Therefore, the request is approved.

Sincerely,

DocuSigned by:

D3E2DDD166F2488...

Ronnie O. Barnes
Director of Public Services

ROB/sh

Enclosures

Date: January 4, 2021
To: Brian Denzel
From: Bill Burton
RE: **Contract Change Request**
Siddons Martin Emergency Group LLC – Contract #FS12-19

Siddons Martin Emergency Group LLC, in correspondence of December 22, 2020 has requested their contract be amended to reflect product updates published February 2021.

Staff has reviewed the request and determined it to be in accordance with applicable contract requirements. The new pricing is 4.85% higher and reflects latest 2021 model year pricing. Approval is recommended.

Please advise if and when request is approved so that we may advise appropriate staff and arrange for website update.

WEB
Attachments



HOUSTON-GALVESTON AREA COUNCIL

January 6, 2021

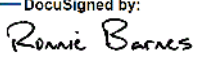
Mr. Jeffrey A. Doran
Director of Order Management
Siddons Martin Emergency Group, LLC
1362 East Richey
Houston, TX 77073

RE: Contract Changes on Contract FS12-19 for the Supply of Fire Service Apparatus (All Types)

Dear Mr. Doran:

The Houston-Galveston Area Council has reviewed your request for contract changes in the above referenced contract (see attachments). We have determined that the changes are reasonable and conform to the provisions of the contract. Therefore, the request is approved.

Sincerely,

DocuSigned by:

D3E2DDD166F2488...
Ronnie O. Barnes
Director of Public Services

ROB/sh

Enclosures

Date: January 4, 2021
To: Brian Denzel
From: Bill Burton
RE: **Contract Change Request**
Siddons Martin Emergency Group LLC – Contract #FS12-19

Siddons Martin Emergency Group LLC, in correspondence of December 22, 2020 has requested their contract be amended to reflect product updates published February 2021.

Staff has reviewed the request and determined it to be in accordance with applicable contract requirements. The new pricing is 4.85% higher and reflects latest 2021 model year pricing. Approval is recommended.

Please advise if and when request is approved so that we may advise appropriate staff and arrange for website update.

WEB
Attachments

Burton, William

From: Jeff Doran <jdor@sidons-martin.com>
Sent: Tuesday, December 22, 2020 4:31 PM
To: Burton, William
Cc: Denzel, Brian; Palmer, Jackie
Subject: Pierce Price Increase
Attachments: Siddons-Martin 2021 HGAC FS12-19 Price increase 2020-12-22.pdf; 2021 HGAC Buy Board and LaMas Pricing Increase SIGNED LETTER.pdf; HGAC 2021 Price Increase 2020-12-21.xlsx

Categories: Red Category

CAUTION: This message originated outside of H-GAC. Please do not click links or open attachments unless you recognize the source and know the content is safe. Report any suspicious email using the Phish Alert button.

Please see attached documents for the upcoming Pierce price increase effective February 1, 2021.

Let me know if you need any additional documentation relating to the request.

Everything with Orders and confirmations has been going great lately, we truly appreciate everyone's hard work and dedication.

Hope you all have a Merry Christmas,

Thank you,
Jeff

Jeffrey A. Doran
Director - Order Management
1-800-784-6806
281-543-7031 Cell
www.siddons-martin.com

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.



December 22, 2020

HGAC

Mr. William Burton
3555 Timmons
Houston, Texas 77027

2021 Pierce Price Increase

As the Texas licensed dealer for Pierce Manufacturing Inc./Oshkosh on **H-GAC Contract Bid FS12-19**, please accept this letter as a formal request to increase the contract pricing on all base models and published options content effective February 1, 2021.

This request is related to an increase in materials costs, component vendor products price increases and production time extensions over previous years. Current build times have been extended near 9 to 14 months depending on the product due to the pandemic and component supply delivery extensions. We will continue to review our vendor pricing, delivery schedules and offer any pricing decrease during the contract period if applicable.

Thank you for your consideration and action on this request.

Please contact me at 1-800-784-6806 or 281-543-7031 if you have any questions or need further information.

Sincerely

Jeffrey A. Doran

Jeffrey A. Doran
Director - Order Management

**Siddons-Martin Emergency Group, LLC
1362 East Richey
Houston, TX 77073
1-800-784-6806**

PIERCE MANUFACTURING INC.

BOS 2022-01-19 p.806/1306

AN OSHKOSH CORPORATION COMPANY • ISO 9001 CERTIFIED

2600 AMERICAN DRIVE
POST OFFICE BOX 2017
APPLETON, WISCONSIN 54912-2017
920-832-3000 • FAX 920-832-3208
www.piercemfg.com



December 22, 2020

Siddons-Martin Emergency Group, LLC
Pat Siddons and Leon Martin Jr.
14233 Interdrive West
Houston, TX 77032

Dear Mr. Siddons and Mr. Martin:

As the licensed dealer in Louisiana, Nevada, New Mexico, Texas and Utah for Pierce Manufacturing Inc. on both H-GAC Contract Bid FS12-19, and Buy Board Contract 571-18, this letter is to inform you of the 2021 price increase of approximately 4.85% on all Pierce products effective February 1, 2021.

Pierce Manufacturing Inc. evaluates pricing continually throughout the year with product suppliers to control pricing as available. Adjustments are based on several economic factors as well as material costs, component vendor pricing, wages, and health care. Our sales and manufacturing build process of 9-14 months requires us to forecast costs over a long term. The decision to implement a price increase to mitigate these long-term impacts is made with careful consideration.

If you have questions relative to this information, please contact me at (920) 832-3000.

Respectfully,

A handwritten signature in blue ink, appearing to read "Michael DuFrane", is written over a light blue horizontal line.

Michael DuFrane
Vice President, Sales & Marketing
Pierce Manufacturing Inc.

F. Airport Rescue Fire-Fighting Vehicles		2021 Updated Pricing
FS19UF01	Oshkosh Striker 4x4, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (375/750 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (1500 gal.), Foam Tank Capacity (210 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$834,809.00
FS19UF02	Oshkosh Striker 6x6, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (3000 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$898,242.00
FS19UF03	Oshkosh Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQA, Single Stage Centrifugal, 1950 gpm at 240 psi)	\$1,048,535.00
FS19UF04	Oshkosh New Generation Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi), dual engine driveline	\$1,215,945.00
FS19UF05	Oshkosh Stinger Class 2 ARFF vehicle; 2-Door Ford 4x4 F550 Cab/chassis, 2 Passenger Seating, Bumper Turret, one (1) twin agent handline, Water Tank Capacity (300 gal.), Foam Tank Capacity (40 gal.), Dry Chemical 500 pounds.	\$353,488.00
FS19UF06	Oshkosh H-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 50,000 GVWR, Single Axle	\$355,483.00
FS19UF07	Oshkosh HT-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 55,000 GVWR, Single Axle	\$410,225.00
FS19UF08	Oshkosh P-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 51,000 GVWR, Single Axle	\$312,991.00
V. Pierce		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19VA01	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$896,731.00
FS19VA02	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$931,959.00
FS19VA03	Pierce Enforcer Chassis 4-Door 75' Aluminum Rear Mounted Telescoping Ladder, Formed Aluminum Body	\$881,793.00
FS19VA04	Pierce Arrow Chassis 4-Door 100' Aluminum Rear Mount Aerial, Aluminum Body, Tandem Axle	\$1,181,318.00
FS19VA05	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Rear-Mounted Telescoping Ladder	\$995,504.00
FS19VA06	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 107' Rear-Mounted Telescoping Ladder	\$1,043,437.00
FS19VA07	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 110' Rear-Mounted Telescoping Platform	\$1,095,017.00
FS19VA08	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 105' Rear-Mounted Telescoping Ladder (500#)	\$1,044,283.00
FS19VA09	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	\$1,386,599.00

FS19VA10	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Rear-Mounted Telescoping Ladder with Platform (750#)	\$1,315,704.00
FS19VA11	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Tractor Drawn - Mid-Mounted Telescoping Ladder (#500)	\$1,327,786.00
B. Wildland Fire Apparatus (Brush Fire)		
FS19VB01	Pierce Brush Fire Apparatus, Ford F450, Formed Aluminum Utility Body	\$145,605.00
FS19VB02	Pierce Brush Fire Apparatus, Ford F-550 Mini Pumper 500 gpm, 300 tank	\$225,803.00
FS19VB03	Freightliner 4-Door 4 x 4 Wildland, 500 water, 1000 gpm Pump	\$381,906.00
C. Pumper Fire Apparatus		
FS19VC01	M2 Freightliner, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$277,201.00
FS19VC02	IHC, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$286,400.00
FS19VC03	KW, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$280,129.00
FS19VC04	Peterbilt, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$289,319.00
FS19VC05	Pierce Saber 4- Door Full Tilt Aluminum Cab, Ford Engine, Aluminum Body, 1250 gpm, mid-mounted Pump	\$424,457.00
FS19VC06	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$478,284.00
FS19VC07	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$530,667.00
FS19VC08	Pierce Velocity, 4- Door Full Tilt Cab, Aluminum Long Body, 1250 gpm mid-mounted Pump	\$606,647.00
FS19VC09	Pierce Dash CF, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, PUC Body Pumper	\$674,946.00
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19VD01	Ford F-550 4- Door, 12 'Non-Walk-in Formed Aluminum Body	\$161,755.00
FS19VD02	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$218,441.00
FS19VD03	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$220,384.00
FS19VD04	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$213,947.00
FS19VD05	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$225,380.00
FS19VD06	Pierce Saber FR, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Encore Body 18.5'	\$415,912.00
FS19VD07	Pierce Enforcer 4-Door, Aluminum Cab, Single Axle, Formed Aluminum Body, Non Walk-in HDR Body	\$535,557.00
FS19VD08	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Non-Walk-in HDR Body	\$639,536.00
FS19VD09	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$314,977.00
FS19VD10	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$317,620.00

FS19VD11	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$312,502.00
FS19VD12	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$319,978.00
FS19VD13	Pierce Enforcer 4-Door, Full Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-in HDR Body	\$641,716.00
FS19VD14	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in HDR Body	\$738,751.00
FS19VD15	Pierce Velocity 2-Door, Aluminum Cab, Tandem Axle, Combination Formed Aluminum Body	\$783,656.00
FS19VD16	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in Communications Body	\$814,594.00
E. Pumper/Tankers & Tankers		
FS19VE01	Freightliner 2 Door, Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,692.00
FS19VE02	IHC 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$292,562.00
FS19VE03	Kenworth 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,900.00
FS19VE04	Peterbilt 2dr Single Axle Tanker, Aluminum w/2000 water & 500 pump	\$318,265.00
FS19VE05	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted	\$533,395.00
FS19VE06	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted	\$626,487.00
FS19VE07	Freightliner 2dr, Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$319,685.00
FS19VE08	IHC 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$332,494.00
FS19VE09	Kenworth 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$308,869.00
FS19VE10	Peterbilt 2dr Tandem Axle Tanker, Aluminum w/3000 water & 500 pump	\$320,587.00
FS19VE11	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$531,620.00
FS19VE12	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$646,141.00
FS19VE13	Pierce Velocity, 4-Door Aluminum Cab, Tandem Axle, Aluminum Pumper/Tanker 2000 Gallon Body, 1500 GPM Pump	\$660,849.00



April 21, 2021

HGAC

Mr. William Burton
3555 Timmons
Houston, Texas 77027

2021 Pierce Commodity Surcharge

As the franchised licensed dealer for Pierce Manufacturing Inc./Frontline/Oshkosh on **H-GAC Contract Bid FS12-19 and HGAC Contract AM10-20**, please accept this letter as a formal request to implement the Materials Surcharge as has been presented by Pierce Manufacturing effective June 1, 2021.

This request is related to an increase in raw materials costs to Pierce, Frontline and Oshkosh as well component vendor products price increases due to the commodity cost increase. Current build times are currently 10 to 14 months depending on the product due to the pandemic and component supply delivery extensions. We will continue to review our raw materials and vendor pricing, delivery schedules and offer any surcharge decreases during the contract period if and when the costs decrease.

The increase per vehicle type varies based on the raw material usage so a fix percentage is difficult to project. We would like to show the Materials surcharge per vehicle as a line item on the spreadsheet as we have done in previous years.

Thank you for your consideration and action on this request.

Please contact me at 1-800-784-6806 or 281-543-7031 if you have any questions or need further information.

Sincerely

Jeffrey A. Doran

Jeffrey A. Doran
Director - Order Management

May 03, 2021

Re: Siddons -Martin 2021 HGAC FS12-19 Material Surcharge

The documented reasonable surcharges are approved to be added on the HGAC pricing worksheet.

BRIAN DENZEL

Manager Cooperative Purchasing
Houston-Galveston Area Council
3555 Timmons Lane, Suite 120
Houston, TX 77027
Mailing Address: P.O. Box 22777
Houston, TX 77227
Direct 832-681-2554
HgacBuy.org

Fire Apparatus Purchase #2:

Contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a Pierce 2000 Gallon Dryside Tanker totaling \$484,771.

This Purchase Agreement No. 2 (together with all attachments and exhibits referenced herein, the “**Agreement**”), dated this ____ day of January, 2022, made and entered into by and between Atlantic Emergency Solutions, Inc., a Virginia corporation (“**Atlantic**”), and Fluvanna County, a political subdivision of the Commonwealth of Virginia (“**Customer**”) is effective as of the date specified in Article 3 hereof.

1. **Definitions.** The words below when used in this Agreement are defined as follows:

- a. “**Cooperative Agreement**” means collectively Exhibits 1, 2, and 3 to this Agreement (as defined in Article 2 below).
- b. “**County’s General Terms**” means Exhibit 9 to this Agreement (as defined in Article 2 below).
- c. “**Atlantic Proposal**” means collectively the *Cooperative Agreement*, *Proposal Letter* (being Exhibit 4 hereto), *Proposal* (being Exhibit 7 hereto), *Worksheet* (being Exhibit 5 hereto), *Proposal Options* (being Exhibit 6 hereto), and *Warranties* (being Exhibit 8 hereto), each exhibit being more specifically defined in Article 2 below.
- d. “**Options**” means all those options and additional features, services, work and items set forth or listed in Exhibit 5 (the “*Worksheet*”), Exhibit 6 (the “*Proposal Options*”) or Exhibit 7 (the “*Proposal*”), to this Agreement.
- e. “**Specifications**” means all of the general and particular *Specifications*, warranties, technical *Specifications*, training, and testing requirements for the Product contained in the *Atlantic Proposal* for the *Products* and services being provided to *Customer* under this Agreement and *Specifications* shall include all provisions and requirements under the *Cooperative Agreement*, *Warranty*, and the *County’s General Terms*.
- f. “**Product**” means the fire apparatus and any associated equipment manufactured or furnished for the *Customer* by *Atlantic* pursuant to the *Atlantic Proposal* and consistent with all requirements of the *Atlantic Proposal* and the *Specifications*, and specifically including all *Options*, as defined below, and delivery of Product to the *Customer* in Fluvanna County, Virginia along with at minimum one (1) day new delivery training and all training as set out in the *Atlantic Proposal* (the “*Training*”) or more training at a time and place convenient for the *Customer* in the *Customer’s* reasonable discretion and three engineering trips for three (3) department personnel (the “*Factory Trips*”) as set out in the *Proposal Letter*. Also included with the Product are those options, items, events, training, factory trips, airfare, meals, lodging and allowances set forth in the *Atlantic Proposal*, *Options* and *Worksheet* (as set out in Exhibit 5). *Options*, *Training*, *Factory Trips* and *Delivery* of Product are material parts of the Product under this Agreement.
- g. “**Delivery**” means the date *Atlantic* is prepared to make physical possession of the Product available to the *Customer* in Fluvanna County, Virginia at the following address: 14567 James Madison Hwy, Palmyra, VA 22963. **In any event Delivery and Training must occur no later than 17 months’ from the Agreement’s Effective Date, as defined below. Time is of the essence.**
- h. “**Acceptance**” The *Customer* shall have thirty (30) calendar days of *Delivery* or thirty (30) calendar days of completion of *Training*, whichever is later, to inspect the Product for conformance with the *Specifications*; unless the *Customer* sends *Atlantic* a Notice of Defect within thirty (30) calendar days of *Delivery* or the completion of *Training*, whichever is later, the Product will be deemed to be in conformance with the *Specifications* and accepted by the *Customer* excepting latent material defects. Nothing herein is intended to limit any repair, service or equipment covered under a *Warranty* (as defined below).
- i. “**Warranty**” means any and all warranties required under the *Cooperative Agreement*, *Atlantic Proposal*, including specifically the *Warranties* (as defined in Article 2), and the *County’s General Terms* (Exhibit 9).
- j. “**Purchase Agreement No. 1**” that Purchase Agreement No. 1 entered into on even date herewith between the *Customer* and *Atlantic* for purchase of a Lake Monticello Pierce Aerial Tower as more specifically set forth therein. Certain exhibits to this Agreement are identical to exhibits attached

to Purchase Agreement No.1 and for efficiency are incorporated by reference instead of attaching them repetitively to this related Agreement.

2. Exhibits: The following exhibits are attached to that Purchase Agreement No. 1 and incorporated herein by reference as material provisions of this Agreement:

- a. Exhibit 1 (being Exhibit 1 to Purchase Agreement No 1): Fire Service Apparatus (All Types) Contract No FS12-19 between Houston-Galveston Area Council of Governments (“HGAC”) and *Atlantic* Emergency Solutions, Inc., dated October 25, 2019, as amended by that Amendment No. 1 to Contract No. FS12-19 for Fire Service Apparatus (All Types) dated October 4, 2021, which extended the term through May 31, 2022, and as further amended by Exhibit 12.
- b. Exhibit 2 (being Exhibit 2 to Purchase Agreement No 1): HGAC solicitation for fire service apparatus (all types) FS12-19 issued June 27, 2019, including all suffixes, exhibits, attachments and amendments thereto (the “Solicitation”);
- c. Exhibit 3 (being Exhibit 3 to Purchase Agreement No 1): *Atlantic* Response to FS12-19, including, but not limited to, prices and options offered and all suffixes, exhibits, attachments and amendments thereto (the “Bid”) (**Atlantic’s pricing in this Exhibit 3 is proprietary and Atlantic requests that the pricing in Exhibit 3 be redacted from published versions of this Agreement**);
- d. Exhibit 10 (being Exhibit 10 to Purchase Agreement No 1): Vendor Data Sheet, Proof of Authority to Transact Business in Virginia, Certificate of No Collusion, and Offeror Statement (collectively the “Vendor Forms” executed by *Atlantic*); and
- e. Exhibit 12 (being Exhibit 12 to Purchase Agreement No 1): Amendment No 1 to Siddons Martin Emergency Group, LLC, (“Siddons”) agreement with HGAC under the Solicitation, Amendment No 1 to Pierce Manufacturing, Inc, (“Pierce”) agreement with HGAC under the Solicitation, those Contract Changes on Contract FS12-19 for the Supply of Fire Service Apparatus (All Types) letters both dated January 6, 2021, that letter from Siddons and Pierce to HGAC dated April 21, 2021, and that letter from HGAC to Siddons related to “Siddons-Martin 2021 HGAC FS12-19 Material Surcharge” dated May 3rd, 2021 (together the “Pricing Amendments”).

The following exhibits are attached hereto and incorporated herein as material provisions of this Agreement:

- f. Exhibit 4: Proposal Letter from *Atlantic* Emergency Solutions, the *Atlantic* authorized sales and service dealership in Virginia, dated December 8, 2021 (the “Proposal Letter”);
- g. Exhibit 5: Contract Pricing Worksheet dated December 2, 2021 (the “Worksheet”).
- h. Exhibit 6: Proposal Option List dated December 8, 2021 for the Palmyra FL Dryside Tanker (the “Proposal Options”);
- i. Exhibit 7: *Atlantic* Emergency Solutions Proposal to Palmyra Volunteer Fire Company (the “Proposal”);
- j. Exhibit 8: Product Warranty Information (the “Warranties”);
- k. Exhibit 9: Fluvanna County’s General Terms, Conditions and Instructions to Bidders and Contractors (the “County’s General Terms”); and
- l. Exhibit 11: **Performance Bond (to be provided by *Atlantic*).**

3. Purpose. This Agreement sets forth the terms and conditions of *Atlantic*’s sale of the Product to the *Customer*.

4. Cooperative Procurement. Pursuant to the Virginia Public Procurement Act, this a cooperatively procured contract off of the *Cooperative Agreement* for fire apparatus, incorporated herein by reference and made a material art of this Agreement. The Product must meet or exceed all requirements of the *Cooperative Agreement* and *Atlantic* must meet or exceed all requirements, provisions and terms of the *Cooperative Agreement* relating to the *Products* to be provided hereunder. Notwithstanding any other provisions hereof, *Atlantic* represents and warrants that all pricing in this Agreement for the *Products* is

consistent with or lower than the pricing set forth in the *Cooperative Agreement* and all *Products* purchased hereunder are available under the *Cooperative Agreement*. **Atlantic represents and warrants to Customer that: (i) all pricing offered to Customer is consistent with or less than the pricing under the Cooperative Agreement between Atlantic and HGAC, as amended from time to time, under the Solicitation; and (ii) further its Bid was a joint bid with Siddons and Pierce and that Atlantic is bound by Pricing Amendments entered into by Siddons and Pierce, and that the pricing in Atlantic's Cooperative Agreement with HGAC has been amended consistent with the Pricing Amendments.** Customer is materially relying on such representations and warranties in executing this Agreement as a cooperative procurement pursuant to Virginia law.

5. Term of Agreement. This Agreement will become effective as soon all of the following have occurred: (i) it is signed and approved by both *Customer* and *Atlantic's* authorized representatives (the “**Effective Date**”). This Agreement shall continue in full force and effect until the Completion Date or until sooner terminated consistent with the provisions hereof. Notwithstanding the foregoing, all training, continuing, guarantee and warranty provisions of this Agreement, included the *Warranty* as defined above, shall survive the Competition Date and shall continue for the specific warranty period beginning on the Completion Date until the applicable warranty period expires. Any and all provisions that by their terms are intended or implied to survive the Completion Date shall so survive.
6. Purchase and Payment. The *Customer* agrees to purchase the Product made pursuant to this Agreement, *the Atlantic Proposal* and the *Specifications*, with such Product being delivered and made consistent with all requirements of the *Cooperative Agreement* and the *County's General Terms*, for the total purchase price of **FOUR HUNDRED EIGHTY-FOUR THOUSAND SEVEN HUNDRED SEVENTY-ONE AND NO/100 DOLLARS (\$484,771.00) (“Purchase Price”)**. Prices are in U.S. funds. The Purchase Price reflects a prepayment discount which requires the *Customer* to prepay THREE HUNDRED NINETY-EIGHT THOUSAND FOUR HUNDRED TEN AND NO/100 DOLLARS \$398,410.00 (the “Prepayment”) of the Purchase Price to *Atlantic* by the later of (i) within fourteen (14) days of the *Effective Date* (*Proposal Letter states 10 days, but Atlantic agrees this Agreement modifies the same*); (ii) within five (5) days of the closing of that equipment financing (the “*Financing*”) from which the Customer will obtain the funds for making the payments under this Agreement which is anticipated to close February 2, 2022; or (iii) the date the Performance Bond is delivered by *Atlantic* to Customer.. The remainder of the Purchase Price, being **\$86,361.00**, may be invoiced by *Atlantic* to the County only after the *Completion Date*, as defined below, and the County shall have forty-five (45) days to pay such proper invoice. Final payment shall be made in accordance with Section 47 “*Payment*” of the *County's General Terms*, and in no event shall *Atlantic* be finally paid prior to the *Completion Date*. The date that all *Products* are delivered and are fully operational and all services and work related to the *Products* or necessary for completion of the *Products* in full compliance with this Agreement and all requirements of this Agreement are satisfied, to the sole satisfaction of the County is the “**Completion Date**”. ***Atlantic shall deliver to the Customer at Agreement execution a Performance Bond from a in a form acceptable to the Customer from a Virginia surety company for the full Purchase Price. A form of performance bond acceptable to the Customer is attached as Exhibit 11.***
7. Future Changes. Various state or federal regulatory agencies (e.g. NFPA, DOT, EPA) may require changes to the *Specifications* and/or the Product and in any such event any resulting actual cost increases, without mark-up of any kind, incurred to comply therewith will be added to the Purchase Price to be paid by the *Customer*. *Atlantic* will document and itemize any such price increases for the *Customer*. If *Customer* fails to appropriate such additional funds, then the *Customer* may terminate this Agreement for cause and shall have no further liability of any kind hereunder and no cancellation charges of any kind shall apply; and any amounts prepaid to *Atlantic* shall be refunded to the *Customer* within ten (10) days of such termination. If such prepayment is not refunded within ten (10) days, a late fee of \$50.00 per day shall accrue for every day that such payment is delinquent.

8. Agreement Changes. The *Customer* may request that *Atlantic* incorporate a change to the *Products* or the *Specifications* for the *Products* by delivering a change order to *Atlantic*; provided, however, that any such change order must be in writing and include a description of the proposed change sufficient to permit *Atlantic* to evaluate the feasibility of such change (“Change Order”). Within seven (7) business days of receipt of a Change Order, *Atlantic* will inform the *Customer* in writing of the feasibility of the Change Order, the earliest possible implementation date for the Change Order, of any increase or decrease in the Purchase Price resulting from such Change Order, and of any effect on production scheduling or *Delivery* resulting from such Change Order. *Atlantic* shall not be liable to the *Customer* for any delay in performance or *Delivery* arising from any such Change Order unless the delay is caused by the fault, willful act or negligence of *Atlantic*. A Change Order is only effective when counter-signed by *Atlantic*’s authorized representative; except that *Atlantic* may not unreasonably withhold or delay approval and signature of any Change Order.
9. Cancellation/Termination. In the event this Agreement is cancelled or terminated by Customer without cause and solely for Customer’s convenience before completion, *Atlantic* may charge a cancellation fee. The following cancellation fee charge schedule based on costs incurred may be applied: (a) 10% of the Purchase Price after the Effective Date; (b) 20% of the Purchase Price after completion of approval drawings, and; (c) 30% of the Purchase Price upon substantial material requisition. The cancellation fee will increase accordingly as actual costs are incurred as the order progresses through engineering and into manufacturing. Notwithstanding the foregoing, the cancellation fee may never exceed actual costs incurred by *Atlantic* under the Agreement up to cancellation or termination date and *Atlantic* must use its best efforts to mitigate any such costs through the sale of such Product to another purchaser; however Customer shall remain liable for the difference between the Purchase Price and, if applicable, the sale price obtained by *Atlantic* upon sale of the Product to another purchaser, plus any actual and reasonable costs incurred by *Atlantic* to conduct any such sale.
10. Delivery, Inspection and Acceptance.
- (a) Delivery. *Delivery* of the Product is scheduled to be within 17 months’ after the Effective Date. Time being of the essence. Risk of loss shall pass to *Customer* upon *Delivery* of the Product to the *Customer* at Customer location with prior noticed of the *Delivery* Date and time provided to *Customer* in advance.
- (b) Inspection and Acceptance. From *Delivery* or the completion of Training, whichever occurs later, *Customer* shall have thirty (30) days within which to inspect the Product for conformance to the *Specifications*, and in the event of non-conformance to the *Specifications* to furnish *Atlantic* with written notice sufficient to permit *Atlantic* to evaluate such non-conformance (“Notice of Defect”). Any Product not in conformance to *Specifications* shall be remedied by *Atlantic* within thirty (30) days from the Notice of Defect. In the event *Atlantic* does not receive a Notice of Defect within thirty (30) days of *Delivery* or the completion of Training, whichever is later, Product will be deemed to be in conformance with *Specifications* and Accepted by *Customer*, excepting latent defects. In the event that *Atlantic* fails to remedy a defect within thirty (30) days as required under this Agreement, *Customer* may choose to: (1) Reject the Product in its entirety and receive a complete reimbursement of any and all payments made to *Atlantic* under this agreement, *Atlantic* shall also be required at its sole cost and expense to remove the non-confirming Product from Kents Store, Virginia, and this Agreement shall be deemed null and void and of no further force and effect; or (2) Accept the non-conforming Product subject to a discount equal to either (i) the value of the missing or defective parts, equipment or portions of the Product including any cost to install or make such part, equipment or portion operable, or (ii) the actual cost of the missing or defective part, equipment or portion of the Product including any installation or service fees necessary to make such part, equipment or portion operable based on invoices and receipts. Nothing in this Article 10 is intended to limit any repairs, services or equipment covered under a *Warranty* provided with the

Product and *Atlantic* agrees to respond to all *Warranty* claims and repairs promptly and with due diligence.

11. Notice. Any required or permitted notices hereunder must be given in writing at the address of each party set forth below, or to such other address as either party may substitute by written notice to the other in the manner contemplated herein, by one of the following methods: hand delivery; registered, express, or certified mail, return receipt requested, postage prepaid; or nationally-recognized private express courier:

Atlantic:

Atlantic Emergency Solutions, Inc.

Director of Order Management
12351 Randolph Ridge Lane
Manassas, Virginia 20109
Phone: (703) 393-9911

Customer:

Fluvanna County

Attn: Ms. Cyndi Toler, Purchasing Officer
132 Main Street
P.O. Box 540
Palmyra, VA 22963
Phone: (434) 591-1937
With a Copy to: Fluvanna Count Attorney
414 East Jefferson Street
Charlottesville, VA 22902

12. Standard Warranty. Any applicable warranties are set forth in the *Atlantic Proposal* and *Warranty* definition in Article 1 *supra* and are incorporated herein as if set out in the text of this Agreement. Additional warranties contained in any exhibits hereto are expressly approved by *Atlantic* and incorporated into this Agreement and made a material part hereof as if set out in the text of this Agreement. Any other warranties must be expressly approved in writing by *Atlantic's* authorized representative.

a. Disclaimer. OTHER THAN AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER *ATLANTIC EMERGENCY SOLUTIONS*, AFFILIATES, SUBSIDIARIES, LICENSORS OR SUPPLIERS, THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, SHAREHOLDERS, AGENTS OR REPRESENTATIVES, MAKE ANY EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE *PRODUCTS* PROVIDED HEREUNDER OR OTHERWISE REGARDING THIS AGREEMENT, WHETHER ORAL OR WRITTEN, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, THE IMPLIED WARRANTY AGAINST INFRINGEMENT, AND THE IMPLIED WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED AND DISCLAIMED. STATEMENTS MADE BY SALES REPRESENTATIVES OR IN PROMOTIONAL MATERIALS DO NOT CONSTITUTE WARRANTIES.

b. Exclusions of Incidental and Consequential Damages. Other than as expressly set forth in this Agreement, in no event shall *Atlantic* be liable for consequential, incidental or punitive damages incurred by *Customer* or any third party in connection with any matter arising out of or relating to this Agreement, or the breach thereof, regardless of whether such damages arise out of breach of warranty, tort, contract, strict liability, statutory liability, indemnity, whether resulting from non-delivery or from *Atlantic's* own negligence, or otherwise. Notwithstanding the foregoing, in the event that a dispute arises between the parties that results in litigation any

reasonable attorneys' fees and costs of the substantially prevailing party in such litigation shall be paid by the other party.

13. Insurance. *Atlantic* Emergency Solutions maintains the following limits of insurance with a carrier(s) rated A- or better by A.M. Best:

Commercial General Liability Insurance:

<i>Products/Completed Operations</i>	Aggregate:
\$1,000,000	Each Occurrence:
	\$1,000,000

Umbrella/Excess Liability Insurance:

Aggregate:	\$25,000,000
Each Occurrence:	\$25,000,000

Atlantic will provide to the *Customer* a copy of a current Certificate of Insurance with the coverage listed above or the coverage required under the *County's General Terms*, the higher coverage requirement shall control. Where appropriate *Atlantic* will add *Customer* an additional insured for Commercial General Liability (subject to the terms and conditions of the applicable *Atlantic* insurance policy); and all policies will provide a 30-day notice of cancellation to the named insured.

14. Other Terms. The *County's General Terms* are attached hereto as Exhibit 9 and incorporated herein by reference as a material part of this Agreement.

15. Force Majeure. *Atlantic* shall not be responsible nor deemed to be in default on account of delays in performance due to causes which are beyond *Atlantic's* control which make *Atlantic's* performance impracticable, including but not limited to civil wars, insurrections, strikes, riots, fires, storms, floods, other acts of nature, explosions, earthquakes, accidents, any act of government, allocation regulations or other governmental orders affecting materials, equipment, facilities or completed *Products*, failure to obtain any required license or certificates not being the fault of *Atlantic*, acts of God or the public enemy or terrorism, failure of transportation, epidemics, quarantine restrictions, failure of vendors (due to causes similar to those within the scope of this clause) to perform their contracts or labor troubles causing cessation, slowdown, or interruption of work. **All parties acknowledge that Customer's Financing requires the Products be delivered and paid for no later than August 1, 2023.**

16. Default. The occurrence of one or more of the following shall constitute a default under this Agreement: (a) the *Customer* fails to pay when due any amounts under this Agreement or to perform any of its obligations under this Agreement; (b) *Atlantic* fails to perform any of its obligations under this Agreement with time being of the essence; (c) either party becomes insolvent or become subject to a bankruptcy or insolvency proceedings; (d) any representation made by either party to induce the other to enter into this Agreement is false in any material respect; (e) the *Customer* dissolves, merges, consolidates or transfers a substantial portion of its property to another entity; or (f) the *Customer* is in default or has breached any other contract or agreement with *Atlantic*. Upon the occurrence of an event of default by *Atlantic*, the *Customer* in its sole discretion may choose to immediately cancel and terminate this Agreement for cause with no further amounts due and payable hereunder to *Atlantic*. If *Customer* so chooses to cancel and terminate, then any amount already paid to *Atlantic* including any prepayments of any kind shall be immediately refunded to *Customer* with interest rate of (1%). This shall be in addition to any other remedies *Customer* may have in law or in equity owing to *Atlantic's* default.

17. Manufacturer's Statement of Origin. It is agreed that the manufacturer's statement of origin ("MSO") for the Product covered by this Agreement shall remain in the possession of *Atlantic* until the entire

Purchase Price has been paid or the Product has been delivered to *Customer*, whichever is sooner. If more than one Product is covered by this Agreement, then the MSO for each individual Product shall remain in the possession of *Atlantic* until the Purchase Price for that Product has been paid in full or the Product has been delivered to *Customer*, whichever is sooner. In case of any default in payment, *Atlantic* may take full possession of the Product, and any payments that have been made shall be applied as payment for the use of the Product up to the date of taking possession.

18. Independent Contractors. The relationship of the parties established under this Agreement is that of independent contractors and neither party is a partner, employee, agent, or joint venture of or with the other.
19. Assignment. Neither party may assign its rights and obligations under this Agreement unless it has obtained the prior written approval of the other party.
20. Governing Law; Jurisdiction. Without regard to any conflict of laws provisions, this Agreement is to be governed by and under the laws of the state of Virginia.
21. Facsimile Signatures. The delivery of signatures to this Agreement by facsimile transmission shall be binding as original signatures.
22. Entire Agreement. This Agreement shall be the exclusive agreement between the parties for the Product. Additional or different terms proposed by the *Customer* shall not be applicable, unless accepted in writing by *Atlantic's* authorized representative. No change in, modification of, or revision of this Agreement shall be valid unless in writing and signed by *Atlantic's* authorized representative.
23. Conflict. Whenever possible the Agreement and exhibits shall be read together and the requirements of all of the same shall be met. In the event of a direct conflict between this Agreement and any exhibit hereto, the following shall be the order of precedence: (i) this Agreement; (ii) the Proposal Letter; (iii) the Proposal; (iv) the *Worksheet*; (v) the *Proposal Options*; (vi) Warranties; (vii) the *Cooperative Agreement*; and (viii) the County' General Terms. For clarification, (i) would control over (ii) though (viii); (ii) would control over (iii) through (viii); and so forth.

[Signature page to follow.]

In witness hereof the undersigned duly authorized representatives have executed this Contract on the dates set forth beside their respective signatures:

Atlantic:
Atlantic Emergency Solutions, Inc.

Customer:
County of Fluvanna, a political subdivision of the Commonwealth of Virginia

By: _____	Date: _____	By: _____	Date: _____
Name: _____		Name: _____	
Title: _____		Title: _____	

APPROVED AS TO FORM:

Fluvanna County Attorney, by Kristina M. Hofmann, Deputy Fluvanna County Attorney

December 8, 2021

Palmyra Volunteer Fire Co. 1
P O Box 167
Palmyra, VA 22963

Attention: Chief Dwayne Mayo

Dear Chief Mayo,

Thank you for the opportunity to work together on your upcoming apparatus replacement. Together we have developed a specification to meet your departments requirements and provide many years of service to the Citizens of Fluvanna County.

Pricing to furnish one (1) Pierce 2000 Gallon Dryside Tanker on a Freightliner M2-106 chassis per our proposal 671:

Pierce Dryside Tanker	\$494,039.00
Prepay Discount	<u>- 9,268.00</u>

Total Purchase	\$484,771.00
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Pricing is based off HGAC Contract FS12-19

**A Letter of Intent or Purchase order must be received by
December 15, 2021 to avoid a chassis price increase!**

**Purchase order or contract must be received by January 31, 2022 to
avoid additional increases due to material surcharges.**

Prepayment discount is based off a prepayment of \$398,410.00 received within ten (10) days of receipt of purchase order or contract.

Three engineering/inspection trips for three (3) department personel is included in the purchase.

Delivery: Approximately 16-17 Months after receipt of PO.

Currently we have six (6) factory trained service centers in Virginia with one (1) located in Charlottesville, VA to handle all of the specialized requirements for servicing your emergency apparatus. Mobile service vehicles and 24/7 Emergency Services are also available through our Charlottesville Service Center.

This will provide Palmyra Volunteer Fire Co. with the most experienced, fastest responding, and the most cost-effective solution to keep your emergency units in service. No other dealership in the Commonwealth of Virginia has made a greater commitment to service.

Please let me know if you have any questions or need any additional information.

Sincerely,

Kevin Sandridge

Kevin Sandridge

VP Apparatus Sales

Atlantic Emergency Solutions

Cell 434-953-5153

HGACBuy		CONTRACT PRICING WORKSHEET For MOTOR VEHICLES Only		Contract No.:	FS12-19	Date Prepared:	12/02/21
<i>This Worksheet is prepared by Contractor and given to End User. If a PO is issued, both documents MUST be faxed to H-GAC @ 713-993-4548. Therefore please type or print legibly.</i>							
Buying Agency:	Fluvanna County, VA			Contractor:	Atlantic Emergency Soltuions		
Contact Person:	Dwayne Mayo			Prepared By:	Kevin Sandridge		
Phone:	434-981-6209			Phone:	434-953-5153		
Fax:				Fax:			
Email:	mpelectric@yahoo.com			Email:	ksandridge@atlanticemergency.com		
Product Code:	FS19VE01	Description:	Freightliner 2 Door, Single Axle Tanker				
A. Product Item Base Unit Price Per Contractor's H-GAC Contract:							\$289,692.00
B. Published Options - Itemize below - Attach additional sheet(s) if necessary - Include Option Code in description if applicable.							
(Note: Published Options are options which were submitted and priced in Contractor's bid.)							
Description		Cost	Description		Cost		
			Subtotal From Additional Sheet(s):				\$172,491.00
			Subtotal B:				\$172,491.00
C. Unpublished Options - Itemize below / attach additional sheet(s) if necessary							
Description		Cost	Description		Cost		
			Subtotal From Additional Sheet(s):				\$28,156.00
			Subtotal C:				\$28,156.00
Check: Total cost of Unpublished Options (C) cannot exceed 25% of the total of the Base Unit Price plus Published Options (A+B).				For this transaction the percentage is:		6.09%	
D. Total Cost Before Any Applicable Trade-In / Other Allowances / Discounts (A+B+C)							
Quantity Ordered:	1	X Subtotal of A + B + C:	490339	=	Subtotal D:	\$490,339.00	
E. H-GAC Order Processing Charge (Amount Per Current Policy)						Subtotal E:	\$2,000.00
F. Trade-Ins / Other Allowances / Special Discounts / Freight / Installation							
Description		Cost	Description		Cost		
			Discount				
Delivery		\$1,700.00					
Contract Discount		-\$9,268.00			Subtotal F:	-\$7,568.00	
Delivery Date:		16-17 Months		G. Total Purchase Price (D+E+F):		\$484,771.00	

Pulse Number	Qty	Description	Published Options	Unpublished Options
108	1	upgrade rear single axle to 33,500	\$5,124.00	
127	1	Mud Flaps	\$635.00	
129	1	Disc Brakes Front	\$1,307.00	
134	1	Air inlet-outlet	\$759.00	
136	1	12 or 120 volt air compressor	\$1,945.00	
135	1	Additional Air Tanks	\$404.00	
148	1	Exhaust brake to Engine Brake Commercial	\$1,619.00	
151	1	Aggressive Down shift	\$150.00	
159	1	Add Extended Bumper	\$2,448.00	
161	1	Bumper tray with cover	\$1,015.00	
162	1	Bumper Sight Rod	\$574.00	
179	1	Safety System	\$10,601.00	
193	1	Comercial step upgrade package	\$1,383.00	
208	3	Spare 12 volt power (each)	\$438.00	
223	1	Camera System, Sides and rear to monitor	\$2,246.00	
232	1	Intercom System (up to 6 position)	\$3,379.00	
235	2	Intercom Headset - wireless	\$2,138.00	
237	1	IOTA Charger	\$1,242.00	
245	1	Auto-eject 20 amp	\$567.00	
255	1	LED Headlights	\$2,081.00	
264	4	12 volt LED Flood Recessed or surface (per light) B	\$7,768.00	
270	1	Tanker folding tank storage electric	\$10,232.00	
278	2	Additional Hosebed Divider	\$1,118.00	
296	1	LED Compartment Lighting base upgrade lighting	\$1,974.00	
305	1	air-electric rear dump	\$3,939.00	
306	2	air-electric side dump with extender (each)	\$17,672.00	
307	2	trough - hard suction (each)	\$3,472.00	
308	2	hard suction hose (each)	\$2,594.00	
310	2	Adjustable Compartment shelves	\$420.00	
314	2	Slide-out floor tray	\$1,766.00	
319	3	PegBoard in compartment	\$1,752.00	
320	2	Vertical Partition	\$560.00	
325	4	SCBA Cylinder storage in fender panel single (each)	\$2,860.00	
333	1	750 GPM Pump to 1000 GPM Pump	\$2,314.00	
338	1	Add Mechanical Seal to Pump	\$926.00	
340	1	MIV Valves Electric with manual back-up (each)	\$7,522.00	
344	1	2.5" Discharge front bumper	\$3,274.00	
350	1	2.5" Discharge	\$1,896.00	
353	1	Add Large Diameter Side Discharge	\$6,015.00	
369	1	Hose Reel, above pump w/ 150' Hose	\$3,505.00	
390	1	Airhorn at activation pump panel	\$193.00	
392	3	Tank Level LED Group	\$4,302.00	
422	1	Q2B Siren	\$4,322.00	
428	1	Traffic Directing light bar "A"	\$1,610.00	
495	1	Two-tone Cab paint	\$2,341.00	
506	1	Graphics Upgraded 4	\$4,934.00	
175	1	Electric Windows	\$2,195.00	
176	1	Electric Door locks	\$1,215.00	
364	1	Add Hinged-Type Aluminum Cover to Crosslay (per set of 2)	\$730.00	
365	1	Add 1" Cargo Netting to cross/speedlay (2)	\$442.00	
	1	Dealer Furnished 2100 Fold A Tank		\$1,906.00
555484	1	High Side Compartments - Drivers Side	\$0.00	\$9,642.00
582601	1	Driver Controlled Diff Lock	\$0.00	\$681.00
117	1	Tire Chains - Rear Axle	\$4,580.00	
728954	1	Engine Upgrade		\$4,283.00
180	1	Driver Safety Seat	\$968.00	

52937	1	Scuffplate behind tank rack	\$0.00	\$1,022.00
300078	2	Running Board Trays with restraints	\$0.00	\$1,426.00
516369	1	Tailboard Tray	\$0.00	\$949.00
24239	1	Duo Safety 3 Section 26' ladder	\$0.00	\$1,424.00
752373	1	Duo Safety 12' Ladder	\$0.00	\$624.00
738568	1	Ladder Storage Top of Tank	\$0.00	\$1,934.00
772358	1	Pike Pole Compartment	\$0.00	\$2,130.00
617533	3	Folding Steps	\$0.00	\$1,086.00
777347	1	Stainless Tank Cradle	\$0.00	\$980.00
555	1	Thermal Imager Camera with charger	\$15,573.00	
590	1	Pumper Custom Poly Mount Package	\$7,452.00	
	5	Pac Mounts	\$0.00	\$69.00
		#N/A	\$0.00	
		#N/A	\$0.00	
		#N/A	\$0.00	
		#N/A	\$0.00	
Base Bid			\$289,692.00	
Published Options			\$172,491.00	
Total Published Options			\$462,183.00	
Unpublished Options			\$28,156.00	6.09%
Total Options w/o HGAC Fee			\$490,339.00	

F. Airport Rescue Fire-Fighting Vehicles		2021 Updated Pricing
FS19UF01	Oshkosh Striker 4x4, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (375/750 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (1500 gal.), Foam Tank Capacity (210 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$834,809.00
FS19UF02	Oshkosh Striker 6x6, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (3000 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$898,242.00
FS19UF03	Oshkosh Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQA, Single Stage Centrifugal, 1950 gpm at 240 psi)	\$1,048,535.00
FS19UF04	Oshkosh New Generation Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi), dual engine driveline	\$1,215,945.00
FS19UF05	Oshkosh Stinger Class 2 ARFF vehicle; 2-Door Ford 4x4 F550 Cab/chassis, 2 Passenger Seating, Bumper Turret, one (1) twin agent handline, Water Tank Capacity (300 gal.), Foam Tank Capacity (40 gal.), Dry Chemical 500 pounds.	\$353,488.00
FS19UF06	Oshkosh H-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 50,000 GVWR, Single Axle	\$355,483.00
FS19UF07	Oshkosh HT-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 55,000 GVWR, Single Axle	\$410,225.00
FS19UF08	Oshkosh P-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 51,000 GVWR, Single Axle	\$312,991.00
V. Pierce		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19VA01	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$896,731.00
FS19VA02	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$931,959.00
FS19VA03	Pierce Enforcer Chassis 4-Door 75' Aluminum Rear Mounted Telescoping Ladder, Formed Aluminum Body	\$881,793.00
FS19VA04	Pierce Arrow Chassis 4-Door 100' Aluminum Rear Mount Aerial, Aluminum Body, Tandem Axle	\$1,181,318.00
FS19VA05	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Rear-Mounted Telescoping Ladder	\$995,504.00
FS19VA06	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 107' Rear-Mounted Telescoping Ladder	\$1,043,437.00
FS19VA07	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 110' Rear-Mounted Telescoping Platform	\$1,095,017.00

FS19VA08	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 105' Rear-Mounted Telescoping Ladder (500#)	\$1,044,283.00
FS19VA09	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	\$1,386,599.00
FS19VA10	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Rear-Mounted Telescoping Ladder with Platform (750#)	\$1,315,704.00
FS19VA11	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Tractor Drawn - Mid-Mounted Telescoping Ladder (#500)	\$1,327,786.00
B. Wildland Fire Apparatus (Brush Fire)		
FS19VB01	Pierce Brush Fire Apparatus, Ford F450, Formed Aluminum Utility Body	\$145,605.00
FS19VB02	Pierce Brush Fire Apparatus, Ford F-550 Mini Pumper 500 gpm, 300 tank	\$225,803.00
FS19VB03	Freightliner 4-Door 4 x 4 Wildland, 500 water, 1000 gpm Pump	\$381,906.00
C. Pumper Fire Apparatus		
FS19VC01	M2 Freightliner, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$277,201.00
FS19VC02	IHC, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$286,400.00
FS19VC03	KW, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$280,129.00
FS19VC04	Peterbilt, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$289,319.00
FS19VC05	Pierce Saber 4- Door Full Tilt Aluminum Cab, Ford Engine, Aluminum Body, 1250 gpm, mid-mounted Pump	\$424,457.00
FS19VC06	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$478,284.00
FS19VC07	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$530,667.00
FS19VC08	Pierce Velocity, 4- Door Full Tilt Cab, Aluminum Long Body, 1250 gpm mid-mounted Pump	\$606,647.00
FS19VC09	Pierce Dash CF, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, PUC Body Pumper	\$674,946.00
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19VD01	Ford F-550 4- Door, 12 'Non-Walk-in Formed Aluminum Body	\$161,755.00
FS19VD02	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$218,441.00
FS19VD03	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$220,384.00
FS19VD04	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$213,947.00
FS19VD05	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$225,380.00
FS19VD06	Pierce Saber FR, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Encore Body 18.5'	\$415,912.00

FS19VD07	Pierce Enforcer 4-Door, Aluminum Cab, Single Axle, Formed Aluminum Body, Non Walk-in HDR Body	\$535,557.00
FS19VD08	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Non-Walk-in HDR Body	\$639,536.00
FS19VD09	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$314,977.00
FS19VD10	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$317,620.00
FS19VD11	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$312,502.00
FS19VD12	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$319,978.00
FS19VD13	Pierce Enforcer 4-Door, Full Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-in HDR Body	\$641,716.00
FS19VD14	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in HDR Body	\$738,751.00
FS19VD15	Pierce Velocity 2-Door, Aluminum Cab, Tandem Axle, Combination Formed Aluminum Body	\$783,656.00
FS19VD16	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in Communications Body	\$814,594.00
E. Pumper/Tankers & Tankers		
FS19VE01	Freightliner 2 Door, Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,692.00
FS19VE02	IHC 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$292,562.00
FS19VE03	Kenworth 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,900.00
FS19VE04	Peterbilt 2dr Single Axle Tanker, Aluminum w/2000 water & 500 pump	\$318,265.00
FS19VE05	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted	\$533,395.00
FS19VE06	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted	\$626,487.00
FS19VE07	Freightliner 2dr, Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$319,685.00
FS19VE08	IHC 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$332,494.00
FS19VE09	Kenworth 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$308,869.00
FS19VE10	Peterbilt 2dr Tandem Axle Tanker, Aluminum w/3000 water & 500 pump	\$320,587.00
FS19VE11	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$531,620.00
FS19VE12	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$646,141.00
FS19VE13	Pierce Velocity, 4-Door Aluminum Cab, Tandem Axle, Aluminum Pumper/Tanker 2000 Gallon Body, 1500 GPM Pump	\$660,849.00

FORM E - PUBLISHED OPTIONS		FS12-19
Offeror Name:		
Notes: (Important)	<p>1) Bid each Option on a single separate line. Bidder is responsible to identify each item with a specific code or part number.</p> <p>2) Use a single Form E for ALL items. Add/Insert additional lines as necessary.</p> <p>3) Completely describe each option, including manufacturer's code or part numbers as appropriate. Each item listed MUST have a unique code or part number.</p> <p>4) Options which replace standard equipment on a base bid Item on Form D should be priced net of any credit due for the replaced item.</p> <p>5) Options which are shown as upgrades/downgrades of a base bid item on Form D should be priced at the differential amount between the base bid item and the option.</p> <p>6) You are encouraged to offer specific manufacturer's catalogs (eg. Wheeler, Red Signal, etc.) as options, with 'List Less' or 'Cost Plus' percentages for pricing. Copy of catalog should be supplied w/bid</p>	
Note: Bidder must identify each option bid with an identifying Code or Part No. that should be referenced on all Contract Pricing Worksheets		
Code or Part No.	Option Description	2021 Pricing
OSK-1	110 volt auxiliary air compressor with auto-eject shore power connection	\$2,353.00
OSK-2	110 volt engine preheater with auto-eject shore power connection	\$610.00
OSK-3	Battery charger with auto-eject shore power connection	\$835.00
OSK-4	Air inlet at rear or on either side of cab with auto-eject connection	\$424.00
OSK-5	Air outlet on either side of cab with 50' of hose and a tire gauge	\$166.00
OSK-6	Air hose reel in upper compartment with 150' of 1/2" hose	\$3,107.00
OSK-7	Alternating flashing feature for headlights "wig wag"	\$173.00
OSK-8	Two driving and two fog lights	\$413.00
OSK-9	LED ground lighting	\$552.00
OSK-10	Monitoring and Data Acquisition System [MADAS]	\$8,544.00
OSK-11	Two defroster fans in cab	\$143.00
OSK-12	Additional seat (3 seats are standard)	\$999.00
OSK-13	Upgrade to Smartdock hands' free SCBA bracket for one crew seat	\$547.00
OSK-14	Add roof hatch access step in cab	\$776.00
OSK-15	High output dual air conditioning	\$5,894.00
OSK-16	Streamlight brand rechargeable flashlights in cab - qty 2	\$495.00
OSK-17	Streamlight brand rechargeable flashlights in cab - qty 4	\$989.00
OSK-18	Medical storage compartment in cab	\$2,066.00
OSK-19	Power strip in cab with shore power provisions	\$757.00
OSK-20	Ladders with fixed mounting on roof - Duo Safety 900A-24 and Little Giant Model 26	\$2,614.00
OSK-21	Height adjustable roll-out shelf in lower storage compartment	\$797.00
OSK-22	Height adjustable fixed shelf in lower storage compartment	\$690.00
OSK-23	Slide out, tilt down tray in an upper compartment	\$1,150.00
OSK-24	Stowable step for upper compartment access	\$1,488.00
OSK-25	Storage for two spare SCBA cylinders in the cab	\$783.00
OSK-26	Driver and turret operator foot switches for siren and air horns	\$537.00
OSK-27	Rear vision camera system including a rear facing color camera mounted at the top rear of the vehicle	\$2,982.00

OSK-28	Forward Looking Infrared (FLIR) camera with pan and tilt	\$19,358.00
OSK-29	Digital recorder with forward facing camera	\$2,425.00
OSK-30	Continuous duty cycle central lubrication system	\$6,751.00
OSK-31	Spare tire and wheel	\$3,723.00
OSK-32	Central tire inflation/deflation system for 4x4 vehicle	\$27,170.00
OSK-33	Central tire inflation/deflation system for 6x6 vehicle	\$32,606.00
OSK-34	Central tire inflation/deflation system for 8x8 vehicle	\$38,038.00
OSK-35	Beadlocks for 4x4 vehicle including spare	\$2,656.00
OSK-36	Beadlocks for 6x6 vehicle including spare	\$3,985.00
OSK-37	Beadlocks for 8x8 vehicle including spare	\$5,311.00
OSK-38	Beadlock press	\$1,241.00
OSK-39	Bronze water pump housing in place of standard cast iron housing	\$10,475.00
OSK-40	Water/foam hose reel with 150' of 1.25" hose and 95 gpm nozzle in a lower compartment	\$9,087.00
OSK-41	Swing-out feature for hose reel	\$638.00
OSK-42	Limited structural panel on the left side - no suction connections	\$3,381.00
OSK-43	Structural panel with one 2-1/2" suction inlet, one 5" suction inlet and a priming pump on the LH side	\$5,407.00
OSK-44	Structural panel with one 2-1/2" suction inlet, one 5" suction inlet and a priming pump on the LH side with "Fill from Draft" provisions	\$6,031.00
OSK-45	One 2-1/2" foam / water producing discharge outlet with a bleeder valve on each side - 2 total	\$2,722.00
OSK-46	Two 2-1/2" foam / water producing discharge outlets with bleeder valves on each side - 4 total	\$5,026.00
OSK-47	Water tank shut-off	\$2,504.00
OSK-48	One 2-1/2" and 4-1/2" water tank fill connection on right hand side	\$1,996.00
OSK-49	550 lb. dry chemical system with fixed dual agent hosereel holding 100' of 1" twinned hose and a Hydro-Chem type nozzle in a lower compartment. Includes agent vessel and propellant system with system indicators in cab	\$28,106.00
OSK-50	Spare nitrogen cylinder for dry chemical system.	\$1,470.00
OSK-51	Foam transfer pump - electric	\$9,421.00
OSK-52	Foam transfer pump - pneumatic	\$4,409.00
OSK-53	Electronic foam proportioning system in place of standard fixed rate, around the pump foam proportioning system	\$20,893.00
OSK-54	375/750 gpm high volume, dual rate bumper turret in place of standard 300 gpm bumper turret - 4x4 only	\$5,870.00
OSK-55	375/750 gpm high volume, dual rate, low-attack type bumper turret in place of standard 300 gpm bumper turret - 4x4 only	\$24,895.00
OSK-56	625/1250 gpm high volume bumper turret in place of standard 300 gpm bumper turret - 6x6 and 8x8 only	\$5,870.00
OSK-57	625/1250 gpm high volume, low attack bumper turret in place of standard 300 gpm bumper turret - 6x6 and 8x8 only	\$24,895.00
OSK-58	Hydro-Chem type direct injection foam/water/dry chemical nozzle option added for any dual rate roof or bumper turret	\$6,361.00
OSK-59	Exterior mounted water and foam tank level lights each side	\$613.00
OSK-60	Compartment mounted water and foam tank level lights each side	\$409.00
OSK-61	One HID light on roof turret	\$518.00

OSK-62	One HID light on bumper turret	\$648.00
OSK-63	One LED spotlight on roof turret	\$692.00
OSK-64	One LED spotlight on bumper turret	\$858.00
OSK-65	Snozzle 50' High Reach Extendable Turret (HRET) with piercing nozzle in place of standard roof turret *(Available on Oshkosh 4x4, 6x6 and 8x8 chassis)	\$222,934.00
OSK-66	Snozzle 65' High Reach Extendable Turret (HRET) with piercing nozzle in place of standard roof turret. *(Only available on Striker 6x6, 8x8 vehicle)	\$265,072.00
OSK-67	One HID light on Snozzle boom end	\$648.00
OSK-68	One LED light on Snozzle boom end	\$858.00
OSK-69	Forward Looking Infrared (FLIR) camera on Snozzle boom end	\$18,542.00
OSK-70	Color video camera on Snozzle boom end	\$2,385.00
OSK-71	Undertruck nozzles	\$2,766.00
OSK-72	Winterization system for vehicle's firefighting compartments	\$12,397.00
OSK-73	460 lb. Halotron clean agent system with fixed hosereel holding 150' of 1" hose and a Halotron nozzle in an upper compartment. Includes agent vessel and propellant system with system indicators in cab.	\$30,099.00
OSK-74	Spare argon cylinder for Halotron I system.	\$1,417.00
OSK-75	10 Kw Onan hydraulic generator.	\$16,311.00
OSK-76	Two 110 volt 750 watt sidelights above windshield (Requires generator)	\$1,165.00
OSK-77	Two 110 volt LED sidelights above windshield (Requires generator)	\$4,043.00
OSK-78	Two 110 volt 1000 watt pneumatic telescoping sidelights on each side - four total (Requires generator)	\$8,472.00
OSK-79	Two 110 volt LED manually telescoping sidelights on each side - four total (Requires generator)	\$12,367.00
OSK-80	Two cab mounted HID worklights - 24VDC	\$965.00
OSK-81	Two cab mounted LED worklights - 24 VDC	\$1,144.00
OSK-82	Two HID worklights per side four total - 24VDC	\$1,635.00
OSK-83	Two LED worklights per side four total - 24VDC	\$2,138.00
OSK-84	Two HID worklights at rear - 24VDC	\$814.00
OSK-85	Two LED worklights at rear - 24VDC	\$1,068.00
OSK-86	110 volt electric cable reel in an upper compartment with 200' of 12/3 SO safety yellow cord. (Requires generator)	\$3,928.00
OSK-87	Two 110 volt duplex (straight/twist) receptacles on each side of truck in a lower compartment. (Requires generator)	\$378.00
OSK-88	Four red LED mini light bars in place of standard red LED beacons on roof	\$4,211.00
OSK-89	Four premium red LED mini light bars in place of standard red LED beacons on roof	\$8,230.00
OSK-90	Lower perimeter red LED warning light system with two front facing, two rear facing and three lights per side in place of standard warning lights	\$714.00
OSK-91	Premium lower perimeter red LED warning light system with two front facing, two rear facing and three lights per side	\$2,086.00
OSK-92	Lower perimeter emergency warning switch to disable lower emergency lights when needed	\$173.00

OSK-93	Eco EFP Foam Testing System (EFP Proportioner)	\$11,097.00
OSK-94	Eco EFP Foam Testing System (Poppet Proportioner)	\$24,412.00
H1	Lubrication data plate	\$50.00
H2	Pintle hook at rear	\$156.00
H4	Aluminum tool box frame mounted	\$1,533.00
H5	Auto lube system for chassis only	\$4,791.00
H7	Coolant heater 1500 watt block type	\$448.00
H8	Scania DC13 500hp drive engine lieu of 350hp	\$10,847.00
H9	Engine oil pan heater (includes both engines, if applicable)	\$182.00
H11	Side access drain valves for engine fluids (includes engine oil, coolant & hydraulic oil on both engines, if applicable)	\$450.00
H15	29,000 LB front axle capacity in lieu of 27,000 LB capacity	\$3,122.00
H16	26,000 LB rear axle capacity with All Steer in lieu of 23,000 LB non AS	\$24,295.00
H17	Shock absorbers for one axle	\$837.00
H18	Spare tire mounted on rim	\$2,495.00
H19	Air conditioning	\$7,996.00
H21	Deluge system for cab	\$1,656.00
H22	5lb fire extinguisher in cab	\$195.00
H23	Radio in cab - AM/FM/Weather/CD	\$517.00
H24	Premium heated hi back seat or driver	\$165.00
H26	Heated wiper blades front	\$1,258.00
H27	Side window wipers unheated	\$769.00
H28	Side window wipers heated	\$1,032.00
H29	Cab mounted defroster fans	\$251.00
H31	Rear view back up camera	\$641.00
H32	Amber plow lights on cab light bar	\$346.00
H33	HID lights - one pair - on cab light bar	\$866.00
BL-DEB	Standard "Dual Engine Blower" snow blower package - 550 hp auxiliary engine	\$337,267.00
BL-SEB	Standard "Single Engine Blower" snow blower package	\$322,124.00
BL-RB	Standard "Road Blower" snow blower package - 550 hp auxiliary engine	\$472,220.00
BL1	670hp blower engine in lieu of standard 550	\$11,027.00
BL2	Aux engine oil pan heater	\$179.00
BL4	Spot cast chute - inc. 29K front and ballast bumper	\$16,157.00
BL5	Truck loading chute - inc. 29K front and ballast bumper	\$37,483.00
BL6	High speed blower system - variable torque ribbon motors (dedicated blower)	\$17,500.00
BL7	Hydraulic relief block	\$1,642.00
BL8	Add 18' broom head for multipurpose snow chassis	\$141,378.00
BR-XF	Standard front mount broom package - 350 hp auxiliary engine	\$308,993.00
BR1	Broom aux engine 500hp lieu of 350hp base	\$3,729.00
BR2	20 foot head in lieu of 18' head base	\$15,057.00

BR3	22 foot head in lieu of 18' head base	\$20,235.00
BR4	50/50 wire poly in lieu of all poly base	\$920.00
BR5	All wire in lieu of all poly base	\$1,125.00
BR8	Broom quick disconnect hoses	\$7,603.00
BR10	Marker lights on broom	\$728.00
BR11	Vibrator on broom head	\$2,637.00
BR12	Snow shed hood 18 foot length	\$8,895.00
BR13	Snow shed hood 20 foot length	\$9,361.00
BR14	Snow shed hood 22 foot length	\$9,743.00
HT1	Single side fuel fill	\$1,453.00
HT4	26,000 LB rear axle capacity with All Steer in lieu of 23,000 LB non AS	\$39,216.00
HT5	Rear tandem 46K LB capacity in lieu of single axle 23K	\$20,373.00
HT6	Rear tandem 46K LB capacity with All Steer in lieu of single axle 23K	\$71,167.00
HT7	500hp drive engine on HT lieu of base standard 350hp drive engine	\$3,729.00
HT8	Air conditioning	\$11,798.00
HT9	Cab deluge	\$2,994.00
HT10	Radio in cab - AM/FM/Weather/CD	\$1,052.00
HT11	Premium heated hi back seat or driver	\$781.00
HT13	Heated wiper blades front	\$1,163.00
HT14	Side window wipers unheated	\$1,177.00
HT15	Side window wipers heated	\$2,105.00
HT16	Cab mounted defroster fans	\$298.00
HT18	Rear view back up camera	\$3,062.00
HT19	Amber plow lights on cab light bar	\$409.00
HT20	HID lights - one pair - on cab light bar	\$1,079.00
HT21	Oshkosh XT towed broom 18' width, all poly, 350 HP aux	\$400,429.00
HT22	500 HP aux engine in lieu of 385 HP base	\$3,812.00
HT23	20 foot head in lieu of 18' head base	\$15,389.00
HT24	22 foot head in lieu of 18' head base	\$20,682.00
HT25	50/50 wire poly lieu of all poly base	\$3,812.00
HT26	All wire in lieu of all poly base	\$3,912.00
HT27	Broom aux engine oil pan heater	\$387.00
HT28	Broom aux engine block heater	\$397.00
HT30	Marker lights on broom	\$745.00
HT31	Vibrator on broom head	\$2,695.00
HT32	Snow shed hood 18 foot length	\$11,543.00
HT33	Snow shed hood 20 foot length	\$12,659.00
HT34	Snow shed hood 22 foot length	\$13,000.00
HT35	20' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$54,892.00
HT36	22' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$56,196.00

HT37	24' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$57,400.00
P1	6x6 chassis in lieu of 4x4, 51,000 pounds GVWR, 175" CT	\$14,160.00
P2	Engine hp upgrade package	\$4,876.00
P3	Engine brake	\$4,890.00
P4	75 gallon fuel tank lieu of 50 gallon std	\$547.00
P5	5-speed transmission in lieu of 4-speed	\$519.00
P8	26,000 LB rear axle capacity in lieu of 23,000 base	\$7,223.00
P9	30,000 LB rear axle capacity in lieu of 23,000 base	\$16,605.00
P11	26,000 LB rear axle capacity with All Steer in lieu of 23,000 base	\$31,998.00
P12	46,000 LB tandem rear axle capacity with All Steer in lieu of base	\$33,577.00
P13	Air suspension cab	\$1,304.00
P14	Heated front wipers	\$503.00
P15	Heated front windshield	\$3,557.00
P16	Side window wipers	\$918.00
P17	Power side windows	\$872.00
P18	Air conditioning	\$3,757.00
P19	Radio in cab - AM/FM/Weather/CD	\$999.00
P20	High idle and cruise control	\$683.00
P21	Alternator upgrade	\$1,171.00
P22	Trailer electrical system	\$366.00
P25	10-12 yd dump body (painted steel), 18' flared plow with hands free DIN hitch, central hydraulics (4x4 chassis)	\$100,779.00
P26	V-box 14' Stainless Steel Spreader, twin spinner discs, 18' Flared Plow with hands free DIN hitch, 800 gallon de-icing tanks/pre-wet, central hydraulics, tarp system (Must select 6x6 Chassis above)	\$218,822.00
101	Add Frame liner Commercial	\$1,137.00
102	Add Frame Liner Custom	\$1,902.00
103	Aerial Frame liner	\$4,840.00
104	Galvanized Frame structure	\$3,390.00
105	upgrade to 22,800# front axle	\$2,280.00
106	upgrade to 27,000# rear axle	\$2,295.00
107	upgrade to 31,000# rear	\$5,475.00
108	upgrade rear single axle to 33,500	\$5,124.00
109	TAK-4 Suspension	\$17,788.00
110	T3 Single Suspension	\$13,559.00
111	T3 Tandem Suspension	\$22,356.00
112	Change to Air Ride Suspension, Single	\$3,075.00
113	Change to Air Ride Suspension, Tandem	\$7,182.00
114	Change to Dynalastic Suspension	\$5,066.00
115	4 x 4 Option Commercial	\$27,458.00
116	4 x 4 Option Custom	\$25,768.00
117	Tire Chains - Rear Axle	\$4,580.00
118	Auto Lube, 22 point	\$5,708.00

119	Auto Lube Lincoln 34 Point	\$14,258.00
120	Aluminum Wheels Commercial (Split Rear)	\$1,013.00
121	Credit Custom Aluminum Wheels, front	-\$2,166.00
122	Credit Aluminum Wheels, Rear Single Axle	-\$3,901.00
123	Credit Aluminum Wheels Tandem Axle	-\$4,977.00
124	Spare Steel Wheel and Mounted tire	\$2,488.00
125	Electronic Tire Pressure Management	\$1,548.00
126	Safety Bands (pair)	\$1,104.00
127	Mud Flaps	\$635.00
128	Wheel Chocks and Mounts	\$1,013.00
129	Disc Brakes Front	\$1,307.00
130	Disc Brakes, Rear, Single	\$848.00
131	Disc Brakes, Rear, Tandem (per)	\$1,689.00
132	ABS upgrade to ESC/ABS/ATC	\$6,533.00
133	Collision Mitigation	\$2,904.00
134	Air inlet-outlet	\$759.00
135	Additional Air Tanks	\$404.00
136	12 or 120 volt air compressor	\$1,945.00
137	Brake fittings compression type	\$1,507.00
138	Cummins ISB 360 to ISL 330	\$3,161.00
139	Paccar 330 to 380	\$1,483.00
140	Cummins L9 400hp to 450hp L9	\$2,205.00
141	Cummins L9 450hp to Detroit DD13 470 hp	\$21,166.00
142	Detroit DD13 470 to 525	\$5,020.00
143	Cummins 450 to x12	\$26,163.00
144	Cummins X12 to X15	\$23,314.00
145	Cummins x15 565 to 600 hp	\$7,762.00
146	Emergency Shutdown for Engine, Air w/ reset	\$1,455.00
147	1000 Watt Immersion Heater	\$625.00
148	Exhaust brake to Engine Brake Commercial	\$1,619.00
149	EVS 3000 TO 4000	\$10,130.00
150	EVS 4000 TO 4500 PR	\$11,843.00
151	Aggressive Down shift	\$150.00
152	Telma Retarder, Single Axle	\$15,895.00
153	Exhaust Extension Plymo or Nederman	\$696.00
154	Magnetic Grabber	\$1,041.00
155	Exhaust Diffuser - Care	\$696.00
156	Increase DEF Capacity	\$536.00
157	75 gallon fuel tank	\$1,251.00
158	Steering with controls	\$1,627.00
159	Add Extended Bumper	\$2,448.00
160	Add 26" Extended underslung Bumper	\$5,574.00
161	Bumper tray with cover	\$1,015.00
162	Bumper Sight Rod	\$574.00
163	Bumper compartment for Winch	\$1,817.00
164	Bumper Equipment Tray with cover	\$2,658.00

165	Bumper warning light recess	\$957.00
166	Linex Bumper Coating	\$479.00
167	Mirrors - change to Bus style cab corner	\$3,277.00
168	Mirrors - change to door mount bus style	\$2,247.00
169	Mirrors - change to One-Eleven style	\$2,414.00
170	Raised roof, custom cab	\$2,516.00
171	84" Extended Cab	\$5,724.00
172	Full height Cab doors - Raised Roof	\$2,384.00
173	Stainless Door Jamb Scuffplates	\$756.00
174	Mounting plate on engine tunnel	\$529.00
175	Electric Windows	\$2,195.00
176	Electric Door locks	\$1,215.00
177	110 Volt cab A/C	\$2,414.00
178	Danhard Style A/C	\$6,831.00
179	Safety System	\$10,601.00
180	Driver Safety Seat	\$968.00
181	SCBA Safety Seat	\$960.00
182	Bostrom Officer SCBA	\$1,788.00
183	Bostrom 2 F-Facing Crew	\$2,618.00
184	3 Seat to Crew (Commercial)	\$2,315.00
185	Clean Cab base option	\$1,619.00
186	EMS Compartment in Cab	\$2,797.00
187	EMS Compartment w outside access (each)	\$2,968.00
188	Upgrade SCBA Bracket to Hands Free	\$804.00
189	Cab step 2" larger mid and bottom	\$1,233.00
190	Handrail with LED Lighting Cab	\$604.00
191	Full height Cab doors - Raised Roof	\$2,009.00
192	Cab Windows Factory Tint	\$528.00
193	Comercial step upgrade package	\$1,383.00
194	Upgrade Freightliner M2-106 to M2-112	\$43,296.00
195	Upgrade International 2 door to 4 door	\$11,510.00
196	Upgrade to extended cab	\$4,825.00
197	Upgrade to Freightliner 2 door to 4 door	\$8,584.00
198	Upgrade Saber to Enforcer	\$9,422.00
199	Upgrade Enforcer to Impel	\$2,500.00
200	Upgrade Enforcer to Arrow	\$44,981.00
201	Upgrade Enforcer to Velocity	\$48,801.00
202	Upgrade Arrow to Velocity	\$13,689.00
203	Upgrade Arrow to Quantum	\$18,433.00
204	Upgrade Arrow to Dash CF	\$7,668.00
205	Velocity to Quantum	\$14,612.00
206	Upgrade Velocity to Dash CF	\$3,847.00
207	Remote Control Spot Lights	\$1,367.00
208	Spare 12 volt power (each)	\$146.00
209	Radio with Weatherband	\$1,122.00
210	Additional MUX Screen	\$3,000.00

211	GPS Navigation and preplan capable	\$816.00
212	install Customer MDT with power wiring	\$1,091.00
213	Install Customer Antenna	\$63.00
214	Install Customer GPS	\$399.00
215	install Customer radio	\$993.00
216	install customer Knox	\$190.00
217	install customer drug vault	\$458.00
218	Medi-Kool mk18	\$5,724.00
219	2 Person Command Center Configuration	\$14,190.00
220	Roll Alert System	\$4,093.00
221	Camera System Rear only	\$1,140.00
222	Camera System, Sides and rear to mux	\$4,228.00
223	Camera System, Sides and rear to monitor	\$2,246.00
224	Camera System with DVR	\$3,206.00
225	Camera System interior cab and exterior body	\$8,347.00
226	Camera System Fotokite modem portable	\$45,584.00
227	Camera System Fotokite Compartment mounted	\$48,645.00
227m	Camera System Fotokite w modem Compartment mounted	\$50,800.00
228	Camera body to weatherprof panel monitor	\$1,537.00
229	Camera Stabilizer without lazer	\$4,336.00
230	Camera, Stabilizer Placement with Command Zone Display with Laser	\$6,177.00
231	Intercom System (BASIC)	\$2,624.00
232	Intercom System (up to 6 position)	\$3,379.00
233	Intercom Wireless System	\$5,323.00
234	Intercom Headset - Wired	\$558.00
235	Intercom Headset - wireless	\$1,069.00
236	Idle Reduction Technology	\$4,227.00
237	IOTA Charger	\$1,242.00
238	Blue Sea 40 amp	\$1,795.00
239	Dual Pro Charger	\$909.00
240	Kussmaul Charger	\$1,915.00
241	Kussmaul Pump plus	\$2,791.00
242	Progressive p2180 (per unit)	\$1,893.00
243	Newmar Charger	\$1,633.00
244	Auto-eject 15 amp	\$541.00
245	Auto-eject 20 amp	\$567.00
246	Auto-eject 30 amp	\$1,283.00
247	Transfer switch	\$658.00
248	Sub Feed Box	\$225.00
249	Batteries 6 total	\$1,114.00
250	320 amp to 360	\$2,171.00
251	430 Amp Niehoff alternator	\$4,796.00
252	430 amp Delco alternator	\$4,101.00

253	LED cab lighting	\$1,020.00
254	LED body perimeter additional	\$2,284.00
255	LED Headlights	\$2,081.00
256	12 volt LED Scene - A	\$1,371.00
257	12 volt LED Scene - B	\$1,564.00
258	12 volt LED Flood Brow light A	\$2,102.00
259	12 volt LED Flood Brow light B	\$3,428.00
260	12 volt LED Hi-Viz Brow Full single	\$5,467.00
261	12 volt LED Hi-Viz Brow Double Lights	\$3,099.00
262	12 volt-Hi Viz LED (per light)	\$2,292.00
263	12 volt LED Flood Recessed or surface (per light) A	\$1,306.00
264	12 volt LED Flood Recessed or surface (per light) B	\$1,942.00
265	12 volt LED Flood Pole light (per light)	\$2,080.00
266	Tail lighting LED Upgrade	\$1,548.00
267	Tail Board Upgrade Package	\$1,903.00
268	Tanker Hose bed Package	\$4,859.00
269	Tanker folding tank storage manual	\$3,717.00
270	Tanker folding tank storage electric	\$10,232.00
271	Upgrade Tanker Step Package	\$1,861.00
272	Flush back body option	\$1,284.00
273	Rear step package with wrap bumper	\$2,825.00
274	Add Vinyl Cover for Crosslay Hose Bed	\$492.00
275	Hose Bed Cover, Aluminum	\$6,137.00
276	Hose Bed Cover, Vinyl	\$690.00
277	Hose Bed Cover, Roll-up	\$8,453.00
278	Additional Hosebed Divider	\$559.00
279	NY Hose Bed	\$3,013.00
280	PUC Body Configuration	\$13,629.00
281	Aerial body full depth per side	\$6,395.00
282	Pumper Body to Galvaneal	-\$2,779.00
283	Pumper Body to Stainless	\$11,250.00
284	Aerial Aluminum to stainless body	\$9,795.00
285	Long Pumper body	\$1,859.00
286	Compartment door locks (each)	\$83.00
287	PUC Flip-out steps	\$1,003.00
288	Catwalk-Hatch Compartment, Each	\$3,764.00
289	Underbody Compartments, each	\$2,788.00
290	Add Right High Side Compartments	\$4,107.00
291	Add Electric / Hydraulic Ladder Rack	\$11,294.00
292	Full Height - Depth Compartments	\$6,073.00
293	Ladder Storage next to tank	\$5,077.00
294	Winch 12,000#	\$6,009.00
295	Winch 9000#	\$3,396.00
296	LED Compartment Lighting base upgrade lighting	\$1,974.00
297	LED Compartment Lighting premium	\$3,375.00
298	Increase Booster Tank to: 1000 Gallons	\$993.00

299	Increase Booster Tank to: 1250 Gallons	\$4,174.00
300	Increase Booster Tank to: 1500 Gallons	\$6,920.00
301	2.5" Direct Tank Fill to Main Intake	\$4,740.00
302	Rear Direct tank fill electric	\$5,352.00
303	Direct Tank Fill Manual	\$1,411.00
304	manual rear dump with 90	\$4,564.00
305	air-electric rear dump	\$3,939.00
306	air-electric side dump with extender (each)	\$8,836.00
307	trough - hard suction (each)	\$1,736.00
308	hard suction hose (each)	\$1,297.00
309	Mate Flex in Enclosed Compartments Per Shelf	\$134.00
310	Adjustable Compartment shelves	\$210.00
311	Slide-out tool board	\$1,302.00
312	Swing-out tool board	\$1,932.00
313	Slide-out tool board in tray	\$1,269.00
314	Slide-out floor tray	\$883.00
315	Toolboard in Slide-out tray	\$1,285.00
316	Adjustable slide-out tray	\$760.00
317	Tilt-out adjustable tray	\$738.00
318	PacTrac in compartment	\$985.00
319	PegBoard in compartment	\$584.00
320	Vertical Partition	\$280.00
321	Horizontal Partition	\$311.00
322	3 Drawer C-Tech 24 wide	\$989.00
323	3 Drawer C-Tech 36 wide	\$2,118.00
324	4 Drawer C-Tech 48 wide	\$3,082.00
325	SCBA Cylinder storage in fender panel single (each)	\$715.00
326	SCBA Cylinder storage in fender panel double (each)	\$943.00
327	SCBA Cylinder storage in fender panel triple (each)	\$1,006.00
328	SCBA Storage in fender panel	\$1,166.00
329	Extinguisher Compartment	\$702.00
330	SCBA Storage Bins (each)	\$170.00
331	Add Dura Surf (per each)	\$26.00
332	Electric Cord Reel Compartment	\$577.00
333	750 GPM Pump to 1000 GPM Pump	\$2,314.00
334	Increase Pump from 1250 to 1500 gpm	\$2,812.00
335	Increase Pump from 1500 to 1750 gpm	\$3,577.00
336	Increase Pump from 1500 to 2000 gpm	\$4,179.00
337	add pump anodes (pair)	\$380.00
338	Add Mechanical Seal to Pump	\$926.00
339	Flow Meters, each	\$1,954.00
340	MIV Valves Electric with manual back-up (each)	\$7,522.00
341	Manual Ball Intake Valve	\$2,797.00
342	add 2.5" suction inlet	\$1,320.00
343	1.5" discharge front bumper	\$2,368.00
344	2.5" Discharge front bumper	\$3,274.00

345	Preconnect 1.5" with 2.0" plumbing - Speed or cross	\$2,542.00
346	Preconnect 2.5 or 3" plumbing - Speed or Cross	\$3,603.00
347	Add Front Suction Inlet 4-6"	\$7,603.00
348	Add Rear Suction Inlet	\$5,669.00
349	1.5" discharge	\$1,527.00
350	2.5" Discharge	\$1,896.00
351	3" Discharge	\$2,805.00
352	Add Large Diameter Rear Discharge	\$5,894.00
353	Add Large Diameter Side Discharge	\$6,015.00
354	add electric valve deluge plumbing	\$5,510.00
355	Dual voltage water heater with tanker	\$4,770.00
356	Extenda-gun 12"	\$4,279.00
357	Extenda-gun 18"	\$4,477.00
358	Electric Extenda Gun	\$6,671.00
359	Electric Deluge riser	\$7,405.00
360	Electric Deluge with foam by-pass	\$10,008.00
361	Wireless remote monitor	\$12,364.00
362	Provide (2) Speedlays IPO Crosslay with Rollers	\$5,905.00
363	Provide (2) Speedlays w/ Tray's IPO Crosslay with Rollers	\$8,134.00
364	Add Hinged-Type Aluminum Cover to Crosslay (per set of 2)	\$730.00
365	Add 1" Cargo Netting to cross/speedlay (2)	\$442.00
366	Crosslay roll-up door enclosure	\$2,814.00
367	Poly Tray additional	\$575.00
368	Hose Reel, Rear Compartment Mounted w/ 150' Hose	\$3,804.00
369	Hose Reel, above pump w/ 150' Hose	\$3,505.00
370	Hose Reel, Under Cab w/ 100' Hose	\$9,584.00
371	Akron 3096-95 gpm Single Agent System	\$6,114.00
372	Akron 3096-95 gpm Dual Agent System	\$7,616.00
373	Elkhart 240-95 Single Agent	\$6,465.00
374	Elkhart 240-95 Dual Agent	\$7,969.00
375	Foam Pro 1600 Single Agent to (3) Discharges	\$9,716.00
376	Foam Pro 2001 Dual Agent to (3) Discharges	\$1,896.00
377	Foam Pro 2002 Dual Agent to (3) Discharges	\$21,985.00
378	Pierce Husky 3, Single Agent (3) discharges	\$10,732.00
379	Pierce Husky 12 Single Agent (5) discharge	\$19,201.00
380	Pierce Husky 12 Dual Agent (5) Discharge	\$22,834.00
381	Pierce Husky 300 Industrial Foam System	\$112,135.00
382	Foam Cell 20 Gallons	\$1,644.00
383	Foam Cell 40 Gallons	\$2,050.00
384	Foam Cell 50 Gallons	\$2,732.00
385	Foam system by-pass to deluge or aerial	\$4,821.00
386	Foam Cell 300 Gallons	\$3,670.00
387	Pierce Hercules CAFS to (5) Discharges	\$31,888.00
388	Pump Panel Enclosure	\$3,930.00

389	Cold Climate Pump Package	\$9,734.00
390	Airhorn at activation pump panel	\$193.00
391	Add Top Pump Control	\$8,844.00
392	Tank Level LED Group	\$1,434.00
393	Tank level LED (Individual lights)	\$2,977.00
394	LED Backlite Gauges each	\$108.00
395	D-TEC	\$1,208.00
396	Will-Burt 7-30 Mast with Nycoil	\$13,498.00
397	Will-Burt 7-42 Mast with Nycoil	\$19,577.00
398	4 Channel Flash drive DVR	\$2,720.00
399	120 volt Body A/C, roof mounted with heat	\$2,531.00
400	2 person Command Center	\$14,605.00
401	Fire Pump 250 gpm	\$32,442.00
402	Haz-Mat Upgrade	\$23,190.00
403	LED Emergency Light Package	\$13,071.00
404	Upgrade to HDR Body	\$47,564.00
405	HDR Stainless Body	\$11,299.00
406	Water Tank - Rescue	\$11,848.00
407	Communications Center, 2 Desk with Conference	\$265,353.00
408	LED Interior Lighting	\$4,761.00
409	Tool Drawer(each)	\$1,302.00
410	Airbag Rack (each)	\$195.00
411	Rack, Plywood (10)	\$1,105.00
412	120 v Refrigerator 23 cu ft.	\$2,803.00
413	Vertical Exhaust in Compartment	\$799.00
414	Slide-out Module up to 132" each	\$19,259.00
415	Leveling System	\$10,242.00
416	Awning	\$3,940.00
417	Electric Awning	\$8,135.00
418	Quic-Ladder Access Ladder	\$2,239.00
419	Air Horns with 2 foot switches	\$170.00
420	Additional Speaker	\$676.00
421	Howler	\$1,179.00
422	Q2B Siren	\$4,322.00
423	Chrome Bell with manual pull string	\$1,785.00
424	GTT Emitter Roof/remote mounted	\$5,211.00
425	Roto Ray Emergency Light	\$2,881.00
426	Mini Lightbar over crew cab Doors	\$4,459.00
427	3 Mini LED Light over each side cab door	\$1,396.00
428	Traffic Directing light bar "A"	\$1,610.00
429	Traffic Directing light bar "B"	\$2,544.00
430	Dual Traffic Advisor Lights	\$2,552.00
431	Inverter	\$3,178.00
432	Diesel 7.5 KW	\$15,966.00
433	Diesel 10 KW Generator w/ Monitor Package	\$19,748.00
434	Diesel 20 KW water cooled	\$24,767.00

435	Gas EM400 3.5	\$6,305.00
436	Gas 5.5 KW	\$7,922.00
437	Hydraulic 3.6 kw	\$13,023.00
438	Hydraulic 6 KW	\$19,883.00
439	Hydraulic 8 KW	\$22,671.00
440	Hydraulic 10 KW	\$23,486.00
441	Hydraulic 15 KW	\$36,202.00
442	Hydraulic 30 KW	\$45,477.00
443	PTO Drive 15 KW	\$18,256.00
444	PTO Drive 25 kw	\$19,688.00
445	PTO Drive 40 Kw	\$23,918.00
446	500 Watt Tripod Flood Light	\$2,152.00
447	750 Watt Flood Light w/ pole	\$2,279.00
448	1000 Watt Flood Light w/pole	\$2,376.00
449	1500 Watt Flood Light - recessed	\$2,378.00
450	120 volt LED visor light	\$1,802.00
451	750 Watt Visor light	\$1,877.00
452	120 volt 150 watt LED w/ pole	\$2,742.00
453	120 volt 150 watt LED recessed/flush mount	\$2,215.00
454	120 volt 150 watt LED Pedestal	\$2,848.00
455	Light Tower 9000 watt	\$24,935.00
456	Light Tower 6000 watt	\$21,881.00
457	Light Tower 3000 Watt	\$18,215.00
458	Light Tower 12 volt 4 - Lights	\$14,100.00
459	Electric Cord Reel with 200' of 10/3	\$2,859.00
460	Electric Cord Reel with 200' of 10/3 in Front Bumper	\$3,215.00
461	Electrical Receptacle duplex (per each) 15 or 20 amp	\$314.00
462	Electrical Receptacle 30 amp (per each)	\$384.00
463	Cascade - 6 - 6000 PSI UN	\$16,553.00
464	Breathing air compressor	\$81,424.00
465	Breathing air booster pump	\$2,830.00
466	Breathing air fill-frag station	\$9,957.00
467	High Pressure Breathing Air Reel (200' hose)	\$3,478.00
468	Tool air reel with 150' hose	\$2,744.00
469	Hydraulic Reel, 100' x .25" Hose	\$6,509.00
470	Hydraulics package (2 reels with 100' hoses and 2 connector 12' hoses)	\$15,069.00
471	Hannay reel with 100' Core Tech hose	\$8,506.00
472	Rescue Bulkhead fittings	\$2,007.00
473	AC Power to Tip	\$7,330.00
474	Full Depth & Full Height Compartments	\$6,800.00
475	Quick lock waterway	\$5,562.00
476	Provide Breathing Air to Tip	\$14,044.00
477	Add PUC pump, tank and crosslay to Tiller	\$97,386.00
478	Provide Super Duty 100' Aerial Ladder, In Addition to Base Price	\$108,790.00

479	Pumper Style Body for Single Axle 75'	-\$10,144.00
480	Remote Tip Controls, Ladder	\$6,715.00
481	Aerial Control Wireless MUX Aerials	\$10,133.00
482	Lyfe Brackets 3 in 1	\$1,820.00
483	LED Emergency Light Package Upgrade	\$9,502.00
484	Two (2) Monitors with Platforms	\$23,239.00
485	Single VUM Monitor Valve	\$2,449.00
486	2- VUM Manual Monitor Valves	\$5,571.00
487	Stokes Brackets behind Boom	\$903.00
488	Enclosed Stokes Box	\$2,028.00
489	Collision Avoidance	\$7,776.00
490	Aerial warning lighting A	\$4,804.00
491	Aerial Warning Lighting B	\$5,143.00
492	LED Rung Lighting	\$4,671.00
493	High Flow Waterway	\$8,447.00
494	12 Volt LED Tracking/tip lights	\$3,391.00
495	Two-tone Cab paint	\$2,341.00
496	Undercoating, Cab & Body, Ziebart	\$1,227.00
497	E-Coat Under body Chassis	\$1,912.00
498	Corrosion Prevention Treatment, ECK, Dissimilar Metal	\$2,172.00
499	Painted Grill	\$1,306.00
500	Pump Panel Drawing	\$1,316.00
501	50' Snozzle - P-50	\$221,886.00
502	65' Snozzle HS-2 65'	\$243,618.00
503	Graphics upgrade 1	\$1,973.00
504	Graphics Upgrade 2	\$2,960.00
505	Graphics Upgrade 3	\$3,948.00
506	Graphics Upgraded 4	\$4,934.00
507	Extended Chassis Warranty (per year)	\$5,016.00
508	Extended Body Warranty (per year)	\$6,499.00
509	Emergency Equipment Upfitting	
510	Responder Lighting Package	\$3,773.00
511	Squad Package	\$6,532.00
512	Commander Package	\$8,859.00
513	Arrestor Package	\$11,036.00
514	Director Package	\$13,619.00
515	Lieutenant Package	\$20,294.00
516	Chief's Package	\$25,333.00
517	Executive Package	\$25,714.00
518	Whelen Lighting and parts (Red 19 or PL 19.1)	43% Off List
519	Havis (HS 6/19)	32% Off List
520	ProGard (ProGard 2019 Catalog)	25% Off list
521	Minor P. M.	\$1,271.00
522	Major P. M.	\$2,084.00
523	Major P. M. w/ Transend	\$2,511.00
524	Aerial Maintenance	\$1,861.00

525	ARFF Unit Annual Inspection	\$1,804.00
526	ARFF Minor Service	\$2,621.00
527	ARFF Major Service	\$3,670.00
528	HRET Upgrade - Attackmaster 3	\$20,446.00
529	HRET Upgrade - Attackmaster 4	\$26,737.00
530	Foam System Maintenance Husky or similar (in shop)	\$1,358.00
531	Foam Testing ARFF	\$813.00
532	CAFS Service	\$1,358.00
533	Annual Pump Test (in shop)	\$446.00
534	Quantum Step Maintenance	\$393.00
535	Wheels off brake inspection - Single	\$315.00
536	Wheels off brake inspection - Tandem	\$524.00
537	A/C System Service	\$917.00
538	Power steering Flush	\$624.00
539	TAK4 Inspection	\$603.00
540	Husky/CAFS/Foam Service	\$1,504.00
541	Aerial Testing	\$1,835.00
542	Labor Rate, per hour	\$139.00
543	Each 150' Lengths of Utility Rope	\$222.00
544	150' life safety rope, at least 1/2" (12 mm) diameter meeting NFPA	\$289.00
545	150' Life Safety Rope, at least 5/8" (16 mm) diameter meeting NFPA	\$318.00
546	2.5 Gallon Water Extinguisher	\$183.00
547	Hose 1.75" x 50 Double Jacket with 1.50" couplings	\$230.00
548	Hose 2.50" x 50' Double Jacket with 2.50" Couplings	\$273.00
549	Hose 3.0" x 50' Double Jacket with 2.5" Couplings	\$340.00
550	4.00" x 100' Rubber Lined Hose	\$725.00
551	5.00" x 100' Rubber Lined Hose	\$798.00
552	Additional 10' Folding Ladder	\$579.00
553	Additional 14' Roof with Hooks	\$707.00
554	Air Bags - 56 Ton System	\$8,454.00
555	Thermal Imager Camera with charger	\$15,573.00
556	Combination Spanner Wrench with Bracket	\$183.00
557	Complete SCBA	\$9,961.00
558	Deck Gun with Tips, Manual	\$4,894.00
559	Deck Gun with Tips, Electric	\$9,567.00
560	1.5" Nozzle with shut-off	\$1,587.00
561	2.5" Nozzle with shut-off	\$1,766.00
562	Portable Monitor 2.5" Inlet	\$6,264.00
563	Each Approved Portable Fire Extinguisher: ABC	\$220.00
564	Each Approved Portable Fire Extinguisher: CO2	\$283.00
565	Each Hydrant Wrench Set	\$220.00
566	Each Portable Hand Light w/ Mounting Brackets	\$145.00
567	Each Scoop Shovel	\$105.00
568	First Aid Kit, 24 units, Fire Department Assortment	\$318.00

569	Little Giant Ladder	\$670.00
570	One Assorted Tool Box	\$556.00
571	One Hose Roller	\$406.00
572	One Pair of Bolt Cutters 24"	\$273.00
573	Cut-off Circular Saw	\$2,669.00
574	Chain Saw	\$2,268.00
575	Piston Intake	\$2,097.00
576	Rescue Tools - Power Unit, (2) Rams, Cutter, Spreader, Hoses	\$41,940.00
577	Silent Witness	\$1,446.00
578	Spare SCBA Bottles	\$1,573.00
579	Thermal Imager Camera System	\$35,596.00
580	Hose Clamp	\$651.00
581	Axe, Pick	\$145.00
582	Axe, Flat	\$139.00
583	PPV Fan, Gas	\$2,726.00
584	PPV Electric Fan	\$5,452.00
585	Poly mounts for tools, Rescue Equipment	\$1,296.00
586	380 Camera 8003040	\$9,832.00
587	380 Camera 8003030	\$11,631.00
588	Poly Console Box	\$1,944.00
589	Small poly console box	\$1,296.00
590	Pumper Custom Poly Mount Package	\$7,452.00
591	Aerial Custom Poly Mount Package	\$9,936.00
592	Rescue Custom Poly Mount Package	\$13,338.00
593	Engine Tunnel Custom Poly Console	\$1,728.00



Option List

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12/8/2021

Customer:	Fluvanna County, VA	Bid Number:	671
Representative	Sandridge, Kevin	Job Number:	
Organization:	Atlantic Emergency Solutions, Inc	Number of Units:	1
Requirements Manager:		Bid Date:	08/16/2019
Description:	Palmyra FL Dryside Tanker	Stock Number:	
Body:	Tanker, High Side Dry Side, Aluminum Body, Single Rear Axle, w/Saber or Commercial	Price Level:	40 (Current: 40)
Chassis:	Freightliner M2-106, 4x2 Single Rear Axle	Lane:	

Line	Option	Type	Option Description	Qty
1	0784629		Build-to-Order, Pierce Florida Product - Dry Side Tanker	1
2	0766671		Boiler Plate, Tanker, w/Commercial Chassis	1
			Fire Department/Customer - Palmyra Volunteer Fire Dept.	
			Operating/In conjunction W-Service Center - Operating	
			Miles - 50 Miles	
			Number of Fire Dept/Municipalities - 25	
			Bidder/Sales Organization - Atlantic Emergency Solutions	
			Delivery - Delivery representative	
			Dealership/Sales Organization, Service - Atlantic Emergency Solutions	
3	0018257		Commercial chassis & Snorkel products	1
4	0584455		Manufacture Location, Bradenton, Florida	1
5	0584453		RFP Location: Bradenton, Florida	1
6	0588609		Vehicle Destination, US	1
7	0610783		Comply NFPA 1901 Changes Effect Jan 1, 2016, With Exceptions, Commercial Chassis	1
8	0545738		Mobile Water Supply Fire Apparatus, PMFD	1
9	0588617		Vehicle Certification, Tanker	1
10	0568412		Agency, Apparatus Certification, Pumper/Tanker, Third Party, PMFD	1
11	0620362		Consortium, HGAC	1
12	0537375		Unit of Measure, US Gallons	1
13	0000005		Bid Bond, 10%	1
14	0540326		Performance Bond, Not Requested	1
15	0000007		Approval Drawing	1
16	0631595		Drawing, Standard Layout, Pump Panel, Control Zone, Ref Only, Pumper, 2nd Gen, PMFD	1
17	0589819		Electrical Diagrams, Commercial	1
18	0583846		Freightliner M2-106, 4x2 Single Rear Axle	1
19	0893566		Model Year 2024	1
20	0721210		Base Price, Freightliner M2-106, 4x2, Effective 5/18/2021 - EXPIRED 11/23/2021	1
21	0623753		Wheelbase, 211" to 225", Single Axle (16K/27+K GAWR), Freightliner	1
			Wheelbase - 221.5"	
22	0584367		GVW Rating, Commercial Chassis	1
			GVW rating - 45,600 lbs.	
23	0579898		Frame, Chassis, Freightliner, 120 KSI	1
24	0582814		Frame Reinforcement, 1/4" Inner Liner, Freightliner	1
25	0669868		Axle, Front, 16K (w/16K Rating), Freightliner, 4x2	1
26	0083043		Suspension, Front Spring, 16,000 lb, Commercial	1
27	0073051		Shock Absorbers, Front	1
28	0082996		Brakes, Cam Front, 16.50"x 6.00" Commercial	1
29	0735082	SP	Continental Tires - SPECIAL Rating - 33.5 Rear Axle, Freightliner	1
30	0772241		Tires, Front, 315/80R22.50	1
31	0772196		Wheels, Polished Aluminum, 22.50" x 9.00"	1
32	0761618	SP	Axle, Rear, Meritor RS-30-185, 33.5 Rating, Freightliner M2-106/108SD	1
33	0892703	SP	S-Cam Style 16.50" x 8.62" (Use w/33.5K Rear Axle)	1
34	0544651		Top Speed of Vehicle, 60 MPH, Commercial Chassis	1
35	0761616	SP	Suspension, Rear Spring, 33,500 lb, Commercial	1
36	0582601		No-Spin Differential Lock, Driver Controlled, Freightliner M2-106 4x2, 4x4	1
37	0772234		Tires, Rear, 315/80R22.50	1
38	0773812		Wheels, Polished Aluminum, 22.50" x 9.00"	1
39	0620570		Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Single Axle	1
			Qty, Tire Pressure Ind - 6	

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.849/1306
40	0003245		Axle Hub Covers w/center hole, S/S, Front Axle	1
41	0001960		Axle Hub Covers, Rear, S/S, High Hat (Pair)	1
42	0057936		Covers, Lug Nut, Chrome	1
43	0002045		Mud Flap, Front and Rear, Pierce Logo	1
44	0769814		Clear Coat on Aluminum Wheels, (DuraBrite/AccuShield), Commercial 4x2	1
45	0742602	SP	Chains, Rud automatic tire, 6 strand, Locking Switch	1
46	0544802		Chocks, Wheel, SAC-44-E, Folding	1
Qty, Pair - 01				
47	0544806		Mounting Brackets, Chocks, SAC-44-E, Folding, Horizontal	1
Qty, Pair - 01				
Location, Wheel Chocks - Left Side Rear Tire, Forward				
48	0773967		ABS, Anti-Lock Braking, w/Electronic Stability Pgm w/ATC, Commercial	1
49	0009547		Air Compressor, Brake, 18.7 CFM, Commercial	1
50	0773985		Air Dryer, Brake, w/Heater, Commercial	1
51	0000858		Inlet/Outlet, Air, w/Disconnect Fitting	1
Location, Air Coupling(s) - h) DS Pump Panel				
Qty, Air Coupling (s) - 1				
52	0584079		Air Tank, One (1) Additional for Extra Capacity, Commercial (Pierce Install)	1
53	0029441		Compressor, Air, Gast 4HCC-10-M450X, 120V Brake System	1
Location - Cargo Dunnage Area				
54	0728954		Engine, Cummins L9, 360 hp, Freightliner	1
55	0755088		Engine Surcharge, Cummins/Freightliner	1
56	0001247		High Idle w/Electronic Engine, Commercial	1
57	0627254		Auxiliary Brake, Engine Brake, Cummins C-Brake with Brake Lts, Freightliner	1
58	0779576		Fuel/Water Separator, Detroit, w/Hand Primer, H2O Sensor w/Preheater, M2-106/108SD	1
59	0773981		Air Intake, Engine, w/Ember Separator, OEM Installed, Commercial	1
60	0773636		Exhaust System, Horizontal, RH Step Mounted DPF/SCR, Commercial	1
61	0684987		Exhaust Modifications, Commercial Chassis, Horizontal Exhaust	1
62	0061579		Coolant Hoses, Gates Blue Stripe, FL M2	1
63	0773913		Fuel Tank, 50 Gallon, Left Side, Aluminum, Commercial	1
64	0773952		DEF Tank, Left Side Location, Commercial	1
65	0723716		Fuel Priming Pump, Electronic, Automatic, Cummins, No Swt Req'd	1
66	0646198	SP	Shutoff Valve, Fuel Line, Freightliner, PDI Install	1
67	0023745		Cooler, Chassis Fuel, Pierce Installed	1
68	0773950		Trans, Automatic, Allison 3000 EVS, w/(2) PTO Provsions, Commercial	1
69	0773949		Transmission, Shifter, Push Button, 5 Speed, Commercial	1
70	0011475		Transmission Oil Cooler, Internal, Commercial	1
71	0601080	SP	Mode, Downshift, Aggressive Downshift to 3nd, w/engine brake, 5 spd, Freightliner	1
72	0680324		Enable Allison Automatic Transmission Prognostics, Freightliner M2-106	1
73	0733745		Driveline for Mid-Ship Pump Installation - Provided By Chassis Mfgr - Commercial	1
74	0773977		Steering, Power w/Tilt/Telescope Column, Commercial	1
75	0631834		Bumper Extension, 22", Steel Painted, Chicago Style, Commercial Chassis	1
76	0640195		Tray, Hose, Center, 22" Bumper, Outside Air Horns	1
Grating, Bumper extension - Grating, Rubber				
Capacity, Bumper Tray - 21) 150' of 1.75"				
77	0633479		Hose Restraint, Bumper Tray, Velcro Straps, Pair	1
Qty, Pair - 01				
78	0002270		Tow Hooks, Chrome	1
79	0591736		Rods, Sight on Bumper, Bores, Model 848-211, Directional and Marker Light Active	1
80	0582760		Cab, 2-door, Flat Roof, Freightliner M2-106/108SD	1
81	0769896		Cab Interior, Gray, w/Convenience Package, 2-Door, Freightliner	1
82	0668972		Grille, Chromed Plastic, w/Exterior Appearance Pkg, Freightliner	1
83	0548159		Mirrors, West Coast, 8"Convex, Heated, Remote, Bright, PS Aux, Freightliner	1
84	0027013		Not Required, Peeper Window	1
85	0057971		Step Package, Deluxe Alum 4-Way, M2, 2-Door	1
86	0509487		Lights, Cab Access Steps, P25, LED, 4Lts	1
87	0582789		Visor, Exterior Sun, Painted Composite, FL M2-106/112/108/114SD	1
88	0773760		Power Windows & Door Locks, 2-Door Cab, Commercial	1
89	0070598		Daytime Running Lts, Commercial	1
90	0773943		Air Conditioning, Commercial	1
91	0759495		Ember Screen, for AC Filter, Air Intake, Pierce Provided, Commercial Chassis	1

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.850/1306
92	0005940		Lights, Engine Compt, (2) Commercial Chassis	1
93	0543655		Console, Freightliner M2, 2/4 Door, Radio/Map Storage	1
94	0726766		Side Roll Protection, Freightliner	1
95	0624102		Seating Capacity, Cab, 2-Door, Commercial	2
			Qty, - 02	
96	0726339		Seats, Cab, Air Driver/Passenger, Pierce PSV, Non-SCBA, Freightliner	1
			Covering, Seat Material, Commercial - Vinyl	
97	0073999		No Crew Cab Seats, 2-door cab	1
98	0597773		Seat Belt Web Length, NFPA Compliant, Commercial Chassis	1
99	0581771		Seat Belts, Orange, Commercial Chassis	1
100	0543914		Helmet Storage, In Body Compartment	1
101	0602629		Portable Hand Lt, Provided by Fire Dept, Mobile Water Supply, NFPA 2016	1
102	0584358		Cab Instrumentation, Commercial Chassis	1
103	0058045		Panel, Emergency Switch, Overhead, Freightliner	1
104	0005937		Light, Do Not Move Apparatus, Commercial Chassis	1
			Alarm, Do Not Move Truck - Steady Alarm	
105	0005926		Light, Open Door - Commercial Std	1
106	0072620		Wiper control, intermittent feature Commercial	1
107	0628991		Wiring, Spare, 30 A 12V DC, 12 Circuit Fuse Block, Blue Sea 5026 1st	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Location - Cab in the console and top front bulkhead wall of LS4	
108	0636439		Wiring, Spare, 37.5 A 12V DC, Cust Install Radio, 30A Bat Dir, 7.5A Ign & Grnd	1
			Qty, - 01	
			Location - Cab Console	
109	0637219		NO RADIO, AM/FM	1
110	0626864		Not Required, Vehicle Information Center, No Multiplex System	1
111	0734854		Collision Mitigation, Not Requested	1
112	0611591		Vehicle Data Recorder w/Seat Belt Monitor, Commercial	1
			VDR Primary Inputs - No Primary Input	
			VDR Additional Input - No Additional Input	
113	0602598		Intercom, Firecom 5100D Single Radio, 1 Wireless Base Station, 1-5 Wireless	1
			Location - TBD	
114	0006240		Cable, Radio to Intercom Interface, Firecom, 1 Radio	1
			Radio, First Two-Way Make - Motorola High Power	
			Radio, First, Two-Way Model - Motorola APX 7500 HP	
115	0602376		Headset, Firecom, Wireless, UHW-505 Under Helmet, Radio Transmit	2
			Qty, - 02	
			Location, Headset - Driver Seat and Officer Seat	
116	0681408		Hangers For Headsets, NFPA, Each	2
			Qty, - 02	
			Location, Headset Hangers - Driver Seat and Officer Seat	
117	0696434		Antenna Mount, Commercial Chassis, Cable Routed to Console	2
			Qty, - 02	
118	0564138		Camera System, Zone Defense, Rear Camera & 7" LCD Display	1
			Location, Camera Monitor - Mount at Pick Up Driver Dash FLA	
119	0511071		Guard, 4-Way, Rear Vision Camera	1
			Qty, - 01	
			Location - Rear Body	
120	0622833		Traditional Direct Wired Electrical System, Commercial Chassis	1
121	0623127		Electrical System, Freightliner M2-106/108SD, Tanker	1
122	0746524		Single Start, (2) Batteries, 2000 CCA Total, LH, Freightliner	1
123	0583981		Battery Relocation NOT REQUIRED	1
124	0897772		Battery Location as Provided by Chassis Manufacturer	1
125	0072685		Selector, Single Start Battery, Commercial Chassis	1
126	0531313		Charger, Sngl Sys, IOTA, DSL 55, 55 amp, Kussmaul 091-94-12 Indicator	1
127	0663649		Location, Charger, w/location feature	1
			Location - Behind the driver's seat	
128	0567881		Location, Bat Chrg Ind, Driver's Seat Riser, Comm Chassis	1
129	0782026		Shoreline, 20A 120V, Blue Sea Sure Eject 7851	1
			Qty, - 01	
			Connection, Shoreline - 120V Air Compressor, Battery Charger and shoreline receptacles.	

Line	Option	Type	Option Description	Qty
129			Color, Cover, BI Sea Inlet - Yellow	
130	0785088		Shoreline Location, Commercial Chassis/PMFD	1
			Location, Shoreline(s) - DS Pump Panel	
131	0621234		Alternator, 300 amp, Delco, 40SI, FLR	1
132	0692675		Load Manager, Kussmaul 2 Channel, Commercial	1
133	0738018		Cab Lighting, LED HEADLIGHTS, Freightliner	1
134	0773739		Cab Lighting, LED Marker Lights, Commercial	1
135	0620054		Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	1
136	0563675		Lights, Clearance/Marker/ID, Rear, Truck-Lite 33050R LED 7Lts	1
137	0564683		Lights, Tail, Wln M6BTT* Red LED Stop/Tail & M6T* Amber LED Dir Arw For Hsg	1
			Color, Lens - Colored	
138	0561471		Lights, Backup, Wln M6BUW, LED, For Tail Lt Housing	1
139	0664481		Bracket, License Plate & Light, P25 LED	1
140	0556842		Bezels, Wln, (2) M6 Chrome Pierce, For mtg (4) Wln M6 lights	1
141	0755859	SP	Instruction, Order of Tail Lt Instl, Stop, Dir, BU, Warn PMFD	1
142	0589905		Alarm, Back-up Warning, PRECO 1040	1
143	0768513		Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 2Dr	1
144	0769572		Lights, Perimeter Pump House, Amdor AY-LB-12HW020 LED 2lts	1
145	0768520		Lights, Perimeter Body, Amdor AY-LB-12HW020 LED 2lts, Rear Step, Comm Chassis	1
			Control, Perimeter Lts - Parking Brake Applied	
146	0607703		Lights, Step, P25 LED 4lts, Ign, Prk Brk Activated, Commercial Chassis	1
147	0748321		Lights, Wln, PCPSM2*, Pioneer, 12 VDC, 3rd	1
			Location - Forward and high on the PS body	
			Qty, - 01	
			Color, Wln Lt Housing - Chrome Cover	
			Control, Scene Lts - Cab Sw Panel DS and Pump Panel Sw LS	
148	0763610		Lights, Wln, PCPSM2*, Pioneer, 12 VDC, 1st	1
			Location - Forward and high on DS body	
			Qty, - 01	
			Color, Wln Lt Housing - Chrome Cover	
			Control, Scene Lts - Cab Sw Panel DS and Pump Panel Sw LS	
149	0772850		Lights, Wln, S16*M* 16" 12VDC, 1st	2
			Location - One each side of the traffic advisor recessed in the full width step.	
			Qty, - 02	
			Color, Wln Lt Housing - Black Paint	
			Control, Scene Lts - Cab Sw Panel DS and Body Switch, DS Rear Bulkhead	
			Scene Light Optics - flood	
150	0532358		Not Required, Deck Lights, Other Hose Bed & Rear Lighting	1
151	0645877		Lights, Hose Bed, Sides, Dual LED Light Strips	1
			Control, Hose Bed Lts - Cup Switch At Rear	
152	0645677		Lights, Not Required, Rear Work, Alt. 12 Volt Lights At Rear Body	1
153	0762433		Lights, Walk Surf, Amdor AY-LB-12HW0**, LED, Cargo Areas, Front Sheet	1
			Qty, Cargo Lts - 1	
154	0753285		Switch, White Warning Lights, Front	1
			Function Reset - On	
155	0514863		Switch, Master, For Tank Dump Valves, E-Tanker & Dry Side	1
156	0683326		Tanker, High Side Dry Side, Aluminum Body, Single Rear Axle, w/Saber or Commercial	1
157	0682210		No Value Discount Available	1
158	0594708		Tank, Water, Poly, High Side Dry Side, 2000 Gallon, w/Catwalks	1
159	0028107		Not Required, Foam Cell Modification	1
160	0777347		Tank Cradle, Stainless Steel, Dryside Tanker	1
161	0671494		Sleeve through Tank - Up to 3" Plumbing, Dryside	1
			Qty, Sleeve - 1	
162	0556517		Restraint, Water Tank, Dry Side Tanker	1
163	0083235		Tank Access Ladder, Poly Tank, Dry Side Tanker	1
			Location, driver's/passenger's/center - Left Side	
164	0027805		Overflow, 6" Poly, Tanker	1
165	0027604		Bracket, For Over Length Zico Quic-Lift, Etanker/ Dry Side	1

Line	Option	Type	Option Description	Qty
166	0645089		Rack, Zico Quic-Lift, PTS-HA, Hydraulic Tank Rack, Cover	1
			Qty, - 01	
			Location, driver's/passenger's/center - Right Side	
			Size, Portable Tank - 2100g Fol-Da-Tank - Aluminum Frame	
			Cover Material, Rack, Folding Tank or HSH - Smooth Aluminum - Painted Job Color	
167	0543906		Doors, Side Dump Chute, Top Hinged, S/S Finish	1
168	0052937	SP	Scuffplates, Side Sheet, Brushed S/S, Behind Portable Tank Rack, Dry Side	1
169	0038731		No 2.5" Direct Rear Tank Fill Req'd	1
170	0021882		Tank Fill, Direct, Rear 4.0", Akron/Elkhart Ball Valve, Poly Tank	1
			Qty, - 1	
			Location, driver's/passenger's/center - Right	
			Adapter, Elbow - 4.0"NST x 4.0" Storz	
171	0048710		Not Required, Jet Assist	1
172	0666425		Tank Dump, Ebro, 10" Air Control, Rear	1
173	0028796		Dump Chute, Rear, Air Actuated, Stainless Steel	1
174	0666428		Tank Dump, Ebro, 10" Air Control, Rear of Axle, LS	1
175	0028766		Dump Chute, LS, Air Actuated	1
176	0666427		Tank Dump, Ebro, 10" Air Control, Rear of Axle, RS	1
177	0028760		Dump Chute, RS, Air Actuated	1
178	0091023		Hose Bed, Aluminum, Dry Side Tanker	1
			Finish, Inside of Hose Bed - Painted	
179	0618593		Hose Load, Dry Side Tanker, Other than Standard	1
			Capacity, Hosebed - 500' -4", 300'-3"	
180	0059656		Divider, Hose Bed, .25" Unpainted, PMFD	2
			Qty, Hosebed Dividers - 2	
181	0615183		Pull Bar w/1" Strap for Seat Belt Buckle Fasteners	1
			Location - Rear Hose Bed	
			Qty, - 01	
			Fill in Blank - Seat Belt Buckles at the top of the Hose Bed	
			Color - 2) red	
182	0589278		Hose Restraint, Hose Bed, Velcro Strap on Top, 2" Heavy Nylon Web at Rear	1
			Type of fastener - seat belt buckle	
			Nylon Web Color - Black	
			Type of fastener, Rear - seat belt buckle - bottom of hosebed	
183	0013512		Running Boards, 12.75" Deep	1
184	0028777		Tailboard, 16" Deep, Etanker & Dry Side	1
185	0690023		Wall, Rear, Smooth Aluminum	1
186	0003540		Tow Eyes (2) (Tanker/Rescue)	1
187	0590926		Hose Restraint, Running Board, Velcro Straps	2
			Location, Hose Tray, Running Board - a) both sides	
			Qty, Tray, Hose - 2	
188	0664760		Hose Restraint, Tailboard, Velcro Straps	1
			Location - Center tray on rear tailboard	
			Qty, Tray, Hose - 1	
189	0030078	SP	Tray, Hose, Running Board, Special Cap, "Floating" Tray	2
			Location, Hose Tray, Running Board - a) both sides	
			Qty, Tray, Hose - 2	
			Capacity, Hose Tray - TBD	
190	0516369	SP	Tray, (Qty), Hose, Tailboard, Capacity Feature	1
			Capacity, Hose Tray - TBD	
			Location, driver's/passenger's/center - Centered	
191	0003581		Construction, Compt, Alum, Elliptical & Dry Side Tanker	1
192	0555484		LS 148" Rollup, Side Dump, High Side Dry Side, Commercial Chassis	1
193	0001401		LS, No Hard Suction Hose Compt Available, Dry Side	1
194	0001385		RS 148" Roll-up Door, w/Side Dump, Dry Side, Commercial Chassis	1
195	0696829		Compt, (1) Hard Suction Hose, RS, Dry Side 148", S/S Door	1
196	0505647		Doors, Amdor, Roll-up, Side Compartments	5
			Qty, Door Accessory - 05	
			Color, Roll-up Door - AMDOR Painted to Match Lower Body	
			Latch, Roll-up Door - Non-Locking Liftbar	
197	0048732		No Rear Compt Req'd - Elliptical/Dry Side/Tanker	1

Line	Option	Type	Option Description	Qty
198	0659353		Lights, Compt, Amdor AY-9220 LED, Dual Lt Strip	5
			Qty, - 05	
199	0687146		Shelf Tracks, Painted	2
			Qty, Shelf Track - 02	
			Location, Shelf Track - LS4 and RS1	
200	0687112		Shelves, Adjustable, 500 lb Capacity, Full Width/Depth, Painted	2
			Qty, Shelf - 02	
			Location, Shelf - LS4 and RS1 rear of the compartment partitions.	
201	0647091		Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides	2
			Qty, - 02	
			Location, Tray Slide-Out, Floor Mounted - RS1 - Left of Partition and LS4	
			- Right of Partition	
			Material Finish, Tray - Painted - Spatter Gray	
202	0726451		Partition, Vertical Compt	2
			Qty, Partition - 02	
			Location, Partition, Vertical - LS4 and RS1	
203	0755527		Pegboard, Back Wall Mounted, 3/16" Alum, Standard Depth Upper	3
			Qty, Comp. Accessory - 03	
			Hole Diameter, Pegboard/Toolboard - .281" diameter	
			Finish, Pegboard/Toolboard - Painted - Spatter Gray	
			Location, Compartment, Predefined - LS1, LS2 and LS3	
204	0004016		Rub Rail, Aluminum Extruded, Side of Body	1
205	0510626		Fender Crowns, Rear, S/S, Wider Than Std.	1
206	0602338		Hose, Hard Suction, Provided by Dealer, Mobile Water Supply NFPA 2016	2
			Qty, Hard Suction Hose - 2	
			Brand, Model, Age of Tool - National Hose	
			Length, Hard Suction Hose - 10'	
			Diameter, Hard Suction Hose - 6.00"	
			Type of Hose Ends, Couplings, Hard Suction Hose - Long Handle	
			Female X Rocker Lug Male	
207	0778011	SP	Trough, Hard Suction Hose, Single, Top of Zico Portable Tank Rack, Painted	1
			Fill in Blank - 6" X 10'	
208	0626229		Handrails, Side Pump Panels, Per Print	1
209	0018215		Compt, Air Bottle in Fender, PVC Tube, Set of 4, Cast Products Door	1
210	0024239		Ladder, 26' Duo-Safety 925-A 3-Sect	1
211	0752373		Ladder, 12' Duo-Safety 775-DR Roof	1
			Qty, - 01	
212	0738568	SP	Ladder Storage, Top of Tank, Right Side, Dry Side, Door	1
			Door, Material & Finish, Ladder Storage - aluminum treadplate	
			Latch, Door, Storage - "D" Handle Latch	
213	0733387		Ladder, 10' Duo-Safety Folding 585A	1
214	0084332		Not Required, Pike, Pole, 8'	1
215	0784209		Pike Pole, 6', Mobile Water Supply, Not Required by NFPA 2016 Classification	1
216	0772358	SP	Compt, (5) Pike Pole Tubes, Alum, Mounted on Compt Top, Rear Access Door	1
			Location - DS compartment catwalk.	
			Qty, Pike Pole Tubes - 01	
			Size, Ladder/Pike Pole - TBD	
			Make/Model - TBD	
			Dimensions - TBD	
			Door, Material & Finish, Storage - Aluminum Treadplate	
			Latch, Door, Storage - Southco C2 Chrome Raised	
			Hinge Location - Top	
			Location, Pike Pole Tube - Compt Top - DS	
217	0785102		Steps, Folding, Front of Body, Cargo Bed Access, w/LED, Trident	1
			Coating, Step - black	
			Location, Steps - Full Height Left Side w/LED Light	
218	0014381		Not Required, Rear Step (No rear door)	1
219	0617533		Step, Folding - Extra, Front of Body Only, w/LED, Trident, Dry Side/Elliptical	3
			Qty, Folding Step - 03	
			Location, driver's/passenger's/center - RS	
			Coating, Step - black	
220	0736249	SP	Step, Full	1
			Width, Rear Of Body, 8", Accommodate Traffic Direct Flood Light, Dry Side Tanker	
221	0007545		Pump House, Side Control, 45", Control Zone	1

Line	Option	Type	Option Description	Qty
222	0035501		Pump House Structure, Std Height	1
223	0766794	SP	Cover, Alum 4-way, Compressor, Cargo Area, Bolt On/Removable	1
224	0004415		Pump, Waterous, CS, 1250 GPM, Single Stage	1
225	0004482		Seal, Mechanical, Waterous	1
226	0559769		Trans, Pump, Waterous C20 Series	1
227	0635600		Pumping Mode, Stationary Only	1
228	0605126		Pump Shift, Air Mnl Override, Split Shaft, Interlocked, Waterous	1
229	0003148		Transmission Lock-up, EVS	1
230	0004547		Auxiliary Cooling System	1
231	0014486		Not Required, Transfer Valve, Stage Pump	1
232	0746501		Valve, Relief Intake, Elkhart	1
			Qty - 1	
			Pressure Setting - 150 psig	
			Intake Relief Valve Control - Behind Right Side Pump Panel	
233	0692045		Controller, Pressure, FRC, Pump Boss, PBA400	1
234	0072153		Primer, Trident, Air Prime, Air Operated	1
235	0780364		Manuals, Pump, (2) Total, Electronic Copies	1
236	0602512		Plumbing, Stainless Steel and Hose, Single Stage Pump, Control Zone	1
237	0089437		Plumbing Without Foam System	1
238	0004645		Inlets, 6.00" - 1250 GPM or Larger Pump	1
239	0767389		Valve, w/Relief, Right Inlet, 6", Akron 9333 Elec Controller, Jamesbury,Override	1
			Qty, Main Inlet Valves - 1	
240	0004646		Cap, Main Pump Inlet, Long Handle, NST, VLH	1
241	0084610		Valves, Akron 8000 series- All	1
242	0016158		Valve, Inlet(s) Recessed, Side Cntrl, "Control Zone"	1
			Qty, Inlets - 1	
243	0004700		Control, Inlet, at Valve	1
244	0055600		Not Required, Auxiliary Inlet, Left Side	1
245	0024681		Inlet, Right Side, 2.50", w/3.00" Plumbing	1
246	0092569		No Rear Inlet (Large Dia) Requested	1
247	0064116		No Rear Inlet Actuation Required	1
248	0092696		Not Required, Cap, Rear Inlet	1
249	0009648		No Rear Intake Relief Valve Required on Rear Inlet	1
250	0092568		No Rear Auxiliary Inlet Requested	1
251	0563738		Valve, .75" Bleeder, Aux. Side Inlet, Swing Handle	1
252	0029043		Tank to Pump, (1) 3.00" Valve, 3.00" Plumbing	1
253	0027900		Tank Fill, 2.00"	1
254	0062133		Control, Outlets, Manual, Pierce HW if applicable	1
255	0025045		Not Required, Outlet, Left Side	1
256	0055095		Not Required, Elbow, Left Side Outlets, 2.50"	1
257	0092570		Not Required, Outlets, Left Side Additional	1
258	0035094		Not Required, Elbow, Left Side Outlets, Additional	1
259	0004945		Outlet, Right Side, 2.50"	2
			Qty, Discharges - 02	
260	0085096		Elbow, Right Side Outlets, 30 Degree, 2.5" FNST x 2.5" MNST, VLH	1
261	0550252		Outlet, Right Side, 4" w/3" Plumbing, Handwheel Control, (added)	1
262	0594382		Elbow, Right Side Outlets, 30 Degree, 4.00" FNST x 4.00" Storz, Additional	1
			Qty, Discharges - 01	
263	0029137		Not Required, Outlet, Large Diameter	1
264	0007308		Not Required, Elbow, Large Diameter Outlet	1
265	0648906		Outlet, Front, 2.50" w/2.50" Plumbing	1
			Fitting, Outlet - 2.50" NST with 90 degree swivel	
			Drain, Front Outlet - Automatic	
			Location, Front, Single - top of left bumper	
266	0004995		Outlet, Rear, 2.50"	1
			Qty, Discharges - 01	
			Location, Outlet - a) right side	
267	0040286		Elbow, Rear Outlets, 30 Degree, 2.50" FNST x 2.50" MNST, VLH	1
268	0092574		Not Required, Outlet, Rear, Additional	1
269	0085695		Not Required, Elbow, Rear Outlets, Large, Additional	1
270	0092573		Not Required, Outlet, Hose Bed/Running Board Tray	1

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.855/1306
271	0752097		Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	1
272	0563739		Valve, 0.75" Bleeder, Discharges, Swing Handle	1
273	0029106		Not Required, Deluge Outlet	1
274	0029302		No Monitor Requested	1
275	0029304		No Nozzle Req'd	1
276	0029107		No Deluge Mount	1
277	0087160		No Deadlay Req'd., - Etanker & Dry Side	1
278	0723726		Speedlay Module Not Required	1
279	0722432		Hose Restraint Not Required, No Speedlay Module	1
280	0723395		Speedlays, Not Required	1
281	0723394		Speedlays, Not Required	1
282	0029167		Crosslays Sngl Sheet Unpainted, (2+) 1.50", Std. Cap	2
			Qty, Crosslays - 2	
283	0029196		Not Required, 2.50" Crosslay	1
284	0769652	SP	Hose Restraint, Crosslays, 2" Nylon Web, Seat Belt Buckle, Orange Tether, Bar	2
			Qty, - 02	
285	0029260		Not Required, Speedlays	1
286	0750536		Hose Restr, Spdly, Not Required, No Spdly	1
287	0590875		Hose Restraint, Crosslay/Deadlay, Aluminum Treadplate, Bi-Fold, Top Only	1
			Stay arm, Tray Cover - f) Rubber Latch	
			Restraint Location - Back (towards rear of truck)	
288	0015216		Reel, Booster, Aluminum - Over Pump, Right Side	1
289	0005280		Switches, Reel Rewind - (1) Each Pump Panel	1
290	0562851		Hose, Booster - 200' of 1.00" Niedner ReelTex Hose	1
291	0005245		Capacity, Hose Reel, Special	1
			Capacity, Reel - 200' of 1.00" Niedner ReelTex Hose	
292	0007428		Nozzle for Booster Reel Not Req'd	1
293	0046560		Manual, Override, Hose Reel	1
294	0622237		Roller Assembly, Additional	1
			Location - Mounted to drivers side pump panel cargo side sheet.	
			Qty, - 1	
295	0044333		Not Required, Foam System	1
296	0012126		Not Required, CAF Compressor	1
297	0552517		Not Required, Refill, Foam Tank	1
298	0042573		Not Required, Foam System Demonstration	1
299	0045465		Not Required, Foam Tanks	1
300	0091110		Not Required, Foam Tank Drain	1
301	0091079		Not Required, Foam Tank #2	1
302	0091112		Not Required, Foam Tank #2 Drain	1
303	0746444		Approval Dwg, Color And Label Tags Only	1
304	0032479		Pump Panel Configuration, Control Zone	1
305	0629252		Material, Pump Panels, Side Control Black Vinyl	1
			Material Finish, Pump Panel, Side Control - Black Vinyl	
			Material, Pump Panel, Side Control - Aluminum	
306	0721765		Panel, Pump Access - Right Side Only, Side Control	1
			Latch, Pump Panel Access, Side Mount - Swell Latch, Black	
307	0770487		Cab/Pump Module Gap 3.0" - 4.0", Side Control Pump House	1
			Gap, Cab to Pump Module - Treadplate Valance Panel	
308	0583824		Light, Pump Compt, WIn 3SC0CDCR LED White	1
			Qty, - 01	
309	0586382		Gauges, Engine, Included With Pressure Controller	1
310	0005601		Throttle, Engine, Incl'd w/Press Controller	1
311	0739224		Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle, Green	1
312	0549333		Indicators, Engine, Included with Pressure Controller	1
313	0745568		Indicator Light, Pump Panel, Ok To Pump, Green	1
314	0080713		Control, Air Horn At Pmp Pnl, Red Button, Labeled "Evacuation"	1
315	0005690		Gauges, 6.00" Master, Class 1, 30"-0-600psi	1
316	0005714		Gauge, 2.50" Pressure, Class 1, 0-400psi	1
317	0736421		Gauge, Water Level, Class 1, Remote Module Driver	1
			Activation, Water Level G - pb) parking brake is applied	
318	0760619		Water Level Gauge, WIn PSTANK2, LED 1-Light, 4-Level, PMFD	3
			Qty, - 03	

Line	Option	Type	Option Description	Qty
318			Activation, Water Level G - pb) parking brake is applied Location, Water Level Gauge, Multi-Select - Rear Body and Each Side Body - Most Forward	
319	0735501		Water Level Gauge, Class 1, LED, Mini Slave, Additional	1
320	0006774		Location, Water Level Gauge, Single-Select - a) Cab Not Required, Foam Level Gauge	1
321	0663944		Light Shield/Step 8", LED, P25 LED Stp Lt, Prk Brk Activation	1
322	0643186		Light Shield/Step 8", PS LED, P25 LED Stp Lt Act w/Prk Brk	1
323	0606696		Air Horns, (2) Grover, Stutter Tone, In Bumper	1
324	0606835		Location, Air Horns, Bumper, Each Side, Outside Frame, Outboard (Pos #1 & #7)	1
325	0757092		Control, Air Horn, Multi Select	1
326	0757081		Control, Air Horn, Ft Sw, LS	1
327	0757080		Control, Air Horn, Ft Sw, RS	1
328	0533071		Siren, WIn 295SLSC1, 100 or 200 Watt, w/Plug-in/Detachable Microphone Cord	1
329	0065403		Location, Elect Siren, Overhead, Freightliner M2/SD	1
330	0076156		Control, Elec Siren, Head Only	1
331	0601306		Speaker, (1) WIn, SA315P, w/Pierce Polished Stainless Steel Grille, 100 watt	1
332	0601552		Connection, Speaker - siren head Location, Speaker, Frt Bumper, Recessed, Right Side, Outside Frame, Inbrd (Pos 2)	1
333	0895310		Siren, Federal Q2B	1
334	0006095		Finish, Q2B Siren - Chrome Siren, Mechanical, Mounted Above Deckplate	1
335	0748305		Location, Siren, Mech - b) right Control, Mech Siren, Multi Select	1
336	0748282		Control Mech Siren, Ft Sw LS	1
337	0748281		Control Mech Siren, Ft Sw RS	1
338	0736649		Sw, Siren Brake, Momentary Red, Center Console Sw Pnl	1
339	0746353		Not Required, Warning Lights Intensity	1
340	0747185	SP	Lightbar, WIn, Freedom IV-Q, 60", RRRRW_PCH2F41_WRRRR	1
341	0540357		Filter, Whl Freedom Ltbrs - Colored Lenses Lights, Front Zone, WIn M4* LED, Colored Lens, Comm	1
342	0618457	SP	Color, Lt DS Front - Red Color, Lt PS Front - Red Light, Front, WIn Dominator Plus DP8 30.36", RRWRRWRR, Grl Mt Prk Brk	1
343	0020909		ABS SYSTEMS, Commercial	1
344	0740913	SP	Lights, Side Zone Lower, WIn M6**, M6**, M6**, 6Lts, DS Pump Light De-activation	1
345	0564654		Location, Lights Front Side - b)each side bumper Color, Lens, LED's - Colored Location, Lights Mid Side - Pump Panel Location, Lights Rear Side - Over Rear Wheels Color, Trim - Chrome Trim Color, Lt Side Front, DS - Red Color, Lt Side Front, PS - Red Color, Lt Side Mid DS - Red Color, Lt Side Mid PS - Red Color, Lt Side Rear PS - Red Color, Lt Side Rear DS - Red	1
346	0088745		Lights, Rear Zone Lower, WIn M6* LED, Colored Lens, For Tail Light Housing Color, Lt DS Rear - r) DS Rear Lt Red Color, Lt PS Rear - r) PS Rear Lt Red	1
347	0006551		Light, Rear Zone Up, WIn L31HRFN LED Beacon, Red LED Color, Dome, Rear Warning - b)both domes red	1
348	0035021		Not Required, Lights, Rear Upper Zone Blocking	1
349	0781807		Rear Warning Brackets, S/S, LOW Mount for Dry Side Tanker	1
350	0794034	SP	Light, Traffic Directing, WIn TAL65, 36.00" Long LED, Act. w/Prk Brk	1
351	0563154		Location, Traf Dir Lt, Recessed Within Trdplt Step, Dry Side Tanker	1
352	0519934		Location, Traf Dir Lt Controller, Overhead Area, Within Reach of Driver	1
353	0649753		Not Required, Brand, Hydraulic Tool System	1
354	0007150		Not Required, PTO Driven Hydraulic Tool System Bag of Nuts and Bolts	1
355	0602518		Qty, Bag Nuts and Bolts - 1 NFPA Required Loose Equipment, Mobile Water, NFPA 2016, Provided by Fire Dept	1
356	0519913		Not Required, Soft Suction Hose	1

Line	Option	Type	Option Description	Qty	BOS 2022-01-19 p.857/1306
357	0602383		Strainer, Provided by Fire Department, Mobile Water Supply NFPA Classification	1	
358	0602536		Extinguisher, Dry Chemical, Mobile Water Supply, NFPA 2016, Provided by Fire Dept	1	
359	0602355		Extinguisher, 2.5 Gal. Press. Water, Mobile Water/Foam, Not Required	1	
360	0784238		Axe, Flathead, Mobile Water Supply, Not Required by NFPA 2016 Classification	1	
361	0007492		Not Required, Axes, Pickhead	1	
362	0607712		Paint Process / Environmental Requirements, PMFD	1	
363	0583882		Paint, 90 Red, Commercial Grade Chassis Finish, PMFD Commercial Chassis	1	
			Paint Color, Commercial, Std - #90 Candy Apple Red		
364	0586561		Chassis Cab Paint, #90 Red, by Chassis Mfgr, Standard	1	
			Paint Color, Commercial, Std - #90 Candy Apple Red		
365	0583913		Paint, 2-Tone by PIERCE, Standard Paint Break, 2-Door Cab	1	
			Paint Color, Commercial, Upper - #10 White		
366	0582663		Paint, Chassis Frame Assy, Black, by Commerical Chassis Mfgr	1	
367	0651185		Paint, Wheels, NOT REQUIRED - ALUMINUM WHEELS, Commercial	1	
368	0651164		Wheels, Accent Stripe NOT REQUIRED	1	
369	0007230		Compartment, Painted, Spatter Gray	1	
370	0544129		Reflective Band, 1"-6"-1"	1	
			Color, Reflect Band - A - a) white		
			Color, Reflect Band - B - l) white		
			Color, Reflect Band - C - w) white		
371	0547618		Stripe, Diamond Grade, Chevron, Front Bumper	1	
			Size, Chevron Striping - 04		
			Color, Chevron DG - Yellow Green, Fluorescent		
372	0544909		Stripe, Chevron, Rear, Diamond Grade, Dryside Tanker	1	
			Color, Rear Chevron DG - fluorescent yellow green		
373	0065780		Stripe, Reflective, Cab Drs Interior, Commercial Cabs, 2dr	1	
			Color, Reflective - a) white		
374	0680415		Stripe, Gold Leaf, Side of Cab Hood, Commercial	1	
375	0027372		Lettering Specifications, (GOLD STAR Process)	1	
376	0686426		Lettering, Gold Leaf, 3.00", (61-80)	1	
			Outline, Lettering - Outline and Shade		
377	0685993		Lettering, Reflective, 10.00", Each	6	
			Qty, Lettering - 06		
			Outline, Lettering - No Outline or Shade		
378	0685981		Lettering, Reflective, 14.00", Each	3	
			Qty, Lettering - 03		
			Outline, Lettering - No Outline or Shade		
379	0515269		Lettering, Reflective 2" Script w/outline	1	
			Color, Lettering - a) white		
380	0094460	SP	Emblem, Helmet, Color Imaged	1	
			Qty, - 1		
381	0017273		Emblem, Maltese Cross, Gold Leaf, 12"-14", Pair	1	
			Qty, - 01		
			Location, Emblem - TBD		
382	0666388		Emblem, Freedom Flag with Twin Towers, Each	2	
			Qty, - 02		
			Location, Emblem - TBD		
			Size, Flag - 9" - 11"		
383	0766245		Manual, Fire Apparatus Parts, USB, Body Parts Only, Commercial Product	1	
384	0766243		Manual on USB Flash Drive, Service, Commercial	1	
385	0002902		Manual, Commercial Chassis Operation	1	
386	0080008		Warranty, Basic, 1 Year, Apparatus, Commercial Chassis, WA0008	1	
387	0681678		Warranty, Basic Vehicle, 3 yrs or 100,000 Miles, Freightliner	1	
388	0595282		Warranty, Cab Paint, As Provided By Chassis Manufacturer, Commercial	1	
389	0708760		Warranty, Not Applicable, LED Strip Lights	1	
390	0021516		Warranty, 5-Year EVS Transmission, Standard Comm, WA0187	1	
391	0596025		Warranty, Structure, 10 Year, Body, WA0009	1	
392	0693127		Warranty, Gortite, Roll-up Door, 6 Year, WA0190	1	
393	0734463		Warranty, Pump, Waterous, 7 Year Parts, WA0382	1	
394	0648675		Warranty, 10 Year S/S Pumbing, WA0035	1	
395	0641372		Warranty, Foam System, Not Available	1	
396	0688015		Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	1	

Line	Option	Type	Option Description	Qty
397	0595820		Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	1
398	0595421		Warranty, Goldstar, 3 Year, Apparatus, WA0018	1
399	0683627		Certification, Vehicle Stability, CD0156	1
400	0544897		Certification, Cab Integrity, Freightliner, CD0022	1
401	0545073		Amp Draw Report, NFPA Current Edition	1
402	0002758		Amp Draw, NFPA/ULC Radio Allowance	1
403	0000017		FLORIDA DIVISION BODY	1
404	0000015		FLORIDA DIVISION COMMERCIAL CHASSIS	1
405	0004713		ENGINE, OTHER	1
406	0046395		EVS 3000 Series TRANSMISSION	1
407	0020011		WATEROUS PUMP	1
408	0089358		DRY SIDE - TANK	1
409	0028047		NO FOAM SYSTEM	1
410	0020006		SIDE CONTROL	1
411	0020007		AKRON VALVES	1
412	0755450		PIERCE MFG BODY	1

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Atlantic Emergency Solutions is pleased to submit a proposal to Palmyra Volunteer Fire Dept. for a **Pierce® Tanker** per your request for quotation. The following paragraphs will describe in detail the apparatus proposed. It will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution, except where amended by your specifications. Loose equipment not specifically requested will not be provided.

PIERCE MANUFACTURING was incorporated in 1917. Since then we have been building bodies with one (1) philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 75 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 28,500 apparatus on commercial chassis, and more than 33,900 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 870,000 total square feet of floor space situated on approximately 105 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land. A multi-million dollar inventory of parts is available to keep your unit in service long after it has left the factory.

Our beliefs in high ethical standards are carried through in all of our commitments and to everyone with whom we do business. Honesty, Integrity, Accountability and Citizenship are global tenets by which we all live and work. Consequently, we neither engage in, nor have we ever been convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

Pierce has only one brand of fire apparatus "Pierce", ensuring you are receiving top of the line product that meets your specification.

In accordance with the current edition of NFPA 1901 standards, this proposal will specify whether the fire department, manufacturer, or apparatus dealership will provide required loose equipment.

Images and illustrative material in this proposal are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.

GENERAL DESIGN AND CONSTRUCTION

To control quality and ensure the compatibility of all the components, Pierce specifically designs the pump module, body, and electrical system to properly integrate and function with the commercial cab and chassis.

All welding, assembly and paint work will be done in Pierce owned manufacturing facilities. This includes, but not limited to the pumphouse module assembly, the body and the electrical system.

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American welding Society B2.1-2000 requirements for structural welding of

sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American Welding Society standards A5.20-E70T1. Furthermore, all employees classified as welders are tested and certified to meet the American welding Society codes upon hire and every three (3) years thereafter. Pierce also employs an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal.

In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to insure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

To demonstrate the quality of our products and services, a list of at least twenty five (25) fire departments/municipalities that have purchased vehicles for a second time is provided.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty. A qualified delivery representative shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered.

MANUAL AND SERVICE INFORMATION

At time of delivery, complete operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery Pierce will also provide one (1) 39-minute, professionally-produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, pump operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus will meet NFPA 1901 acceleration requirements and NFPA 1901 braking requirements. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle and not less than 50 percent nor more than 75 percent on the rear axle.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Atlantic Emergency Solutions by operating a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within fifty (50) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operators manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24 hour 7 day a week toll free hot line, four (4) on staff EVTs, and offers hands-on repair and maintenance training classes multiple times a year.

LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

INSURANCE PROVIDED BY BIDDER

COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Personal and Advertising Injury\$1,000,000

General Aggregate\$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property

damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form:

Each Accident Combined Single Limit:\$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate:\$3,000,000

Each Occurrence:\$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

INSURANCE PROVIDED BY MANUFACTURER

PRODUCT LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when required by written contract between the Owner and a Pierce authorized dealer.

UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence:\$25,000,000

Aggregate:\$25,000,000

The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.

Your apparatus will be manufactured in Bradenton, Florida.

NFPA 2016 STANDARDS

This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, Pierce has not received certification from this chassis manufacturer that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2016.

Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.

All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in the current edition at time of contract execution. Fire Department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA."

PUMP TEST

The rated water pump will be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details will be forwarded to the Fire Department.

GENERATOR TEST

If the unit has a generator, the generator will be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results will be provided to the Fire Department at the time of delivery.

BID BOND

A bid bond as security for the bid in the form of a 10% bid bond will be provided with the proposal. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language which assures that the bidder/principal will give a bond or bonds, as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract.

Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.

PERFORMANCE BOND NOT REQUESTED

A performance bond will not be included. If requested at a later date, one will be provided to you for an additional cost and the following will apply:

The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A

and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required.

Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Bumper to Bumper warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed three (3) years from the date of such satisfactory acceptance and delivery, or the actual Bumper to Bumper warranty period, whichever is shorter.

APPROVAL DRAWING

A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.

A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.

DRAWING, STANDARD LAYOUT, PUMP OPERATOR'S PANEL

A drawing of the pump operator's panel will be provided for the purpose of illustrating the standard location(s) of controls and discharges on the pump operator's panel. The drawing will not be meant as an approval, or final construction drawing, rather it will be used as an illustration drawing of a standard panel layout. This drawing will include the usual gauges and controls as typically located on the pump operator's panel.

Non-standard options included within this bid proposal will not be shown.

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the body as it interfaces with the commercial chassis, will be provided.

CHASSIS

The chassis will be a Freightliner, Model M2, 106MD Conventional Chassis, supplied with the following equipment:

WHEELBASE

The wheelbase of the vehicle will be 221.5".

GVW RATING

The gross vehicle weight rating will be 45,600 lbs. .

FRAME

The frame rails will be formed from 120,000 psi yield, heat treated alloy steel. The frame rails will be E-coated prior to painting.

FRAME LINER

An 0.25" inner frame reinforcement will be provided.

The frame section properties will be:

- Section Modulus: 26.80 cubic inch, per rail
- RBM: 3,217,000 in-lb, per rail
- Yield Strength: 120,000 psi, per rail

FRONT AXLE

Front axle will be an "I" beam type, made of forged steel. It will have a ground rating capacity of 16,000 pounds.

FRONT SUSPENSION

Taper leaf spring

Capacity at Ground: 16,000 lb

Shock absorbers will be provided on the front axle.

FRONT BRAKES

The front brakes will be S-Cam, 16.50" x 6.00". The front brakes will be provided with automatic slack adjusters.

TIRE BRAND

The brand of tire for the commercial chassis manufacturer for this apparatus with a high capacity rear axle is Continental.

However, the commercial chassis manufacturer reserves the right to substitute brands and models of tire as may be available at the factory on the date of manufacture. They will provide the proper tread style and weight rating for the position in which the tire is installed.

Pierce Manufacturing and the chassis manufacturer are working to provide the brand of tire specified. However, due to shortages (and even model changes by the tire manufacturers), if the chassis manufacturer substitutes other tires, they will not be changed by Pierce.

TIRES, FRONT

Front tires will be 315/80R22.50, radial tires with a tread pattern suitable for the steering axle position. The capacity of the tires will meet or exceed the rating of the axle and/or suspension.

WHEELS, FRONT

Wheels for the front axle will be 22.50" x 9.00" polished aluminum disc.

REAR AXLE

The single reduction rear axle will be a Meritor™, Model RS-30-185, with a ground rating capacity of 33,500 lb.

PARKING BRAKE

The parking brake will be spring set and located on the rear axle service brake.

Rear axle brakes will be 16.50" x 8.62", S-Cam drum type brakes. Automatic slack adjusters will be provided.

REAR AXLE RATIO

A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 60 MPH.

REAR SUSPENSION

The rear suspension will be spring mounted with a capacity at ground level of 33,500 lbs. Auxiliaries will be included.

NO-SPIN DIFFERENTIAL

The rear axle will be equipped with a driver controlled differential lock.

TIRES, REAR

Rear tires will be 315/80R22.50 radial tires with a traction tread pattern suitable for the drive axle position. The tires will meet or exceed the weight rating of the axle and/or suspension.

WHEELS, REAR

The rear wheels will be aluminum 22.50" x 9.00" disc.

TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

FRONT HUB COVERS

Stainless steel hub covers will be provided on the front axle. An oil level viewing window will be provided.

REAR HUB COVERS

A pair of stainless steel high hat hub covers will be provided on rear axle hubs.

CHROME LUG NUT COVERS

Chrome lug nut covers will be supplied on front and rear wheels.

MUD FLAPS

Mud flaps with a Pierce logo will be installed behind the front and rear wheels.

CLEAR COAT ON ALUMINUM WHEELS

The outside wheel surface shall have a clear coat spray-on finish applied to the outside wheel surface.

It is understood that certain road de-icing chemicals may cause damage to this coating and that damage is not covered by warranty.

AUTOMATIC TIRE CHAINS

One (1) pair of Rud 6-strand automatic tire chains will be provided at the rear axle. The system will be an electric-over-air type. A locking switch to engage/disengage the chains will be provided on the cab instrument panel. This system will be operable at speeds up to 35 mph.

WHEEL CHOCKS

There will be one (1) pair of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.

Wheel Chock Brackets

There will be one (1) pair of Zico, Model SQCH-44-H, horizontal mounting wheel chock brackets provided for the Ziamatic, Model SAC-44-E, folding wheel chocks. The brackets will be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets will be mounted forward of the left side rear tire.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with an anti-lock braking system. The ABS will provide anti-lock braking control on both the front and rear wheels. It will be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel will be monitored by the system. When any particular wheel begins to lockup, a signal will be sent to the control unit. This control unit then will reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

The system will include Automatic Traction Control (ATC).

The system will include Electronic Stability Control (ESC). When instability is detected, the ESC system will automatically apply brakes to individual wheels (with no intervention from the driver) and may also reduce engine torque to help keep the vehicle on track.

AIR COMPRESSOR, BRAKE SYSTEM

The air compressor will have an output of 18.7 cubic feet per minute.

AIR DRYER

An air dryer with a heater will be provided. Other features of this air dryer include:

- Desiccant style filter
- In-line filtration system
- Automatic purge valve

AIR INLET/OUTLET

One (1) air inlet/outlet will be installed with the female coupling located on the driver side pump panel. This system will tie into the "wet" tank of the brake system and include a check valve in the inlet line and an 85 psi pressure protection valve in the outlet line. The air outlet will be controlled by a needle valve.

A mating male fitting will be provided with the loose equipment.

The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure.

AIR TANK, ADDITIONAL

One (1) additional air tanks with total of 1452 cubic inch displacement will be provided to increase the capacity of the main air brake system. This tank will be plumbed into the rear half of the brake system. The air tank will be primed and painted to meet a minimum 750 hour salt spray test. To reduce the effects of corrosion, the air tanks will be mounted with stainless steel brackets.

The output flow of the engine air compressor will vary with engine rpm. Full compressor output will only be achieved at governed engine speed. Engine speed will be limited by generators, pumps and other PTO driven options.

AIR COMPRESSOR - BRAKE SYSTEM MAINTENANCE

A Gast, Model 4HCC-10-M450X, air compressor will be provided. It will be driven by the 110-volt shoreline electrical system. The compressor will maintain the air pressure in the chassis air brake system while the vehicle is not in use. A pressure switch will sense when the system pressure drops and automatically start the compressor, which then will run until pressure is restored. It will be located in compartment Cargo Dunnage Area.

ENGINE

- Model: Electronic Cummins L9
- Number of Cylinders: Six (6)
- Bore and Stroke: 4.49" x 5.69"
- Displacement: 543 cubic inches (8.9 Liter)
- Rated Brake Horsepower: 360 at 2200 rpm
- Peak Torque: 1150 at 1200 rpm
- Governed rpm: 2200
- Turbocharger
- Charge Air Cooled

- Fuel System: Hydraulically Actuated, Electronically Controlled Unit Injectors (HEUI)

ENGINE ACCESSORIES

- Air Cleaner: Dry type, with restriction indicator in cab
- Fuel Filters: Dual, with check valve
- Governor: Limiting speed type
- Lube Oil Cooler
- Lube Oil Filter: Full flow
- Starting Motor: 12-volt
- Oil Fill and Level Gauge

RADIATOR

- Pressurized System, Tube and Fin
- Deaeration Tank and Sight Glass
- Anti-Freeze Protection -30 Degrees Fahrenheit

HIGH IDLE

A high idle switch will be provided on the instrument panel inside the cab. Activating the switch will cause the vehicle to automatically maintain a preset engine rpm.

The high idle switch will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided adjacent to the switch. The light will be labeled "OK To Engage High Idle."

ENGINE BRAKE

A Cummins C-Brake engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver. The driver will be able to turn the brake system "On" or "Off" and have at least a "High & Low" setting.

FUEL/WATER SEPARATOR

A Detroit fuel/water separator will be provided on the chassis. It will include a "water in fuel" sensor, hand primer and a 12-volt pre-heater.

AIR INTAKE, W/EMBER SEPARATOR

The air inlet will be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.

This will comply with NFPA 1901 and 1906 standards.

EXHAUST SYSTEM

The exhaust system will include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR will be mounted horizontally outside of the frame rails in the right side front step area.

EXHAUST MODIFICATIONS

The exhaust will terminate with a horizontal tailpipe and diffuser ahead of the right side rear wheels.

A heat deflector shield will be provided where the tail pipe is routed under any side compartmentation.

All modifications will be approved by the chassis engine manufacturer and/or the chassis OEM.

Exhaust treatment devices will not be altered.

COOLANT LINES

Gates Blue Stripe rubber hose will be used for all engine coolant lines installed by the chassis manufacturer.

Hose clamps will be the constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 50 gallon fuel tank will be provided and mounted at the left-hand cab step. The tank will be constructed of aluminum.

DIESEL EXHAUST FLUID TANK

A diesel exhaust fluid (DEF) tank will be provided and mounted on the left side, below the cab.

The tank will be sized by the chassis manufacturer based on the engine provided. It will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

FUEL PRIMING PUMP

A Cummins automatic electronic fuel priming pump will be integrated as part of the engine.

FUEL SHUTOFF

A shutoff valve will be installed in the fuel line, near the filter.

AUXILIARY FUEL COOLING SYSTEM

A supplementary fuel cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the chassis engine fuel. The heat exchanger will be a cylindrical type and will be a separate unit. The cooler will operate any time the pump is discharging water and will be plumbed to the master drain valve.

TRANSMISSION

An Allison, model 3000 EVS, electronic torque converting automatic transmission will be provided. To qualify for the EVS rating, the transmission will be filled with synthetic transmission fluid.

Two (2) PTO openings will be located on left and right side of the converter housing (positions 8 o'clock and 4 o'clock).

A transmission temperature gauge or warning light will be installed on cab instrument panel.

TRANSMISSION SHIFT CONTROL

A push button shift module will be mounted to right of driver. Shift position indicator will be indirectly lit for after dark operation.

The transmission will be a five (5)-speed.

TRANSMISSION COOLER

A transmission oil cooler will be provided in a tank of the radiator.

DOWNSHIFT MODE (W/ENGINE BRAKE)

The transmission will be provided with an aggressive downshift mode.

This will provide earlier transmission downshifts to 3rd gear from 5th gear, resulting in improved engine braking performance.

ALLISON EVS AUTOMATIC TRANSMISSION PROGNOSTICS

The Allison EVS automatic transmission will be provided with the prognostics software enabled.

The prognostics will be accessed via the shift selector, and the following information will display on the shift pad read-out:

Oil Level

Oil Life Monitor

Filter Life Monitor

Trans Health Monitor

Diagnostic Code

DRIVELINE

Drivelines will be a heavy duty metal tube equipped with universal joints properly sized for the application. A splined slip joint will be provided in each driveshaft.

The driveline will be prepped by the chassis manufacturer for the installation of a mid-ship split shaft pump.

STEERING

The steering system will be hydraulically driven. The steering column will have an adjustable tilt and telescope feature.

BUMPER

A one (1) piece bumper manufactured from 0.25" formed steel with a 0.38" bend radius will be provided. The bumper will be a minimum of 10.00" high with a 1.50" top and bottom flange, and will extend 22.00 " from the face of the cab. The bumper will have 45 degree corners. The bumper will be metal finished and painted job color.

To provide adequate support strength, the bumper will be mounted directly to the front of the C channel frame. The frame will be a bolted modular extension frame constructed of 50,000 psi tensile steel.

GRAVEL PAN

A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and the cab face and front wheel wells. The pan will be properly supported from the underside to prevent flexing and vibration.

CENTER HOSE TRAY

A hose tray, constructed of aluminum, will be placed in the center of the bumper extension.

The tray will have a capacity of 150' of 1.75" double jacket cotton-polyester hose.

Black rubber grating will be provided at the bottom of the tray. Drain holes are also provided.

Center Hose Tray Restraint

There will be one (1) pair of hose tray restraint straps located over the center mounted tray.

The restraints will be a pair of 2.00" wide black nylon straps with Velcro® fasteners provided. The strap(s) will be used to secure the hose in the tray.

TOW HOOKS

Two (2) chromed steel tow hooks will be installed under the bumper and attached to the front frame members. The tow hooks will be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow hooks will not be used for lifting of the apparatus.

SIGHT RODS

There will be two (2) Bores, Model 848-211, lighted polished stainless steel sight rods mounted to the outside corners of the front bumper extension.

The lights at the end of each rod will be activated when the running lights are activated.

The lights will also flash with the respective directional light.

CAB

A 2-door flat-roof cab will be provided. The cab and doors will be of an aluminum construction.

Exterior Styling

Aerodynamic hood and windshield

Tinted Glass in all Windows

Fiberglass hood with mounted plastic grille

Single 63"x14" rear window

Interior

Leaf spring rear cab suspension

Vinyl mats

Forward roof mounted console

Two (2) dash-mounted cup holders, right-hand and left-hand

Gray Vinyl Upholstery

Dual Sun visors

Fresh Air Heater and Defroster

CAB INTERIOR W/CONVENIENCE PACKAGE

The cab upholstery will be gray vinyl.

The cab interior will include wood grain driver and center instrument panels, molded plastic door panels with vinyl inserts and brushed aluminum lower door kick plates.

CAB GRILLE - CHROMED

The cab grille will be a chromed high impact plastic with a horizontal rib design. The headlight bezels and air intake grilles will also have a chromed finish. The grille will tilt with the hood.

MIRRORS

West Coast style heated, remote operated mirrors constructed from a molded composite material with a bright finish will be provided. A heated 8.00" convex mirror will be included below the primary mirrors. An auxiliary down view mirror will be included on the passenger side.

CAB ACCESS STEPS

The cab access steps will be provided by the apparatus manufacturer. The steps will be a two (2) step design fabricated from bright aluminum treadplate.

The step assembly will enclose the area under the cab, including the DEF tank. The fuel and DEF tank fill caps will be exposed for refueling if located under the cab. Access will be provided to inspect the chassis batteries when located under the cab.

STEP LIGHTS

There will be four (4) white LED step lights provided. There will be one (1) light installed at each cab door, one (1) light per doorstep.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The lights will be activated when the adjacent door is opened.

SUN VISOR, EXTERIOR

An exterior cab mounted sun visor will be provided. It will be constructed of a composite material and painted to match the top of the cab color.

POWER WINDOWS AND LOCKS

The cab doors will have electrically powered windows and locks.

DAYTIME RUNNING LIGHTS

The chassis will be provided with daytime running lights.

AIR CONDITIONING

An air conditioner will be provided that is integral with heater and defroster system.

AIR CONDITIONING EMBER FILTER

An ember filter will be provided by the apparatus manufacturer to keep embers out of the HVAC filter element.

The air inlet will be equipped with a stainless steel mesh to separate water and burning embers from the HVAC air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.

This will comply with NFPA 1901 and 1906 standards.

ENGINE COMPARTMENT LIGHTS

Two (2) engine compartment lights will be installed under the engine hood, of which the switches are an integral part.

STORAGE CONSOLE

There will be a console located between the front seats with room for map storage, the siren head and a radio. There will be four (4) sections for map storage to the rear of the console. Each map storage section will be approximately 4.00" wide x 13.00" long x 12.25" deep. The console will be constructed of smooth aluminum and painted black.

SIDE ROLL PROTECTION

The cab will be equipped with a side roll protection system and will include the following:

- A supplemental restraint system (SRS) control module will be installed beneath the driver seat. The SRS control module will perform real time diagnostics of all critical subsystems and will monitor inputs immediately before and during a side roll event.
- A fault-indicating light will be provided on the vehicle's instrument panel allowing the driver to monitor the operational status of the SRS system.
- Air bags will be provided in the outboard bolster of outboard seat backs to provide a cushion between the occupant and the vehicle interior surfaces (cab wall, window, B-pillar, etc.) during a side roll event.

- Air suspension seats will be equipped with a pyrotechnic device to compress the suspension to the lowest travel position during a side roll event.
- Seat belt assemblies will be provided with a buckle pre-tensioners to remove slack from the seat belt during a side roll event.

The SRS system will provide protection during 90-degree roll to either side. The system will analyze the vehicle's angle and rate of roll to determine the optimal activation of the advanced occupant restraints.

The SRS control module will deploy the following components in the event of a side roll:

- Air bags mounted in the outboard bolster of outboard seat backs.
- The pull-down pyrotechnic device will compress the seat air suspension to the lowest travel position.
- Seat belt buckle pretensioners will remove slack in the webbing to reduce the motion of the occupant during a roll event.

SEATING CAPACITY

The seating capacity in the cab will be two (2).

DRIVER SEAT

A seat will be provided in the cab for the driver. The seat will be a high back air suspension seat. The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position.
- Slides for fore/aft adjustment
- Recline feature

The seat will be furnished with a 3-point, shoulder type seat belt.

OFFICER SEAT

A seat will be provided in the cab for the passenger. The seat will be a high back style air suspension seat. The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated, this system will pretension the seat belt and then retract the seat to its lowest travel position.
- Slides for fore/aft adjustment
- Recline feature

The seat will be furnished with a 3-point, shoulder type seat belt.

Both seats will be covered in a vinyl material.

SEAT BELT WEB LENGTH

NFPA 14.1.3.2 and 14.1.3.3 requires effective seat belt web length for a Type 1 lap belt for pelvic restraint to be a minimum of 60 in., and a Type 2 pelvic and upper torso restraint-style seat belt assembly to be a minimum of 110 in.

Per Fire Department specification of a commercial chassis, this apparatus will have seat belts of the required length. These belts will provide sufficient length for large firefighters in bunker gear. This apparatus will be compliant to NFPA standards effective at time of contract execution.

SEAT BELTS

All seating positions in the cab and crew cab will have highly visible (orange) seat belts.

HELMET STORAGE

Helmet storage will be located in a body compartment.

PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 7.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.

The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.

CAB INSTRUMENTS

- Engine Temperature Gauge and Warning Buzzer
- Engine Oil Pressure Gauge and Warning Buzzer
- Speedometer with Odometer
- Engine Tachometer
- Engine Hourmeter
- Fuel Level Gauge
- DEF Level Gauge and Warning Lamp
- Voltmeter: Low voltage red warning light and audible alarm
- Air Brake Pressure Gauge
- Air Restriction Indicator
- Circuit Breakers: For overload protection of electric circuits
- Ignition Switch: Keyless type

EMERGENCY SWITCH PANEL

An emergency switch panel will be provided in the cab. The switch panel will be located overhead and on the cab instrument panel.

"DO NOT MOVE APPARATUS" INDICATOR

A flashing red indicator light (located in the driving compartment) will be illuminated automatically per the current edition of NFPA. The light will be labeled "Do Not Move Apparatus If Light Is On".

The same circuit that activates the Do Not Move Apparatus indicator will activate a steady tone alarm when the parking brake is released.

OPEN DOOR INDICATOR LIGHT

A red "open door" indicator light will be provided inside the cab, in clear view of the driver, to warn of an open compartment door.

WIPER CONTROL

Wiper control will include an intermittent feature and windshield washer controls.

CUSTOMER SUPPLIED RADIO WIRING

There will be one (1) 12 volt combination wiring leads of which each will include one (1) direct battery, one (1) ignition and one (1) negative for use with radio equipment.

Each lead will be 18.00" long and be provided Cab Console. The leads will be clearly marked in a coil and terminate with butt splices.

A breaker rated for 30 amps will be provided for circuit protection of the direct battery lead with a minimum of 10 gauge wire.

A breaker rated for 7.5 amps will be provided for circuit protection of the ignition lead.

The wires will be colored coded as follows:

- red for direct battery
- yellow for ignition
- black for ground

SPARE CIRCUIT

There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

The positive wire will be connected directly to the battery power.

The negative wire will be connected to ground.

Wires will be protected to 30 amps at 12 volts DC.

Power and ground will terminate Cab in the console and top front bulkhead wall of LS4.

Termination will be to a Blue Sea System, Model 5026, 12 circuit with negative bus bar. The terminal block will include a cover with circuit labels.

Wires will be sized to 125% of the protection.

This circuit(s) may be load managed when the parking brake is set.

VEHICLE DATA RECORDER

There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.

The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:

- Vehicle Speed - MPH
- Acceleration - MPH/sec
- Deceleration - MPH/sec
- Engine Speed - RPM
- Engine Throttle Position - % of Full Throttle
- ABS Event - On/Off
- Seat Occupied Status - Yes/No by Position
- Seat Belt Buckled Status - Yes/No by Position
- Master Optical Warning Device Switch - On/Off
- Time - 24 Hour Time
- Date - Year/Month/Day

The system will also be capable of no additional functionality required.

An additional input will be included with this system. When the VDR is active, this input will not be required.

SEAT BELT MONITORING SYSTEM

A seat belt monitoring system (SBMS) will be provided. The SBMS will be capable of monitoring up to six (6) seating positions indicating the status of each seat position per the following:

- Seat Occupied & Buckled = Green LED indicator illuminated
- Seat Occupied & Unbuckled = Red LED indicator with audible alarm
- No Occupant & Buckled = Red LED indicator with audible alarm
- No Occupant & Unbuckled = No indicator and no alarm

The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.

INTERCOM SYSTEM

There will be digital, single radio interface, intercom located TBD in the cab. The front panel will have master volume, and squelch controls with illuminated indicators, allowing for independent level setting of radio and auxiliary audio devices.

There will be one (1) radio listen only / transmit control with select, monitor, receive, and transmit indicators. There will be one (1) auxiliary audio input with select, and receive indicators.

There will be one (1) wireless base station for up to five (1-5) headset users provided.

The wireless base station will have a 100' to 1100' range, line of sight. Objects between the transmitter and receiver affect range.

The following Firecom components will be provided:

- One (1) 5100D Intercom
- One (1) WB505R wireless base station (1-5 wireless positions)
- All necessary power and station cabling

RADIO / INTERCOM INTERFACE CABLE

The apparatus manufacturer will supply and install one (1) radio interface cable before delivery of the vehicle.

The radio equipment to be used by the customer will be:

- Motorola High Power , Model number Motorola, Model APX 7500, high power.

WIRELESS UNDER HELMET, RADIO TRANSMIT ONLY HEADSET

There will be two (2) Firecom™, Model UHW-505, wireless under the helmet, radio transmit headset(s) provided. A heavy duty, coiled 12 volt charging pigtail with plug will be provided driver's seat and officer seat.

Each headset will feature:

- Noise cancelling electric microphone
- Flexible microphone boom
- Ear seals with 20 dB noise reduction
- Stereo Listen-Through Ear dome microphones
- Radio Push To Transmit button (Left or Right Side)
- Rechargeable battery operates for 24 hours on a full charge
- IP-66 when worn



HEADSET HANGERS

There will be two (2) headset hanger(s) installed driver's seat and officer's seat. The hanger(s) will meet NFPA 1901, Section 14.1.11, requirement for equipment mounting.

RADIO ANTENNA MOUNT

There will be two (2) standard 1.125", 18 thread antenna-mounting base(s) installed on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the console. A weatherproof cap will be installed on the mount.



VIDEO SYSTEM, REAR CAMERA & 7" LCD DISPLAY

A Zone Defense 323-1-4 video system with wide angle color rear view video camera and 7" color LCD display monitor with swivel mount will be provided.

The weatherproof, IP67 rated, camera will feature a built in microphone and 18 infrared emitters for 0 lux operation. The camera will be activated with the reverse signal or manually from the monitor.

Images will be displayed in the cab on a 7" color LCD flat panel display with integral camera switcher and integrated speaker permitting audio from the active camera and located mounted in the driver's side dash, location to be specified at pick up.

VEHICLE CAMERA GUARD

There will be one (1) aluminum treadplate guard(s) fastened over the vehicle camera(s) located Rear Body .

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run in loom or conduit where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Electrical wiring and equipment will be installed utilizing the following guidelines:

- (1) All holes made in the roof will be caulked with silicon. Rope caulk is not acceptable. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
- (2) Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
- (3) Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.
- (4) Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).
- (5) All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.

(6) All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches will be mounted on a separate panel installed in the cab. A master warning light switch and individual switches to be provided to allow pre-selection of emergency lights. The light switches will be "rocker" type with an internal indicator light to show when switch is energized. All switches will be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches will be done by either printing or etching on the switch panel. The switches and identification will be illuminated.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

BATTERY SYSTEM

A single starting battery system will be provided consisting of two (2) 12 volt, maintenance-free batteries. The battery system will have a total of 2000 CCA.

Jump Start Connections

Positive and negative posts for jump starting will be provided by the chassis manufacturer. They will be frame mounted and located under the hood.

BATTERY LOCATION

The batteries will be installed in the standard location as provided by the chassis manufacturer. This location is typically under the cab on the left side of the truck.

MASTER BATTERY SWITCH

A master battery switch, to activate the battery system, will be provided inside the cab within easy reach of the driver.

The master battery disconnect switch will be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.

A green "battery on" indicator light, visible from the driver's position, will be provided.

BATTERY CHARGER

An IOTA, Model DLS-55, 55 amp battery charger will be provided.

The battery charger will be wired to the 120-volt shoreline to activate automatically when power is connected.

There will be a Kussmaul, Model 091-94-12, remote indicator.

The battery charger will be located Behind the driver's seat.

The battery charger indicator will be located adjacent to the driver's seat riser. The indicator will be enclosed to protect it from damage.

SHORELINE INLET

There will be one (1) Blue Sea Sure Eject™ part number 7851, 20 amp 120 volt AC shoreline inlet provided to operate the dedicated 120 volt AC circuits on the apparatus.

The shoreline will be connected to 120V Air Compressor, Battery Charger and shoreline receptacles..

The shoreline inlet cover color to be yellow.

The connector body will be released from the inlet when the apparatus engine start button is activated.

There will be a mating connector body supplied with the loose equipment.

There will be a label installed near the inlet(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

The shoreline receptacle will be located on the driver side of pump panel.

ALTERNATOR

The alternator will be a Delco with a capacity of 12-volt 300 amp.

ELECTRONIC LOAD MANAGEMENT

A Kussmaul Load Manager 2 will be provided on the apparatus. The device is an electronic load management (ELM) system that monitors the vehicles 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

The ELM will monitor the vehicle's voltage while at the scene (parking brake applied). It will sequentially shut down individual electrical loads when the system voltage drops below a preset value. Two (2) separate electrical loads will be controlled by the load manager. The ELM will sequentially re-energize electrical loads as the system voltage recovers.

EXTERIOR LIGHTING - HEADLIGHTS

Exterior lighting will meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of proposal.

Front headlights will be LED type and comply to all FMVSS requirements.

EXTERIOR LIGHTING

Exterior lighting will meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at this time.

Five (5) LED clearance/marker lights will be installed across the leading edge of the cab.

INTERMEDIATE LIGHT

There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.

REAR CLEARANCE/MARKER/ID LIGHTING

There will be three (3) Truck-Lite®, Model 33050R, LED lights used as identification lights recessed and located at the rear of the apparatus per the following:

- As close as practical to the vertical centerline
- Centers spaced not less than 6.00" or more than 12.00" apart
- Red in color
- All at the same height

There will be two (2) Truck-Lite, Model 33050R, LED lights recessed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:

- To indicate the overall width of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the rear
- All at the same height

There will be two (2) Truck-Lite, Model 33050R, LED lights recessed on the side of the apparatus as marker lights as close to the rear as practical per the following:

- To indicate the overall length of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the side
- All at the same height

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

Per FMVSS 108 and CMVSS 108 requirements.

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen®, Model M6BTT, red LED stop/tail lights
- Two (2) Whelen, Model M6T, amber LED arrow turn lights

The lights will be provided with color lenses.

The lights will be mounted in a polished combination housing.

There will be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the body.

A white LED light will illuminate the license plate. A stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

LIGHTING BEZEL

There will be two (2) Whelen, Model M6FCV4P, four (4) place chromed ABS housings with Pierce logos provided for the rear M6 series stop/tail, directional, back up, scene lights or warning lights.

TAIL LIGHT MOUNTING INFORMATION

The following lights will be installed in the following order from the top down:

The top lights will be stop lights tail lights.

The second lights from the top will be the directional lights.

The third lights from the top will be back up lights.

The bottom light will be the warning lights.

BACK-UP ALARM

A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.

CAB PERIMETER SCENE LIGHTS

There will be two (2) Amdor®, Model AY-LB-12HW020, 20.00" white LED strip lights provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

PUMP HOUSE PERIMETER LIGHTS

There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" LED weatherproof strip lights with brackets provided under the pump panel running boards, one (1) each side.

If the combination of options in the vehicle does not permit clearance for a 20.00" light, a 12.00" version of the Amdor light will be installed.

The lights will be controlled by the same means as the body perimeter lights.

BODY PERIMETER SCENE LIGHTS

There will be two (2) Amdor Model AY-LB-12HW020, 350 lumens, 20.00" LED lights provided at the rear step area of the body, one (1) each side shining to the rear.

The perimeter scene lights will be activated when the battery switch is on, and the parking brake is applied.

STEP LIGHTS

There will be four (4) white LED, step lights provided. One (1) step light will be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

These step lights will be actuated when the ignition switch is on and the parking brake is set.

All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.

12 VOLT LIGHTING

There will be two (2) Whelen® Model S16*M*, 6,480 lumens 16.00" 12 volt DC light(s) with white LEDs in flood optics provided on the body located, One each side of the traffic advisor recessed in the full width step..

The painted parts of this light assembly to be black.

The scene LEDs will be activated by a switch at the driver's side switch panel and by a switch in a recessed cup located at the driver's side rear bulkhead.

These light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) Whelen® Model PCPSM2*, 16,000 lumens 12 volt DC surface mount light(s) installed on the body of the apparatus located, Forward and high on the PS body.

The light(s) will include housing(s) with a chrome cover.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch at the left side pump panel.

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) Whelen® Model PCPSM2*, 16,000 lumens 12 volt DC surface mount light(s) installed on the body of the apparatus located, Forward and high on DS body.

The light(s) will include housing(s) with a chrome cover.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch at the left side pump panel.

The light(s) may be load managed when the parking brake is applied.

HOSE BED LIGHTS

There will be white 12 volt DC LED light strips with stainless steel protective cover, provided to light the hose bed area. Hose Bed lights will meet the photometric levels listed in NFPA 1901 for Hose Bed lighting requirements.

- Light strip(s) will be installed along the upper edge of the left side of the hose bed.
- Light strip(s) will be installed along the upper edge of the right side of the hose bed.

The lights will be activated by a cup switch at the rear of the apparatus no more than 72.00" from the ground.

WALKING SURFACE LIGHTS

There will be One (1) Amdor®, Model AY-LB-12HW0**, white 12 volt DC LED strip light(s) provided in the cargo area to illuminate the interior surface of the cargo area. Light(s) will be located on the front sheet of the body above the cargo area.

The light shall be activated when the body step lights are on.

FRONT WHITE WARNING LIGHT CONTROL

There will be switch(es) installed in the cab on the switch panel that will allow the operator to activate/deactivate all the front white warning lights whenever the emergency master switch is activated and the parking brake is released. The headlight flash option is included in this white warning light control if applicable. Each time the emergency master switch is activated, and the parking brake is released, the white warning light control switch and the white warning lights will default to on.

SWITCH, MASTER FOR DUMP VALVE

One (1) master on/off switch will be provided for the water tank dump valves. The switch will control all tank dump valves on the apparatus. It will be located at the cab instrument panel.

WATER TANK

The tank will have a minimum capacity of 2000 U.S. gallons complete with a **lifetime** warranty. The tank will be of a specified configuration, and so designed to be completely independent of the

compartment and/or fender modules. When placed on the chassis, the tank will meet or exceed all federal DOT regulations regarding weight distribution, axle loading, and horizontal and vertical center of gravity locations. The tank manufacturer will mark the tank with the manufacturers name, date of manufacture, and serial number. The tank manufacturer will furnish notice that indicates proof of warranty.

The tank will be constructed using a virgin polypropylene sheet with a minimum thickness of .50". This material will be a high impact copolymer (HIC), non-corrosive, stress relieved thermoplastic, UV stabilized for maximum protection.

All joints and seams will be nitrogen welded and tested for maximum strength and integrity. All swash partitions will interlock and be welded to each other as well as to the walls of the tank.

The tank will incorporate a manual fill tower with a 6.00" combination vent/overflow pipe. The fill tower will be constructed of polypropylene and will be large enough to provide filling by means of a conventional 2.50" hose nozzle. The tower will be located near the center of the tank to minimize water surge during vehicle operation. The tower will have a removable polypropylene screen and a polypropylene hinged cover. The vent/overflow pipe will run through the tank and exit through the floor of the tank behind the rear axle.

The sides of the tank will be covered with smooth sheets of aluminum that are painted to match the body. These sheets will provide a pleasing, finished, traditional "fire truck" appearance. These side sheets will not comprise any part of the body or its structure. To closely match the expansion / contraction of the water tank, these sheets will always be aluminum, regardless of the material used to construct the body compartments.

The front cross sheet will be aluminum treadplate.

TANK CRADLE

The water tank will be installed in a fabricated cradle assembly constructed of stainless steel.

Sufficient crossmembers will be provided to properly support bottom of tank. Crossmembers will be constructed of stainless steel bar channel or rectangular tubing.

Isolator material, such as DuraSurf, will be provided between the frame and cradle.

One (1) sleeve will be provided in the water tank for plumbing to the rear.

WATER TANK RESTRAINT

A heavy-duty water tank restraint will be provided to keep the water tank in position.

TOP OF TANK, ACCESS LADDER

An access ladder constructed of aluminum tubing will provided for access to the hosebed and/or tank dome. The ladder will have a flexible mount attached to the tailboard. The ladder will be located on the left side of the truck at the rear.

TANK OVERFLOW/VENT

A 6.00" tube will be installed through the shell of the tank. This tube will function as an overflow to discharge water to the ground once the tank is filled to capacity. It will also function as a vent to allow air to enter the tank when water is being dumped or pumped from the tank.

The tube will be positioned to drain at the bottom of the truck near the center, behind the rear axle.

FOLD-A-TANK RACKS

A quantity of one (1) Zico Quic-Lift PTS-HA hydraulic rack(s) will be provided on the right side for storage of a 2100 gallon aluminum framed Fol-Da-Tank (w/closed dimensions of 135" x 9" x 30") portable folding tank. The Quic-Lift lowering system will be powered by two (2) self-contained hydraulic actuators.

The controls will be located in such a manner to allow the operator full view of the area in which the fold-a-tank will be lowered.

The actuator control will have a master switch and also be interlocked to prevent operation should a compartment door, in the travel area of the rack, be in the open position.

A smooth aluminum painted job color cover will be installed on the lowering device to protect and conceal the fold-a-tank when in the stored position. This cover will be installed with a Zico mounting kit to allow for flexing.

RACK INTERLOCK AND NOT STOWED INDICATOR LIGHT

An interlock will be provided to prevent operation of the rack unless the apparatus parking brake has been activated.

A steady red indicator light will be located on the cab instrument panel and illuminated when the rack is not in the stowed position. The light will be labeled "Rack". In addition, the "Do Not Move Apparatus" light located in the cab will be activated when the rack is not in the stowed position.

LIGHTS, FLASHING, RACK

Flashing amber LED lights facing the front and rear will be provided on the rack and activated whenever the rack is in the down position.

EXTENSION BRACKET

In order to accommodate the powered equipment rack, a reinforced extension bracket may be required. This bracket will be constructed of aluminum and covered with aluminum treadplate.

DUMP CHUTE, S/S DOORS

A dump chute door system constructed of stainless steel will be installed over each side dump chute opening. The door system will be designed with a hinge at the top of the door to open when the chute extends and a magnetic switch to assist in holding the door closed when the chute is not extended. Opening and closing of the door will occur automatically when the chute extends/retracts.

The exterior of the doors will be covered with polished stainless steel.

SCUFFPLATES BEHIND TANK RACK

The area on the sidesheet of the body, immediately behind the manual portable tank rack, will be covered in brushed stainless steel. This area is also to include the vertical posts.

The scuffplates will be attached to the sidesheets using two sided tape.

REAR TANK FILL

There will be one (1) gated external tank fill(s) installed and properly labeled at the rear of the water tank, located right side of the tank.

Piping, for the fill, will be routed through the rear wall of the tank and include a flow deflector to break up the stream of water entering the water tank.

A 4.00" full flow ball valve with 4.00" piping and a 4.00" (M)NST chrome adapter will be located at the inlet. The valve will be controlled by a handwheel.

A 4.00" (F)NST x 4.00" Storz hard coat aluminum 30 degree elbow adapter and 4.00" blind cap will be provided for the tank fill.

REAR TANK DUMP VALVE

One (1) 10.00" Ebro butterfly valve will be installed at the rear of the water tank. The valve will have 316 stainless steel shaft and disc, and NBR seat. The valve will be actuated pneumatically from one (1) switch inside the cab and one (1) switch at the rear of the apparatus.

A sliding, stainless steel, extension chute will be provided on the rear dump valve. The extension chute will extend beyond the tailboard when at full extension and retract automatically with a pneumatic cylinder when the valve is opened or closed.

LEFT SIDE TANK DUMP VALVE

One (1) 10" Ebro butterfly valve will be installed at the left side of the apparatus, rear of the rear axle. The valve will have 316 stainless steel shaft and disc, and NBR seat. The valve will be actuated pneumatically from one (1) switch inside the cab and one (1) switch at the rear of the apparatus.

A sliding stainless steel extension chute will be provided on the dump valve. The extension chute will extend and retract automatically with a pneumatic cylinder when the valve is opened or closed.

RIGHT SIDE TANK DUMP VALVE

One (1) 10.00" Ebro butterfly valve will be installed at the right side of the apparatus, rear of the rear axle. The valve will have 316 stainless steel shaft and disc, and NBR seat. The valve will be actuated pneumatically from one (1) switch inside the cab and one (1) switch at the rear of the apparatus.

A sliding stainless steel extension chute will be provided on the dump valve. The extension chute will extend and retract automatically with a pneumatic cylinder when the valve is opened or closed.

HOSE BED

The hose bed will be fabricated of 0.190"-5052 aluminum with a nominal 38,000 psi tensile strength.

Upper edges of side panels will have a double break for rigidity.

The inside of the hose bed will be painted to match the job color on the side sheets of the body.

Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.

HOSE BED CAPACITY - DRY SIDE TANKER

Per NFPA 1901, a tanker will carry a minimum of 200 feet of 2.50" hose.

However, Dry Side hose beds are large and can accommodate much more hose than the NFPA minimum. The intended amount of hose to be carried is 500' -4", 300'-3" . Pierce will calculate whether or not the intended amount of hose will fit. The hose bed side sheets will not be altered from their standard size. If necessary, the purchaser agrees that the amount of hose to be carried will be decreased so that it properly fits within the hose bed.

The intended amount of hose will also be factored into the engineering weight distribution calculation to assure proper axle capacity.

HOSE BED DIVIDER

Two (2) adjustable hosebed dividers will be furnished for separating hose.

Each divider will be constructed of a .25" brushed aluminum sheet. Flat surfaces will be sanded for uniform appearance, or constructed of brushed aluminum.

Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.

Divider will be held in place by tightening bolts, at each end.

Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.

PULL BAR AND STRAP

A quantity of one (1) pull bar(s) with a 1.00" wide red pull strap will be provided Rear Hose Bed . A pull bar will be provided to connect Seat Belt Buckles at the top of the Hose Bed allowing one strap to release multiple latches.

HOSE BED HOSE RESTRAINT

The hose in the hose bed will be restrained by a pair of black nylon Velcro® straps at the top of the hose bed. At the rear of the hose bed, 2.00" black nylon webbing with a 1.50" x 4.00" box pattern will attach at the top rear outside corners with seat belt buckle fasteners. The webbing will have straps connected with seat belt buckle fasteners located at the rear body sheet below the hose bed.

RUNNING BOARDS

Running boards will be fabricated of .125" bright aluminum treadplate.

Each running board will be supported by a welded 2.00" square tubing and channel assembly, which will be bolted to the pump compartment substructure.

Running boards will be 12.75" deep and spaced .50" away from the pump panel.

A splash guard will be provided above the running board treadplate.

TAILBOARD

The tailboard will be constructed of .125" bright aluminum treadplate supported by a structural steel assembly.

The rear tailboard will be 16.00" deep.

The exterior side will be flanged down and in. The flanges will not be notched.

SMOOTH ALUMINUM REAR WALL

The rear wall will be smooth aluminum.

TOW EYES

There will be a total of two (2) painted tow eyes provided and mounted directly to the chassis frame rails at the rear of the apparatus. The inner and outer edges of the tow eyes will have a radius.

RUNNING BOARD HOSE RESTRAINT

A pair of 2.00" wide black nylon straps with Velcro fasteners will be provided for each hose tray to secure the hose during travel. There will be Two (2) hose trays located one (1) in each side running board.

TAILBOARD HOSE RESTRAINT

A pair of 2.00" wide black nylon straps with Velcro fasteners will be provided for each hose tray to secure the hose during travel. There will be One (1) hose tray located Center tray on rear tailboard .

HOSE TRAY

Two (2) hose trays will be made free floating one (1) in each side running board.

The tray(s) will be flanged and drop in from the top. No fasteners will be used to secure the tray(s).

Capacity of the tray will be TBD.

Rubber matting and drain holes will be installed on the floor of the tray to provide proper ventilation.

HOSE TRAY

An aluminum bin for storage of TBD hose will be installed on the rear tailboard.

Rubber matting will be installed on the floor of the tray to provide proper ventilation.

The location of the tray on the tailboard will be centered .

COMPARTMENTATION

Body and compartments will be fabricated of .125", 5052-H32 aluminum.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided for prevention of rust pockets and ease of maintenance.

Side compartment flooring will be of the sweep out design with the floor higher than the compartment door lip.

The compartment door opening will be framed by flanging the edges in 1.75" and bending out again .75" to form an angle.

Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum treadplate or polished stainless steel.

Front facing compartment walls will be covered with bright aluminum treadplate.

All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this tanker, a method of body and compartment support suitable for the intended load will be provided.

The backbone of the support system will be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.

The support system will include .375" thick steel vertical angle supports bolted to the chassis frame rails with .625" diameter bolts.

Attached to the bottom of the steel vertical angles will be horizontal angles, with gussets welded to the vertical members, which extend to the outside edge of the body.

The body substructure will result in a 500 lb equipment support rating per lower compartment.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

Louvers will be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they will be formed into the metal and not added to the compartment as a separate plate.

PROOF OF TESTING OF BODY DESIGN

A structural analysis has been performed on the body and substructure design. Proven engineering and test techniques such as finite element analysis, stress coating and strain gauging was used with special attention given to fatigue, life and structural integrity of the body and substructure.

When the test was performed, the body was loaded to its greatest in-service weight.

Other criteria used during the testing procedure was include:

- Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.

- Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.
- Driving the vehicle at 35 mph on a washboard road.
- Driving the vehicle at 55 mph on a smooth road.
- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

Each truck produced is not subject to this testing. However, the design has been proven via testing. Evidence and actual test results and techniques are available upon request.

LEFT SIDE COMPARTMENTATION

A roll-up door compartment in the lower area, ahead of the rear wheels will be provided. The interior dimensions will be 63.00" wide x 22.75" high x 25.88" deep. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of the compartment will be 57.25" wide x 21.00" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

Three (3) roll-up door upper compartments will be provided. They will have interior dimensions of approximately 48.00" wide x 22.75" tall x 12.00" deep. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of the compartment will be 42.25" wide x 24.25" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

RIGHT SIDE COMPARTMENTATION

One (1) roll-up door compartment will be provided in the area ahead of the rear wheels. The interior dimensions of the compartment will be 63.00" wide x 22.13" high x 25.88" deep. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of the compartment will be 57.25" wide x 21.88" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

HARD SUCTION HOSE COMPARTMENT

A hard suction hose storage compartment will be provided as an integral part of the right side body compartments. The hose storage compartment will be fabricated of the same material as the body compartment and will be fully enclosed. Access to the hose will be through a vertically hinged stainless steel door at the rear.

ROLL-UP DOOR, SIDE COMPARTMENTS

There will be five (5) compartment doors installed on the side compartments, double faced, aluminum construction painted one (1) color to match the lower portion of the body and manufactured by AMDOR™ brand roll-up doors.

Door(s) will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be

connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools. The slats will be mounted in reusable slat shoes with positive snap-lock securement.

Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingress.

The doors will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials.

Bottom panel flange of roll-up door will be equipped with two (2) cut-outs to allow for easier access with gloved hands.

A stainless steel lift bar to be provided for opening the door and located at the bottom of each door with latches on the outer extrusion of the door frame. A ledge to be supplied over lift bar for additional area to aid in closing the door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals.

All injection molded roll-up door wear components will be constructed of Type 6 nylon.

Each roll-up door will have a 3.00 inch diameter balancer/tensioner drum to assist in lifting the door.

The header for the roll-up door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

COMPARTMENT LIGHTING

There will be five (5) compartments with Amdor, Model AY-9220, white 12 volt DC LED compartment light strips. The lights will be mounted with mechanical fasteners.

There will be two (2) strip lights installed vertically in each compartment opening per the latest NFPA requirements.

The lights will be activated when the battery switch is on and the respective compartment door is opened.

MOUNTING TRACKS

There will be two (2) sets of tracks for mounting shelf(s) in LS4 and RS1. These tracks will be installed vertically to support the adjustable shelf(s), and will be full height of the compartment. The tracks will be painted to match the compartment interior.

ADJUSTABLE SHELVES

There will be two (2) shelves with a capacity of 500 lb provided. The shelf construction will consist of .188" aluminum with 2.00" sides. Each shelf will be painted spatter gray. Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track.

The shelves will be held in place by .12" thick stamped plated brackets and bolts.

The location will be LS4 and RS1 rear of the compartment partitions. .

SLIDE-OUT FLOOR MOUNTED TRAY

There will be two (2) floor mounted slide-out tray(s) provided.

Each tray will have 2.00" high sides and a minimum capacity rating of 500 lb in the extended position.

Each tray will be constructed of aluminum painted spatter gray

There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.

To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.

The location(s) will be RS1 to the left of the partition and LS4 to the right of the partition.

VERTICAL COMPARTMENT PARTITION

Two (2) partitions will be bolted in LS4 and RS1. Each partition will be the full vertical height of the compartment.

PEGBBOARD

There will be 3/16" thick aluminum pegboard spatter gray painted will be installed on the back wall of three (3) compartments. It will be mounted using two (2) horizontal tracks. Retainers will be used to mount the pegboard to the tracks. The pegboard(s) installed will be on the upper standard depth section of the compartment. The holes will be .281" diameter, punched 1.00" on center. Pegboard will be provided in the following compartments: LS1, LS2 and LS3.

RUB RAIL

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail.

Trim will be 2.12" high with 1.38" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Stainless steel fender crowns will be provided around the rear wheel openings. These fender crowns must be wide enough to prevent splashing onto the body from the specified tires.

A rubber welting will be provided between the body and the crown to seal the seam and restrict moisture from entering.

A dielectric barrier will be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.

HARD SUCTION HOSE

NFPA 1901, 2016 edition, section 7.8.2 requires a minimum of 20 ft of suction hose or 15 ft of supply hose.

Hose is not on the apparatus as manufactured. The dealer will provide suction or supply hose.

There will be Two (2) lengths of 10' long x 6.00" diameter hose provided and equipped with a Long Handle Female X Rocker Lug Male couplings provided on the ends. The brand will be National Hose.

HARD SUCTION HOSE TROUGH, ADDITIONAL

One (1) trough for a 6" X 10' long hard suction hose will be installed on the top of the electric portable tank lowering system.

The trough will be painted job color.

HANDRAILS

The handrails will be 1.25" diameter knurled aluminum to provide a positive gripping surface.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

Handrails will be provided to meet NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.

AIR BOTTLE STORAGE

A total of four (4) air bottle compartments will be provided, two (2) each side of the body. The air bottle compartment will be in the form of a PVC round tube to accommodate different size air bottles. The inside diameter of the tube will be approximately 7.63" in diameter x 26.00" deep. Drain holes will be provided at the bottom of the tubes to prevent water collection.

A Cast Products door with latch will be provided to contain the air bottle.

EXTENSION LADDER

There will be a 26', three (3) section, aluminum, Duo-Safety, Series 925-A extension ladder provided.

ROOF LADDER

There will be one (1) 12' aluminum roof ladder, Duo-Safety, Series775-DR roof ladder(s) provided.

LADDER STORAGE

The ladders will be stored inside the hose bed, on the right side. Each ladder will lie flat in separate storage areas constructed with stainless steel angle guides with a plastic Dura Surf slide. The rear of ladder storage area will have a bottom hinged aluminum treadplate door and a D-handle latch to contain the ladders.

NOTE:One (1) hose bed divider is provided for support and separation from the hose in the hose bed.

FOLDING LADDER

One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be installed.

6 FT PIKE POLE, NOT REQUIRED BY NFPA 2016

NFPA 1901, 2016 edition, Section 7.9.4 does not require a pike pole to be provided under the miscellaneous equipment.

PIKE POLE STORAGE

A compartment on top of the DS compartment catwalk. body compartmentation will be provided. The compartment will be made of aluminum treadplate and sized TBD. There will be five (5) aluminum pike pole tubes provided within this compartment for TBDTBD. The poles will be accessed at the rear of the compartment through a door hinged on the top with a Southco raised trigger C2 chrome latch constructed of aluminum treadplate.

FOLDING STEPS FRONT OF BODY

Folding steps will be provided full height on the left side body compartments to provide access to the cargo bed. Steps will be spaced evenly on the sales drawing. Actual quantity may vary due to pump panel interferences but will meet the NFPA required maximum stepping height.

The Trident steps will be bright finished, non-skid with a black tread coating on the stepping surface.

The step will incorporate an LED light to illuminate the stepping surface.

The steps can be used as a hand hold with two openings wide enough for a gloved hand.

Three (3) additional folding steps will be located on the right side. The step(s) will be bright finished, non-skid, with a a black tread coating. The step(s) can be used as a hand hold with two openings wide enough for a gloved hand.

REAR STEP/PLATFORM

An 8.00" deep, full-width bright aluminum treadplate step will be provided at the rear of the body, above any rear tank dump or direct fill connections.

The area below and incorporated into this step will be designed to accommodate and protect a traffic directing light as defined elsewhere in this specification.

The area below and incorporated into this step shall be designed to accommodate and protect flood lights as defined elsewhere in this specification.

To meet NFPA required weight capacity for steps, the water tank will have reinforced mounting blocks installed during its construction to allow for the installation of this step/platform.

PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. It will be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a single assembly.

PUMP MOUNTING

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.

LEFT SIDE PUMP CONTROL PANELS

All pump controls and gauges will be located at the left side of the apparatus and properly identified.

Layout of the pump control panel will be ergonomically efficient and systematically organized.

The pump operator's control panel will be removable in two (2) main sections for ease of maintenance:

The upper section will contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels will be removable from the face of the pump panel for ease of maintenance. Below the sub panels will be located all valve controls and line pressure gauges.

The lower section of the panel will contain all inlets, outlets, and drains.

All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding.

IDENTIFICATION TAGS

The identification tag for each valve control will be recessed in the face of the tee handle.

All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge.

All line pressure gauges will be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting will be removable from the face of the pump panel for ease of maintenance. The casting will be color coded to correspond with the discharge identification tag.

All remaining identification tags will be mounted on the pump panel in chrome plated bezels.

The pump panel on the right side will be removable with lift and turn type fasteners.

Trim rings will be installed around all inlets and outlets.

The trim rings for the side discharge outlets will be color coded and labeled to correspond with the discharge identification tag.

COVER, ALUMINUM 4-WAY OVER AIR COMPRESSOR

There will be an aluminum 4-way cover installed over the top of the air compressor. The treadplate will be bolted down and made removable. The cover will be made strong enough to stand on and knockouts will be provided for proper ventilation..

PUMP

Pump will be a Waterous CS, 1250 gpm, single (1) stage midship mounted centrifugal type.

Pump will be the class "A" type.

Pump will deliver the percentage of rated discharge at pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.

- 70% of rated capacity at 200 psi net pump pressure.

- 50% of rated capacity at 250 psi net pump pressure.

Pump body will be close-grained gray iron, bronze fitted, and horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings).

Pump will be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.

Pump case halves will be bolted together on a single horizontal face to minimize a chance of leakage and facilitate ease of reassembly. No end flanges will be used.

Discharge manifold of the pump will be cast as an integral part of the pump body assembly and will provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency.

The three (3) 3.50" openings will be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold.

Impeller shaft will be stainless steel, accurately ground to size. It will be supported at each end by sealed, anti-friction ball bearings for rigid precise support.

Bearings will be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings will be used.

Pump will be equipped with a self-adjusting, maintenance-free, mechanical shaft seal.

The mechanical seal will consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring will press against a highly polished stainless steel stationary ring that is sealed within the pump body.

In addition, a throttling ring will be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance will not deteriorate, nor will the pump lose prime, while drafting if the seal fails during pump operation.

Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.

PUMP TRANSMISSION

The pump transmission will be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump will be through a high strength Morse HY-VO silent drive chain. By the use of a chain rather than gears, 50% of the sprocket will be accepting or transmitting torque, compared to two (2) or three (3) teeth doing all the work.

Drive shafts will be 2.35" diameter hardened and ground alloy steel and supported by ball bearings. The case will be designed to eliminate the need for water cooling.

PUMPING MODE

An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system will be designed to allow stationary pumping only.

AIR PUMP SHIFT

Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the left side pump panel.

Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump".

The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements.

The pump shift control in the cab will be illuminated to meet NFPA requirements.

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE - PUMP

There will be One (1) Elkhart Style 40 relief valve(s) installed on the suction side of the pump preset at 150 psig.

The relief valve(s) will have a working range of 75 psi to 250 psi.

The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag.

The relief valve pressure control will be located behind behind the right side pump panel with a stainless steel access door .

PRESSURE CONTROLLER

A Fire Research Pump Boss Model PBA400 pressure governor will be provided.

A pressure transducer will be installed in the water discharge manifold on the pump.

A pressure transducer will be installed in the inlet manifold on the pump

The display panel will be located at the pump operator's panel.

PRIMING PUMP

The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of NFPA 1901.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction.

One (1) priming control will open the priming valve and start the pump primer.

PUMP MANUALS

There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.

PLUMBING, STAINLESS STEEL AND HOSE

All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.

Plumbing manifold bodies will be ductile cast iron or stainless steel.

All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame.

All water carrying gauge lines will be of flexible polypropylene tubing.

All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.

MAIN PUMP INLETS

A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

INLET BUTTERFLY VALVE

There will be One (1) butterfly valve provided on the right side main pump inlet(s).

The 6.00" Jamesbury inlet valve will be recessed behind the pump panel with a stainless steel trim ring around the opening.

A built-in, adjustable pressure relief valve and a 3/4" bleeder valve will be provided on the inlet side of the valve.

There will be Akron 9333 electric valve controller(s) provided on the pump operators panel. The electric control(s) must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit(s) must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller(s) will provide position indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option.

The electric actuator will be furnished with a manual override accessible at the pump panel.

A maintain switch will be provided behind the stainless steel access door near the manual override. The switch will cut off power to the valve to allow for manual override valve actuation.

MAIN PUMP INLET CAP

The main pump inlets will have National Standard Threads with a long handle chrome cap.

The cap will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

**VALVES**

All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Valves will have a **ten (10) year** warranty.

The location of the valve for the one (1) inlet will be recessed behind the pump panel.

INLET CONTROL

The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.

RIGHT SIDE INLET

There will be one (1) auxiliary inlet with a 3.00" valve at the right side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.

The auxiliary inlet will be provided with a strainer, chrome swivel and plug.

INLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with stainless steel piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

A 2.00" combination tank refill and pump bypass line will be provided using a quarter-turn full flow ball valve, controlled from the pump operator's panel.

DISCHARGE OUTLET CONTROLS

The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve.

If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

RIGHT SIDE DISCHARGE OUTLETS

There will be Two (2) discharge outlets with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

RIGHT SIDE OUTLET ELBOWS

The 2.50" discharge outlets, located on the right side pump panel, will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 30 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

There will be a 4.00" discharge outlet with a 3.00" valve with a 3.00" ball, installed on the right side of the apparatus, terminating with a 4.00" (M) National Standard hose thread adapter. This discharge outlet will be actuated with a handwheel control with position indicator at the pump operator's control panel.

ADDITIONAL RIGHT SIDE OUTLET ELBOWS

The 4.00" outlet will be furnished with a 4.00" (F) National Standard hose thread x 4.00" Storz elbow adapter with Storz cap.

FRONT DISCHARGE OUTLET

There will be one (1) 2.50" discharge outlet piped to the front of the apparatus and located on the top of the left side of the front bumper.

Plumbing will consist of 2.50" piping and flexible hose with a 2.50" full flow valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the plumbing where appropriate. The piping will terminate with a 2.50" NST with 90 degree stainless steel swivel.

There will be automatic drains provided at all low points of the piping.

REAR DISCHARGE OUTLET

There will be One (1) discharge outlet piped to the rear of the hose bed, right side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing will consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel.

REAR OUTLET ELBOWS

The 2.50" discharge outlets, located at the rear of the apparatus, will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 30 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

DISCHARGE CAPS/ INLET PLUGS

Chrome plated, rocker lug, caps with chain will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets.

Chrome plated, rocker lug, plugs with chain will be furnished for all auxiliary inlets 1.00" thru 3.00" in size.

The caps and plugs will incorporate a thread design to automatically relieve stored pressure in the line when disconnected.

OUTLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

CROSSLAY HOSE BEDS

Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying 200' of 1.75" double jacketed hose and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve.

Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus.

The crosslay controls will be at the pump operator's panel.

The center crosslay dividers will be fabricated of 0.25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish.

Vertical scuffplates constructed of stainless steel will be provided at the front and rear ends of the bed on each side of vehicle.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

CROSSLAY HOSE RESTRAINT

A quantity of two (2) 2.00" black nylon, webbing design restraint(s) will be provided at each of the ends of crosslay(s) to secure the hose during travel. The webbing assembly is to be permanent attached at the front of the crosslays with footman loops and the top will attach with seat belt buckles. The lower rearward portion of the webbing will be secured with bungee cord fastener. The female ends of the seat buckles will be permanently attached at the corners of the crosslay opening. A bar will be attached to the female ends of the seat belt buckles to allow a single pull release. A single orange nylon strap will be attached to the bar for releasing the buckles on the webbing.

CROSSLAY COVER

A bi-fold aluminum treadplate cover, hinged at the back will be installed over the top of the crosslay/deadlay(s). It will include a latch at each end of the cover to hold it securely in place, a chrome grab handle at each end for opening and closing the cover and a foam rubber gasket where the cover comes into contact to a painted surface. The cover will be provided with rubber latch hold open device.

BOOSTER HOSE REEL

A Hannay electric rewind booster hose reel will be installed over the pump in a recessed open compartment on the right side of the apparatus. The reel will be fabricated of aluminum and have highly polished end discs.

A polished stainless steel roller and guide assembly will be mounted on the reel side of the apparatus.

Discharge control will be provided at the pump operator's panel. Plumbing to the reel will consist of 1.50" Aeroquip hose and a 1.50" valve.

Reel motor will be protected from overload with a circuit breaker rated to match the motor.

Two (2) electric rewind control switches will be provided, one (1) installed on each pump panel.

BOOSTER HOSE

Neidner Reel Tex booster hose, 1.00" diameter and 200 feet, shall be provided.

Working pressure of the booster hose shall be a minimum of 600 psi

Capacity of the hose reel will be 200' of 1.00" Neidner ReelTex Hose booster hose.

A manual rewind will be provided for the booster hose reel.

There will be one (1) additional polished stainless steel roller and guide assembly mounted Mounted to drivers side pump panel cargo side sheet..

FOAM SYSTEM

A foam system will not be required on this apparatus.

COLOR CODED TAGS

A detailed drawing/chart of the colors used on all of the inlet(s) and outlet(s) will be provided for the customer to review. The customer will be allowed to make changes and/or mark-ups to this approval

drawing/chart. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved drawing/chart of the colors will become part of the contract documents.

SPECIAL TEXT/VERBIAGE TAGS

A detailed drawing/chart of the text/verbiage used on all of the inlet(s) and outlet(s) will be provided for the customer to review. The customer will be allowed to make changes and/or mark-ups to this approval drawing/chart. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved drawing/chart of the text/verbiage will become part of the contract documents.

PUMP PANEL CONFIGURATION

The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.

PUMP AND GAUGE PANEL

The pump and gauge panels will be constructed of aluminum with a black vinyl finish. A polished aluminum trim molding will be provided around each panel.

PUMP ACCESS

Right Side Panel

The right side upper pump panel will be removable.

Panel Fastener

The removable panels will be secured with black swell latch .

The left side pump panels will be attached with screws.

The right side lower pump panel (drain bank) will be attached with screws.

CAB / PUMP MODULE GAP

Due to certain chassis components that extend rearward of the back of the cab, a cab to pump module gap that is larger than typical will be required. The distance between the cab and the pump module will be indicated on the approval drawing supplied by the apparatus manufacturer.

This cab to pump module gap will have a valance panel constructed from aluminum treadplate attached to the front of the module to reduce the visual effect of the gap .

PUMP COMPARTMENT LIGHT

There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12 volt DC LED light(s) with Whelen, Model 3FLANGEC, flange(s) installed in the pump compartment.

There will be a switch accessible through a door on the pump panel included with this installation.

Engine monitoring graduated LED indicators will be incorporated with the pressure controller.

Also provided at the pump panel will be the following:

- Master Pump Drain Control

THROTTLE READY GREEN INDICATOR LIGHT

There will be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.

OK TO PUMP INDICATOR LIGHT

There will be a green indicator light installed on the pump operators panel that is activated when the pump is in Ok To Pump mode.

AIR HORN BUTTON

An air horn control button will be provided at the pump operator's control panel. This button will be red in color and properly labeled "Evacuation".

VACUUM AND PRESSURE GAUGES

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©.

The gauges will be a minimum of 6.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.

Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They will be marked with a label.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1© interlube filled.

They will be 2.50" in diameter and have white faces with black lettering.

Gauges will have a pressure range of 0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

WATER LEVEL GAUGE

There will be an electronic water level gauge provided on the operator's panel that registers water level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The water level indicators will be as follows:

- 100 percent = Green

- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the water tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from water and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The field calibratable display measures head pressure to accurately show the tank level.

There will be a Hale part number: 106877, 4-light driver module included with this installation to power additional water level gauges.

The system(s) will be energized when parking brake is applied.

WATER LEVEL GAUGE

There will be three (3) additional water level indicator, Whelen®, Model PSTANK2, LED module with chrome flange installed one (1) on the rear body and one (1) each side, forward and up high on the body side sheet.

This light module will include four (4) colored levels, and function similar to the water level indicator located at the operators panel:

- First green module indicates a full water level
- Second blue module indicates a water level above 3/4 full
- Third amber module indicates a water level above 1/2 full
- Last red module indicates a water level above 1/4 full and empty
 - Above 1/4 this light will be steady burning
 - At empty this light will be flashing

This module will be activated when the parking brake is applied.

WATER LEVEL GAUGE, ADDITIONAL

An additional water level gauge will be provided. This gauge will have four (4) indicator modules and it will be located inside the cab.

STEP/LIGHT SHIELD

There will be an aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the pump operators panel.

There will be 12 volt DC white LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights shall be activated when the parking brake is set. Additional lights will be included every 18.00" depending on the size of the pump house. One (1) pump panel light will come on when the pump is in ok to pump mode.

- There will be a light activated above the pump panel light switch when the parking brake is set. This is to afford the operator some illumination when first approaching the control panel.

There will be one (1) white LED, step light provided above this step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15.00" x 15.00" square placed 10.00" below the light and a minimum of 1.5 fc covering an entire 30.00" x 30.00" square at the same 10.00" distance below the light.

ADDITIONAL STEP/LIGHT SHIELD

There will be an additional aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the passenger's side pump panel.

- There will be 12 volt DC white LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated when the battery switch is on and the parking brake is applied. Additional lights will be included every 18.00" depending on the size of the pump house.

There will be one (1) white LED, step light provided above the step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. The step light will be activated when the battery switch is on and the parking brake is applied.

AIR HORN SYSTEM

Two (2) Grover, Stutter Tone, air horns will be recessed in the front bumper. The horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed in-line to prevent loss of air in the air brake system.

Air Horn Location

The air horns will be located on each side of the bumper, towards the outside.

AIR HORN CONTROL

The air horn(s) will be activated by the following:

- Left side foot switch
- Right side foot switch

ELECTRONIC SIREN

A Whelen, Model: 295SLSC1, electronic siren with a plug-in, detachable noise canceling microphone will be provided.

This siren to be active when the battery switch is on and that emergency master switch is on.

Siren head will be located near the overhead switches.

The electronic siren will be controlled on the siren head only. No horn button or foot switches will be provided.

SPEAKER

There will be one (1) Whelen®, Model SA315P, black nylon composite, 100-watt, speaker with through bumper mounting brackets and polished stainless steel grille provided. The speaker will be connected to the siren amplifier.

The speaker will be recessed in the right side of the front bumper, just outside of the frame rail.

AUXILIARY MECHANICAL SIREN

There will be a Federal Signal Model Q2B mechanical siren furnished and installed in the front of the apparatus.

The Q2B will be chrome finish.

The siren will have a 2-gauge cable connected to a power solenoid that is connected by a 2-gauge cable ran battery direct to the primary chassis batteries and will be labeled Q2B+ at the battery. The power solenoid will only be enabled when the emergency master switch is on.

The siren will have a 2-gauge ground wire connected to the chassis battery stud. The cable will be labeled Q2B- at the battery.

When the chassis battery switch is on, and the emergency master switch is on, the Q2B siren will be activated by the following:

The mechanical siren will be mounted on the bumper deck plate. It will be mounted on the right side. A reinforcement plate will be furnished to support the siren.

MECHANICAL SIREN CONTROL

The mechanical siren will be activated by the following:

- Left side foot switch.
- Right side foot switch.

A momentary red switch will be included on the center console switch panel to activate the siren brake.

FRONT ZONE UPPER WARNING LIGHTS

There will be one (1) 60.00" Whelen Freedom IV LED lightbar mounted on the cab roof.

The lightbar will include the following:

- One (1) red flashing LED module in the driver's side end position.
- One (1) red flashing LED module in the driver's side front corner position.
- One (1) red flashing LED module in the driver's side first front position.
- One (1) red flashing LED module in the driver's side second front position.
- One (1) white flashing LED module in the driver's side third front position.
- Open in the driver's side fourth front position.
- One (1) PCH2F41 Dual Panel Combo Pioneer Plus Floodlight/Spotlight in the center positions.
- Open in the passenger's side fourth front position.
- One (1) white flashing LED module in the passenger's side third front position.
- One (1) red flashing LED module in the passenger's side second front position.
- One (1) red flashing LED module in the passenger's side first front position.
- One (1) red flashing LED module in the passenger's side front corner position.
- One (1) red flashing LED module in the passenger's side end position.

There will be lenses that are the same color as the LEDs included on the lightbar.

The following switches may be installed in the cab on the switch panel to control the lightbar:

- a switch will control all the warning lights.
- a switch will control the forward facing flood light.

The two (2) white flashing LED modules will be disabled when the parking brake is applied.

Some of the flashing LED modules in the front positions may be load managed when the parking brake is applied.

FRONT ZONE LOWER LIGHTING

Two (2) Whelen model M4* flashing LED warning lights with a chrome flange will be provided on the cab face or grille.

The driver's side front warning light to be red.

The passenger's side front warning light to be red.

Both lights will include a lens that is the same color as the LED's.

Both lights will be controlled by a lighted switch on the cab instrument panel.

FRONT WARNING LIGHT

There will be one (1) Whelen®, Model DP8, 1.74" high x 30.36" long x 2.18" deep LED light bar mounted to the upper section of the front cab grille. The light flash pattern will be controlled by an internal programmable flasher. The flash patten will be set to flash back and forth.

The lightbar will include the following flashing LED modules:

- A red flashing LED module in the driver's side first position.
- A red flashing LED module in the driver's side second position.

- A white flashing LED module in the driver's side third position.
- A red flashing LED module in the driver's side fourth position.
- A red flashing LED module in the passenger's side fourth position.
- A white flashing LED module in the passenger's side third position.
- A red flashing LED module in the passenger's side second position.
- A red flashing LED module in the passenger's side first position.

The lightbar will be activated when the battery switch is on, a switch in the cab on the switch panel is on and the parking brake is released.

SIDE ZONE LOWER LIGHTING

There will be six (6) Whelen®, Model M6**, 4.31" high x 6.75" long x 1.37" deep flashing LED warning lights with chrome trim installed per the following:

- Two (2) lights located, one (1) each side on the bumper extension. The driver's side, side front light to include red warning LEDs and the passenger's side, side front light to include red warning LEDs.
- Two (2) lights located, one (1) each side on the pump panel. The driver's side, side middle light to include red warning LEDs and the passenger's side, side middle light to include red warning LEDs.
- Two (2) lights located, one (1) each side above rear wheels. The driver's side, side rear light to include red warning LEDs and the passenger's side, side rear light to include red warning LEDs.
- The warning light lens colors to be the same as the LEDs.

There will be a switch in the cab on the switch panel to control the lights.

DS light at pump panel to de-activate when pump is engaged.

REAR ZONE LOWER LIGHTING

There will be two (2) Whelen®, Model M6*, LED flashing warning lights will be located at the rear of the apparatus.

- The driver's side rear light to be red
- The passenger's side rear light to be red

Both lights will include a lens that is the same color as the LED's.

There will be a switch located in the cab on the switch panel to control the lights.

REAR/SIDE ZONE UPPER WARNING LIGHTS

There will be two (2) Whelen®, Model L31H*FN, LED warning beacons provided at the rear of the truck, located one (1) each side. There will be a switch located in the cab on the switch panel to control the beacons.

The color of the lights will be red LEDs with both domes red.

The rear warning lights will be mounted on stainless steel brackets with all wiring totally enclosed. These brackets will also support the clearance/marker lights. The brackets will be mounted low enough so the top of the warning light is no higher than the top of the body side sheet.

TRAFFIC DIRECTING LIGHT

There will be one (1) Whelen®, Model TAL65, 36.00" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus.

The Whelen, Model TACTL5, control head will be included with this installation.

The controller will be energized by a circuit that is only active when the parking brake is applied.

This traffic directing light will be recessed within a treadplate step at the rear of the apparatus.

The traffic directing light control head shall be located overhead in reach of the driver.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT

The following loose equipment as outlined in NFPA 1901, 2016 edition, section 7.9.3.1, 7.9.3.2, and 7.9.4 will be provided by the fire department.

- 200 ft (60 m) of 2.50" (65 mm) or larger fire hose.
- 100 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose (if equipped with a fire pump).
- One (1) handline nozzle, 95 gpm (360 L/min) minimum (if equipped with a fire pump).
- One (1) first aid kit.
- Two (2) combination spanner wrenches.
- One (1) hydrant wrench.
- One (1) double female adapter, sized to fit 2.50" (65 mm) or larger fire hose.
- One (1) double male adapter, sized to fit 2.50" (65 mm) or larger fire hose.
- One (1) rubber mallet, for use on suction hose connections (if equipped with a fire pump).
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, *Standard for High Visibility Public Safety Vests*, and have a five-point breakaway feature that includes two at the shoulders, two at the sides, and one at the front.
- Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (152 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band.
- Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.
- One (1) automatic external defibrillator (AED).

- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side will be carried. Any intake connection larger than 3.00" (75 mm) will include a pressure relief device that meets the requirements of 16.6.6 (if equipped with pump).
- If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake will be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.
- If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters will be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE

There will be no soft suction hose provided.

STRAINER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 7.8.2.1.1 requires a suction strainer when suction hose is provided.

The strainer is not on the apparatus as manufactured. The fire department will provide the suction strainer.

DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 7.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2009 edition, section 7.7.3.1 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

AXE, FLATHEAD, NOT REQUIRED BY NFPA 2016

NFPA 1901, 2016 edition, Section 7.9.4 does not require a flathead axe to be provided under the miscellaneous equipment.

PAINT PROCESS

The exterior custom cab and/or body painting procedure will consist of a seven (7) step finishing process. A commercial chassis paint process will follow similar processes as determined by the chassis manufacturer. The following procedure will be used by Pierce:

1. Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.
2. Chemical Cleaning and Pretreatment - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion. A final pure water rinse will be applied to all metal surfaces.
3. Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective base coat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a critical aesthetic finish. The surfacer primer will be a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.
4. Finish Sanding - The surfacer primer will be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.
5. Sealer Primer - The sealer primer is applied prior to the base coat in all areas that have not been previously primed with the surfacer primer. The sealer primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when top coated.
6. Base coat Paint - Two coats of a high performance, two component high solids polyurethane base coat will be applied. The Base coat will be applied to a thickness that will achieve the proper color match. The Base coat will be used in conjunction with a urethane clear coat to provide protection from the environment.
7. Clear Coat - Two (2) coats of clear coat will be applied over the base coat color. The clear coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style doors will be clear coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacturer.

Our specifications are written to define cyclic corrosion testing, physical strengths, durability and minimum appearance requirements must be met in order for an exterior paint finish to be considered acceptable as a quality finish.

Each batch of base coat color will be checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading will be used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

Environmental Impact

Contractor will meet or exceed all current State regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.
- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations will have a 99.99 percent efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98 percent. Water wash systems will be 99.97 percent efficient.
- Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.
- Paint wastes will be disposed of in an environmentally safe manner.
- Empty metal paint containers will be recycled to recover the metal.
- Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Pierce will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with the state EPA rules and regulations.

PAINT

The chassis will be painted by the chassis manufacturer, and will remain the commercial grade finish as provided. The body will be painted the matching color by Pierce.

To ensure a good color match between the body and chassis, Pierce has a mutually pre-approved paint color program with the chassis manufacturer. The apparatus will be painted Pierce #90 candy apple red .

COMMERCIAL CHASSIS PAINT

The chassis will be painted by the chassis manufacturer. It will remain the color and commercial quality finish as provided. The primary color will be Pierce #90 candy apple red .

TWO-TONE CAB

The cab will be painted two-tone by the apparatus manufacturer. The top portion of the cab from the bottom of the windshield up will be painted to match Pierce #10 white .

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.

COMPARTMENT INTERIOR PAINT

The interior of all compartments will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

REFLECTIVE STRIPES

Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" white stripe at the top with a 1.00" gap then a 6.00" white stripe with a 1.00" gap and a 1.00" white stripe on the bottom.

CHEVRON STRIPING ON THE FRONT BUMPER

There will be alternating chevron striping located on the front bumper.

The colors will be red and fluorescent yellow green diamond grade.

The size of the striping will be 4.00".

REAR CHEVRON STRIPING

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus.

The colors will be red and fluorescent yellow green diamond grade.

Each stripe will be 6.00" in width.

This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.

REFLECTIVE STRIPE, CAB DOORS

A white reflective stripe will be provided on the interior of each cab door.

This stripe will be a minimum of 96.00 square inches and will meet the NFPA 1901 requirement.

CAB STRIPE

There shall be a genuine gold leaf stripe located on each side of the cab hood.

LETTERING

The lettering will be totally encapsulated between two (2) layers of clear vinyl.

LETTERING

Sixty-one (61) to eighty (80) genuine gold leaf lettering, 3.00" high, with outline and shade will be provided.

LETTERING

There will be reflective lettering, 14.00" high, with no outline or shade provided. There will be three (3) letters provided.

LETTERING

There will be reflective lettering, 10.00" high, with no outline or shade provided. There will be six (6) letters provided.

LETTERING, SCRIPT

Script lettering will be provided on the rear body compartment door. The lettering will state "Everyone Comes Home".

EMBLEM

There will be one large emblem installed on the rear of the basket.

MALTESE CROSS INSTALLATION

There will be one (1) pair of maltese crosses, comprised of genuine gold leaf material, provided and installed TBD.

EMBLEM

There will be two (2) emblem(s), approximately 9.00" - 11.00" wide in size, installed TBD. The emblem will feature a "Flying American Flag" and an "Eagle Head", along with buildings in the background.

MANUAL, BODY PARTS ONLY

A custom parts manual for the Pierce® installed parts only will be provided in USB flash drive format with the completed unit.

The manual will contain the following:

- Job number
- Part numbers with full descriptions
- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly
- Parts section sorted in Alphabetical order
- Instructions on how to locate parts

The manual will be specifically written for the body model being purchased. It will not be a generic manual for a multitude of different bodies.

SERVICE PARTS INTERNET SITE

The service parts information included in this manual are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

MANUALS, SERVICE

A USB flash drive format service manual supplement containing parts and service information on Pierce® installed components will be provided with the completed unit.

The manual will be specifically written for the unit being purchased. It will not be a generic manual for a multitude of different units.

MANUAL, CHASSIS OPERATION

One (1) chassis operation manual will be provided with the completed unit.

ONE (1) YEAR MATERIAL AND WORKMANSHIP

Each new piece of apparatus will be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty will cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.

A copy of the warranty certificate will be submitted with the bid package.

CHASSIS WARRANTY

The chassis manufacturer will provide a **three (3) year or 100,000 mile warranty**.

PAINT WARRANTY

The commercial chassis manufacturer's paint warranty will apply to the paint on the chassis only.

COMPARTMENT LIGHT WARRANTY

The compartment lights will not offer an extended warranty.

TRANSMISSION WARRANTY

The transmission will have a **five (5) year/unlimited mileage** warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY

A Gortite roll-up door limited warranty will be provided. The mechanical components of the roll-up door will be warranted against defects in material and workmanship for the lifetime of the vehicle. A **six (6) year** limited warranty will be provided on painted and satin roll up doors.

The limited warranty certificate, WA0190, is included with this proposal.

PUMP WARRANTY

The Waterous pump will be provided with a Seven (7) year material and workmanship limited warranty.

A copy of the warranty certificate will be submitted with the bid package (no exception).

TEN (10) YEAR PUMP PLUMBING WARRANTY

The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

LIFETIME MATERIAL AND WORKMANSHIP

A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

THREE (3) YEAR MATERIAL AND WORKMANSHIP

The Pierce Goldstar gold leaf lamination limited warranty limited warranty certificate, WA0018, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

CAB INTEGRITY

The cab has been tested to and passed the following standards:

- ECE Regulation No.29
- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus will provide the following:

- Documentation of the electrical system performance tests.
- A written load analysis, which will include the following:
 - The nameplate rating of the alternator.
 - The alternator rating under the conditions specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - The minimum continuous load of each component that is specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - Additional loads that, when added to the minimum continuous load, determine the total connected load.
 - Each individual intermittent load.

All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).



Fire and Rescue Apparatus

One (1) Year Material and Workmanship

Basic Apparatus

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	Twelve (12) months.
Conditions and Exclusions:	No specific exclusions apply
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



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WWW.TRUCKCOUNTRY.COM

Pierce Mfg
Oshkosh Corporation

1/30/19

1512 38th Ave East

Bradenton, FL 34208

Freightliner M2106, M2112, 108SD and 114SD base spec chassis GVW ordered through 9/30/2019 by Pierce Manufacturing and delivered to Pierce Manufacturing by 12/31/2019 carry an extended basic vehicle warranty.

The M2106 and the 108SD will carry a 3Yr/100,000 mile basic vehicle warranty.

The M2112 and 114SD will carry a 3Yr / 100,000 mile basic vehicle warranty.

This warranty is limited to a chassis domiciled within the United States and Canada.

FXP base spec GVW units domiciled in Canada will carry an extended 3Yr/100,000 mile basic vehicle warranty.

FXP base spec GVW units domiciled in the United States will carry an extended 5Yr/100,000 mile basic vehicle warranty.

Please let me know if you require any additional information.

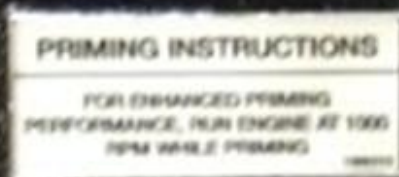
Regards,


John Frawley

Director of Corporate Accounts







AKRON BRASS 10 YEAR WARRANTY ON HEAVY DUTY SWING-OUT™ VALVES

Akron Brass warrants Heavy Duty Swing-Out Valves for a period of ten (10) years after purchase against defects in material or workmanship. Akron Brass will repair or replace any Heavy Duty Swing-Out Valve which fails to satisfy this warranty. Repair or replacement shall be at the discretion of Akron Brass. Electrical components shall carry our standard five (5) year warranty. We will not be responsible for: wear and tear; any improper installation, use or maintenance; negligence of the owner or user; repair or modification after delivery; failure to follow our instructions or recommendations; or anything else beyond our control. WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, OTHER THAN THOSE INCLUDED IN THIS WARRANTY STATEMENT, AND WE DISCLAIM ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Further, we will not be responsible for any consequential, incidental or indirect damages (including, but not limited to, any loss of profits) from any cause whatsoever. No person has authority to change this warranty.

**HEAVY
DUTY**
Swing-Outs
Proven Performance Trusted By Firefighters
For Over Half a Century



 **AKRON**
BRASS COMPANY
An ISO 9001: 2000 Registered Company

**SOLID RED
DIAMOND GRADE
983-72**

**FL. YEL/GRN
DIAMOND GRADE
983-23**

**SOLID RED
DIAMOND GRADE
983-72**

**SOLID YELLOW
DIAMOND GRADE
983-71**

**SOLID RED
DIAMOND GRADE
983-72**

**FL. YELLOW
DIAMOND GRADE
983-21**

Reference Only



Reference Only



Fire and Rescue Apparatus

One (1) Year Material and Workmanship

Basic Apparatus

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	Twelve (12) months.
Conditions and Exclusions:	No specific exclusions apply
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



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The M2106 and the 108SD will carry a 3Yr/100,000 mile basic vehicle warranty.

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This warranty is limited to a chassis domiciled within the United States and Canada.

FXP base spec GVW units domiciled in Canada will carry an extended 3Yr/100,000 mile basic vehicle warranty.

FXP base spec GVW units domiciled in the United States will carry an extended 5Yr/100,000 mile basic vehicle warranty.

Please let me know if you require any additional information.

Regards,


John Frawley

Director of Corporate Accounts

Appendix I

COUNTY OF FLUVANNA

GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

These General Terms, Conditions and Instructions to Bidders and Contractor (hereinafter referred to as the “General Conditions”) shall apply to all purchases and be incorporated into and be a part of each Solicitation (as defined below) and every Contract (as defined below) awarded by Fluvanna County, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the “County”) unless otherwise specified by the County in writing. Bidders, Offerors and Contractors or their authorized representatives are expected to inform themselves fully as to these General Conditions before submitting Bids or Proposals to and/or entering into any Contract with the County: failure to do so will be at the Bidder’s/Contractor’s own risk and except as provided by law, relief cannot be secured on the plea of error.

Subject to all Federal, State and local laws, policies, resolutions, regulations, rules, limitations and legislation, including the County’s Procurement Policies and Procedures, Bids or Proposals on all Solicitations issued by County will bind Bidders or Offerors, as applicable, and Contracts will bind Contractors, to all applicable terms, conditions, instructions, rules and requirements herein set forth unless otherwise SPECIFICALLY set forth by the County in writing in the Solicitation or Contract. All provisions of these General Conditions are material to any contract between the County and a Contractor.

INTRODUCTION

1. **VIRGINIA PUBLIC PROCUREMENT ACT AND ETHICS IN PUBLIC CONTRACTING:** The Virginia Public Procurement Act of Virginia Code §§ 2.2-4300 *et seq.* (hereinafter the “VPPA”) is incorporated herein by reference. Nothing in these General Conditions is intended to conflict with the VPPA and in case of any conflict, the VPPA controls. Specifically, the provisions of Article 6 of the VPPA (Virginia Code §§ 2.2-4367 through 2.2-4377) relating to ethics in contracting, shall be applicable to all Solicitations and Contracts solicited or entered into by the County. By submitting their Bids or signing any Contract, all Bidders and Contractors certify that they have not violated any of the provisions of Article 6 of the VPPA, including, but not limited to, that their Bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements.
2. **DEFINITIONS:** The definitions of Virginia Code §§ 2.2-4301, 2.2-4302.1 and 2.2-4302.2 are specifically incorporated herein by reference and as used in these General Conditions, whether capitalized or not, any of such defined terms have the same meaning as such terms have under the VPPA: such defined terms include: “Affiliate”, “Best Value”, “Business”, “Competitive Negotiation”, “Competitive Sealed Bidding”, “Construction”, “Construction Management Contract”, “Design-Build Contract”, “Employment Services Organization”, “Goods”, “Informality”, “Job Order Contracting”, “Multiphase Professional Services Contract”, “Nonprofessional Services”, “Potential Bidder or Offeror”, “Professional Services”, “Public Body”, “Public Contract”, “Responsible Bidder or Offeror”, “Responsive Bidder”, “Reverse Auctioning” and

“Services”. Additionally, as used in these General Conditions, the following terms, whether capitalized or not, have the following meanings:

- a. Bid/Proposal: The offer of a Bidder or Offeror to provide specific Goods or Services at specified prices and/or other conditions specified in the Solicitation. The term “Bid” is used throughout these General Conditions and where appropriate includes the term “Proposal” or any modifications or amendments to any Bid or Proposal.
- b. Bidder/Offeror/Vendor: Any individual(s), company, firm, corporation, partnership or other organization bidding or offering on any Solicitation issued by the County and/or offering to enter into Contracts with the County. The term “Bidder” is used throughout these General Conditions and where appropriate includes the term “Offeror” and/or “Vendor”.
- c. Contract: Any contract to which the County will be a party.
- d. Contractor: Any individual(s), company, firm, corporation, partnership, or other organization to whom an award is made by the County or whom enters into any contract to which the County is a party.
- e. County: The County of Fluvanna, a political subdivision of the Commonwealth of Virginia, including where applicable all agencies and departments of the County.
- f. County Administrator: The Fluvanna County Administrator.
- g. County Attorney: The Fluvanna County Attorney.
- h. Purchasing Agent: The County Administrator is the County’s Purchasing Agent and is responsible for the purchasing activity of Fluvanna County; and has signatory authority to bind the County to all contracts and purchases made lawfully under the Fluvanna County Small Purchasing Procedures. The Purchasing Agent has signatory authority to bind the County to all other contracts and purchases only after the contracts or purchases have been approved by a vote of the Fluvanna County Board of Supervisors.
- i. General Terms, Conditions and Instructions to Bidders and Contractors (also referred to herein as the “General Conditions”): These General Terms, Conditions and Instructions to Bidders and Contractors shall be attached to and made a part of all Solicitations by the County and all Contracts to which the County is party.
- j. His: Any references to “his” shall include his, her, their, or its as appropriate.
- k. Invitation to Bid (also referred to herein as an “IFB”): A request which is made to prospective Bidders for their quotation on Goods or Services desired by the County. The issuance of an IFB will contain or incorporate by reference the General Conditions and the other specifications and contractual terms and

conditions applicable to the procurement.

- l. Purchasing Officer: The Purchasing Officer employed by the County and to whom Bidders/Contractors can submit questions relating to any Bid or Contract.
 - m. Request for Proposal (also referred to herein as a “RFP”): A request for an offer from prospective Offerors which shall indicate the general terms which are sought to be procured from Offerors. The RFP will specify the evaluation factors to be used and will contain or incorporate by reference the General Conditions and other applicable contractual terms and conditions, including any unique capabilities or qualifications that will be required of the Contractor.
 - n. Small Purchasing Procedures: The County’s Small Purchasing Procedures, being Chapter 4 of the County’s Procurement Policies and Procedures, a method of purchasing not requiring competitive sealed bids or competitive negotiation for single or term contracts for goods and services other than professional services if the aggregate or the sum of all phases is not expected to exceed \$50,000; and also allowing for single or term contracts for professional services without requiring competitive negotiation, provided the aggregate or the sum of all phases is not expected to exceed \$50,000.
 - o. Solicitation: The process of notifying prospective Bidders or Offerors that the County wishes to receive Bids or Proposals on a set of requirements to provide Goods or Services. “Solicitation” includes any notification of the County requirements may consist of public advertising (newspaper, County’s website, or other electronic notification), the mailing of notices of Solicitation, any Invitation for Quotes (“IFQ”), Initiations to Bid (“IFB”), or Requests for Proposal (“RFP”), the public posting of notices, issuance of an Open Market Procurement (“OMP”), or telephone calls to prospective Bidders or Offerors.
 - p. State: The Commonwealth of Virginia.
3. **AUTHORITY**: The Purchasing Agent shall serve as the principal public purchasing official for the County, and shall be responsible for the procurement of goods, services, insurance and construction in accordance with the County’s Procurement Policies and Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every Solicitation, Contract and purchase order issued by the County under the County’s Small Purchasing Procedures. The Purchasing Agent has signatory authority to bind the County to all contracts and purchases made lawfully under the County’s Small Purchasing Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every other Solicitation, Contract and purchase order issued by the County except that the Purchasing Agent has signatory authority to bind the County to all other contracts and purchases ONLY after the contracts or purchases have been adopted and approved by a vote of the Fluvanna County Board of Supervisors (the “Board”).

Unless specifically delegated by the Board or the Purchasing Agent, and consistent with the limited authority granted thereto, no other County officer or employee is authorized to order supplies or Services, enter into purchase negotiations or Contracts, or in any way obligate the County for any indebtedness. Any purchase or contract made which is contrary to such authority shall be of no effect and void and the County shall not be bound thereby.

For convenience, the County's Purchasing Officer shall serve as an intermediary between the Purchasing Agent and the Bidder or Contractor and any Bidder or Contractor may direct communications regarding any purchase, Solicitation or Contract to the Purchasing Officer; however as stated *supra* only the Board or County's Purchasing Agent can bind the County and only upon the conditions stated *supra*.

CONDITIONS OF BIDDING

4. **COMPETITION INTENDED:** It is the County's intent to encourage and permit open and competitive bidding in all Solicitations. It shall be the Bidder's responsibility to advise the County in writing if any language, requirement, specification, etc., or any combination thereof, stifles competition or inadvertently restricts or limits the requirements stated in a Solicitation to a single source. The County must receive such notification not later than seven (7) business days prior to the deadline set for acceptance of the Bids. In submitting a Bid, the Bidder guarantees that he or she has not been a party with other Bidders to an agreement to bid a fixed or uniform price. Violation of this implied guarantee shall render the Bid of any Bidder involved void.
5. **DISCRIMINATION PROHIBITED:** Pursuant to Virginia Code § 2.2-4310, the County does not discriminate against Bidders, Offerors or Contractors because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. Whenever solicitations are made, the County shall include businesses selected from a list made available by the Department of Small Business and Supplier Diversity. Pursuant to Virginia Code § 2.2-4343.1, the County does not discriminate against "faith-based organizations", being a religious organization that is or applies to be a contractor to provide goods or services for programs funded by the block grant provided pursuant to the Personal Responsibility and Work Reconciliation Act of 1996, P.L. 104-193.
6. **CLARIFICATION OF TERMS:** Pursuant to Virginia Code § 2.2-4316, if any Bidder has questions or comments about the specifications or other Solicitation documents, the prospective Bidder should contact the County no later than seven (7) business days prior to the date set for the opening of Bids or receipt of Proposals. Any revisions to the Solicitation will be made only by written addendum issued by the County. Notifications regarding specifications may not be considered if received in less than seven (7) business days of the date set for opening of Bids/receipt of Proposals.
7. **MANDATORY USE OF COUNTY FORM AND TERMS AND CONDITIONS:** Unless otherwise specified in the Solicitation, all Bids must be submitted on the forms

provided by the County, including but not limited to, a Cover Sheet or Pricing Schedule, if applicable, properly signed in ink in the proper spaces and submitted in a sealed envelope or package. Unauthorized modification of or additions to any portion of the Solicitation may be cause for rejection of the Bid. However, the County reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject any Bid or Proposal which has been modified. These General Conditions are mandatory provisions of all Solicitations and all Contracts of the County.

8. LATE BIDS & MODIFICATION OF BIDS: Any Bid or modification thereto received at the office designated in the Solicitation after the exact time specified for receipt of the Bid is considered a late Bid or modification thereof. The County is not responsible for delays in the delivery of the mail by the U.S. Postal Service, private carriers or the inter-office mail system. It is the sole responsibility of the Bidder to ensure their Bid reaches County by the designated date and hour. The following rules apply to all Bids submitted to the County:

- a. The official time used in the receipt of Bids/Proposals is that time on the automatic time stamp machine in the Finance Department;
- b. Late Bids or modifications thereof will be returned to the Bidder UNOPENED, if Solicitation number, due date and Bidder's return address is shown on the container;
- c. If a Bid is submitted on time, however a modification thereto is submitted after the due date and time, then the County in its sole discretion may choose to consider the original Bid except that the County may not consider such original Bid if the Bid is withdrawn by the Bidder pursuant to Section 9 below; and
- d. If an emergency or unanticipated event or closing interrupts or suspends the County's normal business operations so that Bids cannot be received by the exact time specified in the Solicitation, then the due date/time specified for receipt of Bids will be deemed to be extended to the same time of day specified in the Solicitation on the first work day on which normal County business operations resume.

9. WITHDRAWAL OF BIDS:

- a. Pursuant to Virginia Code § 2.2-4330, a Bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his Bid from consideration if the price bid was substantially lower than the other Bids due solely to a mistake in the Bid, provided the Bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn.

If a Bid contains both clerical and judgment mistakes, a Bidder may withdraw his Bid from consideration if the price bid would have been substantially lower than the other Bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn. The Bidder shall give notice in writing to the County of his or her claim of right to withdraw his or her Bid within two (2) business days after the conclusion of the Bid opening procedure and shall submit original work papers with such notice.

- b. A Bidder for a Contract other than for public construction may request withdrawal of his or her Bid under the following circumstances:
 - i. Bids may be withdrawn on written request from the Bidder received at the address shown in the Solicitation prior to the time of opening.
 - ii. Requests for withdrawal of Bids after opening of such Bids but prior to award shall be transmitted to the County, in writing, accompanied by full documentation supporting the request. If the request is based on a claim of error, documentation must show the basis of the error. Such documentation may take the form of supplier quotations, Bidder work sheets, etc. If Bid bonds were tendered with the Bid, the County may exercise its right of collection.
- c. No Bid may be withdrawn under this Section 9 when the result would be the awarding of the Contract on another Bid of the same Bidder or of another Bidder in which the ownership of the withdrawing Bidder is more than five percent (5%).
- d. If a Bid is withdrawn under the authority of this Section 9 the lowest remaining Bid shall be deemed to be the low Bid.
- e. No Bidder who, is permitted to withdraw a Bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn Bid was submitted.
- f. The County shall notify the Bidder in writing within five (5) business days of its decision regarding the Bidder's request to withdraw its Bid. If the County denies the withdrawal of a Bid under the provisions of this Section 9, it shall State in such notice the reasons for its decision and award the Contract to such Bidder at the Bid price, provided such Bidder is a responsible and responsive Bidder. At the same time that the notice is provided, the County shall return all work papers and copies thereof that have been submitted by the Bidder.

- g. Under these procedures, a mistake shall be proved only from the original work papers, documents and materials delivered as required herein. The work papers, documents and materials submitted by the bidder shall, at the bidder's request, be considered trade secrets or proprietary information subject to the conditions of subsection F of Virginia Code § 2.2-4342.

10. ERRORS IN BIDS: When an error is made in extending total prices, the unit Bid price will govern. Erasures in Bids must be initialed by the Bidder. Carelessness in quoting prices, or otherwise in preparation of the Bid, will not relieve the Bidder. Bidders/Offerors are cautioned to recheck their Bids for possible error. Errors discovered after public opening cannot be corrected and the Bidder will be required to perform if his or her Bid is accepted.

11. IDENTIFICATION ON BID ENVELOPE: All Bids, Proposals and requested copies thereof submitted to the County shall be in a separate envelope or package, sealed and identified with the following information clearly marked on the outside of the envelope or package:

- a. Addressed as indicated on page 1 of the solicitation;
- b. Solicitation number;
- c. Title;
- d. Bid due date and time;
- e. Bidder's name and complete mailing address (return address); and
- f. Pursuant to Virginia Code § 2.2-4311.2, the Bidder's identification number issued by the State Corporation Commission, or if the bidder is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bids or proposal a statement describing why the bidder or offeror is not required to be so authorized.

If a Bid is not addressed with the information as shown above, the Bidder takes the risk that the envelope may be inadvertently opened and the information compromised, which may cause the Bid to be disqualified. Bids may be hand delivered to the designated location in the County's offices. No other correspondence or other Proposals/Bids should be placed in the envelope. Any Bidder or Offeror that fails to provide the information required in (f) above shall not receive an award unless a waiver is specifically granted by the County Administrator.

12. ACCEPTANCE OF BIDS: Unless otherwise specified, all formal Bids or Proposals submitted shall be valid for a minimum period of one hundred twenty (120) calendar days following the date established for opening or receipt, respectively, unless extend by mutual agreement of the parties. At the end of the one hundred twenty (120) calendar days the Bid/Proposal may be withdrawn at the written request of the Bidder. Thereafter, unless and until the Proposal is withdrawn, it remains in effect until an award is made or the Solicitation is canceled by the County. The County may cancel any Solicitation at any time by notice of such cancelation to the Bidders.

- 13. COMPLETENESS:** To be responsive, a Bid must include all information required by the Solicitation.
- 14. CONDITIONAL BIDS:** Conditional Bids are subject to rejection in whole or in part.
- 15. RESPONSE TO SOLICITATIONS:** In the event a Bidder cannot submit a Bid on a Solicitation, the Bidder is requested to return the Solicitation cover sheet with an explanation as to why the Bidder is unable to Bid on these requirements, or if there be no cover sheet for the Solicitation a letter to the County explaining the same.
- 16. BIDDER INTERESTED IN MORE THAN ONE BID AND COLLUSION:** More than one bid from an individual, firm, partnership, corporation or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for the work contemplated will cause rejection of all bids in which the bidder is interested. Any or all bids may be rejected if there is any reason for believing that collusion exists among the bidders. Participants in such collusion may not be considered in future bids for the same work. Each bidder, as a condition of submitting a bid, shall certify that he is not a party to any collusive action as herein defined. However, a party who has quoted prices on work, materials, or supplies to a Bidder is not thereby disqualified from quoting prices to other Bidders or firms submitting a Bid directly for the work, materials or supplies.
- 17. BID OPENING:** Pursuant to Virginia Code § 2.2-4301, all Bids received in response to an IFB will be opened at the date, time and place specified, and announced publicly, and made available for inspection as provided in Section 21 of these General Conditions. Proposals received in response to an RFP will be made available for inspection as provided in Section 21 of these General Conditions.
- 18. TAX EXEMPTION:** The County is exempt from the payment of any federal excise or any Virginia sales tax. The price bid must be net, exclusive of taxes. Tax exemption certificates will be furnished if requested by the Bidder.
- 19. DEBARMENT STATUS:** By submitting their Bids, Bidders certify that they are not currently debarred from submitting Bids on Contracts by the County, nor are they an agent of any person or entity that is currently debarred from submitting Bids or Proposals on Contracts by the County or any agency, public entity/locality or authority of the State.
- 20. NO CONTACT POLICY:** No Bidder shall initiate or otherwise have contact related to the Solicitation with any County representative or employee, other than the Purchasing Officer or Purchasing Agent, after the date and time established for receipt of Bids. Any contact initiated by a Bidder with any County representative, other than the Purchasing Officer or Purchasing Agent, concerning this Solicitation is prohibited and may cause the disqualification of the Bidder.

21. VIRGINIA FREEDOM OF INFORMATION ACT: As provided under Virginia Code § 2.2-4342, all proceedings, records, Contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act of Virginia Code §§ 2.2-3700 *et seq.*, except:

- a. Cost estimates relating to a proposed procurement transaction prepared by or for the County shall not be open to public inspection;
- b. Any competitive sealed bidding Bidder, upon request, shall be afforded the opportunity to inspect Bid records within a reasonable time after the opening of Bids but prior to award, except in the event that the County decides not to accept any of the Bids and to reopen the Contract. Otherwise, Bid records shall be open to public inspection only after award of the Contract;
- c. Any competitive negotiation Offeror, upon request, shall be afforded the opportunity to inspect Proposal records within a reasonable time after the evaluation and negotiations of Proposals are completed but prior to award except in the event that the County decides not to accept any of the Proposals and to reopen the Contract. Otherwise, Proposal records shall be open to the public inspection only after award of the Contract;
- d. Any inspection of procurement transaction records under this Section 21 shall be subject to reasonable restrictions to ensure the security and integrity of the records;
- e. Trade secrets or proprietary information submitted by a Bidder, Offeror or Contractor in connection with a procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the Bidder, Offeror or Contractor must invoke the protections of this Section 21 prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and State the reasons why protection is necessary; and
- f. Nothing contained in this Section 21 shall be construed to require the County, when procuring by “competitive negotiation” (RFP), to furnish a Statement of reasons why a particular Proposal was not deemed to be the most advantageous to the County.

22. CONFLICT OF INTEREST: Bidder/Contractor certifies by signing any Bid/Contract to/with the County that no conflict of interest exists between Bidder/Contractor and County that interferes with fair competition and no conflict of interest exists between Bidder/Contractor and any other person or organization that constitutes a conflict of interest with respect to the Bid/Contract with the County.

SPECIFICATIONS

23. OMISSIONS OR DISCREPANCIES: Any items or parts of any equipment listed in a Solicitation which are not fully described or are omitted from such specification, and which are clearly necessary for the completion of such equipment and its appurtenances, shall be considered a part of such equipment although not directly specified or called for

in the specifications. Should a Bidder find a discrepancy or ambiguity in, or an omission from, the Solicitation, including the drawings and/or specifications, he or she shall so notify the County within twenty-four (24) hours of noting the discrepancy, ambiguity or omission and in any event no less than five (5) days prior to the date set for the opening of Bids. If necessary, the County will send a written addendum for clarification to all Bidders no later than three (3) days before the date set for opening of Bids. Any notification regarding specifications received less than five (5) days prior to the date set for the opening of Bids may or may not be considered by the County in its sole discretion. The Bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission, but shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever the mention is made of any articles, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed as to the minimum requirements of these specifications.

24. BRAND NAME OR EQUAL ITEMS: Pursuant to Virginia Code § 2.2-4315, unless otherwise provided in the Solicitation, the name of a certain brand, make or manufacturer does not restrict Bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the County in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Bidder is responsible to clearly and specifically indicate the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the County to determine if the product offered meets the requirements of the Solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding, only the information furnished with the Bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a Bid non-responsive. Unless the Bidder clearly indicates in its Bid that the product offered is "equal" product, such Bid will be considered to offer the brand name product referenced in the Solicitation.

25. FORMAL SPECIFICATIONS: When a Solicitation contains a specification which states no substitutes, no deviation therefrom will be permitted and the Bidder will be required to furnish articles in conformity with that specification.

26. CONDITION OF ITEMS: Unless otherwise specified in the Solicitation, all items shall be new, in first class condition.

AWARD

27. RESPONSIBLE BIDDERS: In determining whether a Bidder is a responsible Bidder as defined herein, at minimum, the following criteria will be considered:

- a. The ability, capacity and skill of the Bidder to perform the Contract or provide the service required under the Solicitation;

- b. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
- c. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
- d. The quality of performance of previous Contracts or Services;
- e. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or Services;
- f. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service;
- g. The quality, availability and adaptability of the Goods or Services to the particular use required;
- h. The ability of the Bidder to provide future maintenance and service for the use of the subject of the Contract;
- i. The number and scope of the conditions attached to the Bid;
- j. Whether the Bidder is in arrears to the County on debt or Contract or is a defaulter on surety to the County or whether the Bidder's County taxes or assessments are delinquent; and
- k. Such other information as may be secured by the County, the Purchasing Agent or the Purchasing Officer having a bearing on the decision to award the Contract. If an apparent low Bidder is not awarded a Contract for reasons of nonresponsibility, the County shall so notify that Bidder and shall have recorded the reasons in the Solicitation or Contract file.

28. AWARD OR REJECTION OF BIDS; WAIVER OF INFORMALITIES: The County shall award the Contract to the lowest responsive and responsible Bidder complying with all provisions of the IFB, provided the Bid price is reasonable and it is in the best interest of the County to accept it. Awards made in response to a RFP will be made to the highest qualified Offeror whose Proposal is determined, in writing, to be the most advantageous to the County taking into consideration the evaluation factors set forth in the RFP. The County reserves the right to award a Contract by individual items, in the aggregate, or in combination thereof, or to reject any or all Bids and to waive any informality in Bids received whenever such rejection or waiver is in the best interest of the County. Award may be made to as many Bidders/Offerors as deemed necessary to fulfill the anticipated requirements of the County. The County also reserves the right to reject the Bid if a Bidder is deemed to be a non-responsible Bidder. Pursuant to Virginia Code § 2.2-4319, an IFB, a RFP, any other solicitation, or any and all bids or proposals, may be canceled or rejected by the County at any time. The reasons for cancellation or rejection shall be made part of the contract file. The County shall not cancel or reject an IFB, a RFP, any other solicitation, bid or proposal solely to avoid awarding a contract to a particular responsive and responsible bidder or offeror.

29. EXCLUSION OF INSURANCE BIDS PROHIBITED: Pursuant to Virginia Code § 2.2-4320, notwithstanding any other provision of law or these General Conditions, no insurer licensed to transact the business of insurance in the State or approved to issue surplus lines insurance in the State shall be excluded from presenting an insurance bid proposal to the County in response to a RFP or an IFB; excepting that the County may

debar a prospective insurer pursuant to its Debarment Policy, see Chapter 2 of the County's Procurement Policies and Procedures.

30. ANNOUNCEMENT OF AWARD: Upon the award or announcement of the decision to award a Contract as a result of this Solicitation, the County will publicly post such notice on the County's bulletin board located at 72 Main Street, 2nd Floor, Palmyra, Virginia 22963. Award results may also be viewed on the County's website.

31. QUALIFICATIONS OF BIDDERS OR OFFERORS: The County may make such reasonable investigations as deemed proper and necessary to determine the ability of the Bidder to perform the work/furnish the item(s) and the Bidder shall furnish to the County all such information and data for this purpose as may be requested. The County reserves the right to inspect Bidder's physical facilities prior to award to satisfy questions regarding the Bidder's capabilities. The County further reserves the right to reject any Bid or Proposal if the evidence submitted by or investigations of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work/furnish the item(s) contemplated therein.

32. TIE BIDS AND PREFERENCE FOR VIRGINIA PRODUCTS WITH RECYCLED CONTENT AND FOR VIRGINIA FIRMS:

- a. Pursuant to Virginia Code § 2.2-4328, in the case of a tie bid on an IFB only, the County may give preference to Goods, Services and construction produced in Fluvanna County or provided by persons, firms or corporations having principal places of business in Fluvanna County. If such choice is not available, preference shall then be given to Goods produced in Virginia, or for goods, services or construction provided by Virginia persons, firms, corporations, pursuant Virginia Code § 2.2-4324. If no County or State choice is available, the tie shall be decided publicly by lot. The decision by the County to make award to one or more such Bidders shall be final.
- b. Whenever the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a percentage preference, a like preference shall be allowed to the lowest responsive and responsible bidder who is a resident of Virginia and is the next lowest bidder. If the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a price-matching preference, a like preference shall be allowed to responsive and responsible bidders who are residents of Virginia. If the lowest bidder is a resident contractor of a state with an absolute preference, the bid shall not be considered. The Department of General Services shall post and maintain an updated list on its website of all states with an absolute preference for their resident contractors and those states that allow their resident contractors a percentage preference, including the respective percentage amounts. For purposes of compliance with this Section 32, the County may rely upon the accuracy of the information posted on this website.
- c. Notwithstanding the provisions of subsections a and b, in the case of a tie bid in instances where goods are being offered, and existing price preferences have

already been taken into account, preference shall be given to the bidder whose goods contain the greatest amount of recycled content.

- d. For the purposes of this Section 32, a Virginia person, firm or corporation shall be deemed to be a resident of Virginia if such person, firm or corporation has been organized pursuant to Virginia law or maintains a principal place of business within Virginia.

33. NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER: Pursuant to Virginia Code § 2.2-4318, unless cancelled or rejected, a responsive Bid from the lowest responsible Bidder shall be accepted as submitted, except that if the Bid from the lowest responsible Bidder exceeds available funds, the County may negotiate with the apparent low Bidder to obtain a Contract price within available funds. However, the negotiation may be undertaken only under conditions and procedures described in writing and approved by the County prior to issuance of the IFB and summarized therein.

CONTRACT PROVISIONS

34. APPLICABLE LAW AND COURTS: Any Bid or Contract resulting from a Solicitation and its terms, including, but not limited to, the parties' obligations under it, and the remedies available to each party for breach of it, shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Virginia, and exclusive jurisdiction and venue of any dispute or matters involving litigation between the parties hereto shall be in the courts of Fluvanna County, Virginia. Any jurisdiction's choice of law, conflict of laws, rules, or provisions, including those of the Commonwealth of Virginia, that would cause the application of any laws other than those of the Commonwealth of Virginia, shall not apply. The Contractor shall comply with applicable federal, State and local laws, ordinances, rules and regulations in performance of the Contract.

35. PROVISION AND OWNERSHIP OF INFORMATION: The County shall make a good faith effort to identify and make available to the Contractor all non-confidential technical and administrative data in the County's possession which the County may lawfully release including, but not limited to Contract specifications, drawings, correspondence, and other information specified and required by the Contractor and relating to its work under any Contract. The County reserves its rights of ownership to all material given to the Contractor by the County and to all background information documents, and computer software and documentation developed by the Contractor in performing any Contract.

36. DOCUMENTS: All documents, including but not limited to data compilations, drawings, reports and other material, whether in hard copy or electronic format, prepared, developed or furnished by the Contractor pursuant to any Contract shall be the sole property of the County. At the direction of the County, the Contractor shall have the right to make copies of the documents produced available to other parties. The County shall be entitled to delivery of possession of all documents, upon payment in accordance with the terms of any Contract for the service incurred to produce such documents.

37. CONFIDENTIALITY: Contractor shall not publish, copyright or otherwise disclose or permit to be disclosed or published, the results of any work performed pursuant to this contract, or any particulars thereof, including forms or other materials developed for the County in connection with the performance by Contractor of its services hereunder, without prior written approval of the County. Contractor, cognizant of the sensitive nature of much of the data supplied by the County, shall not disclose any information (other than information which is readily available from sources available to the general public) obtained by it in the course of providing services hereunder without the prior written approval of the County, unless disclosure of such information by it is required by law, rule or regulation or the valid order of a court or administrative agency.

38. INDEPENDENT CONTRACTOR: The Contractor and any agents, or employees of the Contractor, in the performance of any Contract shall act as an independent contractor and not as officers, employees or agents of the County.

39. INSURANCE: The Contractor agrees that, during the period of time it renders services to the County pursuant to any Contract, it shall carry (and provide the County with evidence of coverage) the following minimum amounts of insurance:

Automobile	\$500,000	Liability Medical Payment Comprehensive Collision
Public Liability	\$1,000,000	
Professional Liability	\$1,000,000	
Excess Liability	\$2,000,000	Aggregate Over Above Policy Limits (Excluding Professional Liability)
Worker's Compensation	Amount required by Virginia law	

The Contract may specifically require the Contractor to carry higher minimum amounts of insurance.

In addition, the Contractor shall require, and shall include in every subcontract, that any subcontractor providing any goods or services related to such Contract obtain, and continue to maintain for the duration of the work, workers' compensation coverage in the amount required by Virginia law.

40. KEY PERSONNEL: For the duration of any Contract, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment, or as expressly approved by the County. The Contractor

shall notify the County within five (5) calendar days after the occurrence of any of these events and provide the information required by the paragraph below.

The Contractor shall provide a detailed explanation of the circumstances necessitating any proposed substitution, complete resumes for the proposed substitute, and any additional information requested by the County. The proposed substitute should have comparable qualifications to those of the person being replaced. The County will notify the Contractor within fifteen (15) calendar days after receipt of all required information of its approval or disapproval of the proposed substitution.

- 41. SEVERABILITY:** If any term, covenant or provision of these General Conditions or any Contract shall be held to be invalid, illegal or unenforceable in any respect, these General Conditions and any Contract shall remain in effect and be construed without regard to such provision.
- 42. TITLES:** The titles and section headings herein and in any Contract are inserted solely for convenience and are not to be construed as a limitation on the scope of the provisions to which they refer.
- 43. ATTORNEYS' FEES:** In the event of a dispute between the County and Contractor under any Contract which cannot be amicably resolved, in addition to all other remedies, the party substantially prevailing in any litigation shall be entitled to recover its reasonable expenses, including, but not limited to, reasonable attorneys' fees.
- 44. NO WAIVER:** Neither any payment for, nor acceptance of, the whole or any part of the services by the County, nor any extension of time, shall operate as a waiver of any provision of any Contract, nor of any power herein reserved to the County, or any right to damages herein provided, nor shall any waiver of any breach of any Contract be held to be a waiver of any other or subsequent breach. Failure of the County to require compliance with any term or condition of any Contract shall not be deemed a waiver of such term or condition or a waiver of the subsequent enforcement thereof.
- 45. NO FINANCE CHARGES:** No finance charges shall be paid by the County.
- 46. ANTITRUST:** By entering into a Contract, the Contractor conveys, sells, assigns, and transfers to the County all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust law of the United States or the State, relating to the particular Goods or Services purchased or acquired by the County under said Contract. Consistent and continued tie bidding could cause rejection of Bids by the County and/or investigation for antitrust violations.
- 47. PAYMENT:** Pursuant to Virginia Code § 2.2-4352, unless more time is provided in the Solicitation or Contract, payment will be made forty-five (45) days after receipt by the County of a proper invoice, or forty-five (45) days after receipt of all Goods or acceptance of work, whichever is later. The County reserves the right to withhold any or all payments or portions thereof for Contractor's failure to perform in accordance with the

provision of the Contract or any modifications thereto. Within twenty (20) days of receipt of proper invoice or of goods or services, the County shall notify the Contractor if any defect or impropriety that would prevent payment by the payment date. The following provisions apply to such payments:

- a. Invoices for items/Services ordered, delivered/performed and accepted shall be submitted by the Contractor in duplicate directly to the payment address shown on the purchase order, Solicitation or Contract, as applicable. All invoices shall show the Contract number, purchase order number, or Solicitation number, as applicable, and as required under Virginia Code § 2.2-4354, either the individual Contractor's social security number or the Contractor's federal employer identification number, whichever is applicable.
- b. Any payment terms requiring payment in less than forty-five (45) days will be regarded as requiring payment forty-five (45) days after receipt of proper invoice or receipt of all Goods or acceptance of work, whichever occurs later. Notwithstanding the foregoing, offers of discounts for payment in less than forty-five (45) days are valid and enforceable.
- c. Pursuant to Virginia Code § 2.2-4353, the date any payment shall be deemed the date of postmark in all cases where payment is made by mail.
- d. The County's fiscal year is July 1 to June 30. Contractors are advised to submit invoices, especially for Goods and/or Services provided in the month of June, for the entire month (i.e. June 1 - June 30), so that expenses are recognized in the appropriate fiscal year.
- e. Any payment made by the Contractor to the County shall only be made in U.S. Dollars. If payment is received in foreign currency the County may, in its sole discretion, reject such payment and require immediate compensation in U.S. Dollars.

48. SUBCONTRACTORS: Pursuant to Virginia Code § 2.2-4354, in the event that any subcontractors are used by Contractor in connection with the work, Contractor shall:

- a. Within seven (7) days after receipt of amounts paid to the Contractor for work performed by a subcontractor, either:
 - i. Pay the subcontractor for the proportionate share of the total payment received attributable to the work performed by the subcontractor under any Contract; or
 - ii. Notify the County and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

- b. Contractor shall require each subcontractor to provide either (i) for an individual, their social security numbers, or (ii) for proprietorships, partnerships, and corporations to provide their federal employer identification numbers.
- c. The Contractor shall pay interest to any subcontractor on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from the County for work performed by the subcontractor under any Contract, except for amounts withheld as allowed in subdivision (a)(II) above. Unless otherwise provided under the terms of any Contract, interest shall accrue at the rate of one percent (1%) per month.
- d. The Contractor shall include in each of its subcontracts under any Contract a provision requiring each subcontractor to include or otherwise be subject to the above payment and interest requirements (a), (b) and (c) with respect to each lower tier subcontractor.
- e. The Contractor's obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this Section 48 shall not be construed to be an obligation of the County. No Contract modification may be made for the purpose of providing reimbursement for such interest charge. No cost reimbursement claim may include any amount for reimbursement for such interest charge.

49. RETAINAGE ON CONSTRUCTION CONTRACTS: Pursuant to Virginia Code 2§ 2.2-4333, if a Contract for construction provides for progress payments in installments based upon an estimated percentage of completion, then the contractor shall be paid at least ninety-five percent (95%) of the earned sum when payment is due, with no more than five percent (5%) being retained to ensure faithful performance of the contract. All amounts withheld may be included in the final payment. Any subcontract related to work on a Contract that provides for similar progress payments shall be subject to the provisions above and the Contractor agrees to include such provisions in every subcontract.

50. SUCCESSORS AND ASSIGNS: The County and the Contractor bind themselves and their respective successors and assigns to any Contract. The foregoing notwithstanding, the Contractor shall not assign, sublet or transfer its interest in any Contract without the prior written consent of the County, which may be granted or withheld in the County's sole discretion. Nothing hereinafter mentioned shall be construed as creating any personal liability on the part of any officer, agent or employee of the County, nor shall it be construed as giving any benefits hereunder to anyone other than the County and the Contractor.

51. DEFAULT: Failure of a Contractor to deliver Goods or Services in accordance with Contract terms and conditions and/or within the time specified, or within reasonable time as interpreted by the County in its sole discretion, or failure to make replacements/corrections of rejected articles/services when so requested, immediately or as directed by the County, or failure of the Contractor to act in accordance with the Contract in any material respect, as reasonably determined by the County, shall constitute

a “default” by the Contractor and shall further authority for the County to purchase in the open market articles/services of comparable grade/quality to replace the services, articles rejected, and/or not delivered. On all such purchases, the Contractor shall reimburse the County, within a reasonable time specified by the County, for any expense incurred in excess of Contract prices including, but not limited to, any purchase and administrative costs. Such purchases shall be deducted from the Contract quantities, if applicable. Should public necessity demand it, the County reserves the right to use or consume articles delivered or services performed which are substandard in quality, subject to an adjustment in price to be determined by the County. In case of any default, the County, after due oral or written notice if required in accordance with the Contract, may terminate the Contract at its option in its sole discretion effective immediately. These remedies shall be in addition to any other remedies which the County may have, including but not limited to, any remedies at law, under the Contract or in equity.

Notwithstanding the foregoing, the Contractor shall not be liable for damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, act of God, act of Government, act of an alien enemy or by any other circumstances which, in the County's opinion, are beyond the control of the Contractor. Under such circumstances, however, the County may, at its sole discretion, terminate or cancel the Contract effective immediately.

52. NON-DISCRIMINATION ASSURANCES: The Contractor shall conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Act of 1975, as amended, where applicable, and § 2.2-4311 of the Virginia Procurement Act:

- a. During the performance of any Contract, the Contractor agrees as follows: the Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. The Contractor, in all Solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer. Notices, advertisements and Solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this Section 52.
- b. The Contractor shall include the provisions of paragraph (a) above in every subcontract or purchase over \$10,000.00 so that the provisions will be binding upon each subcontractor or Vendor.

53. MODIFICATION:

- a. Pursuant to Virginia Code § 2.2-4309, these General Conditions and any Contract entered into by the County and any Contractor shall not be subject to change, modification, or discharge except by written instrument signed by the County and Contractor, but no fixed-price contract may be increased by more than twenty-five percent (25%) of the amount of the contract or \$50,000, whichever is greater, without the advance written approval of the County's Board. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of an offeror from the consequences of an error in its bid or offer.
- b. The County may, but is not obligated to, extend the term of an existing contract for services to allow completion of any work undertaken but not completed during the original term of the contract.
- c. Nothing in this Section 53 shall prevent the County from placing greater restrictions on contract modifications.

54. INDEMNIFICATION: Contractor agrees to indemnify, keep and save harmless the County, its officers, agents, officials, employees and volunteers against any and all claims, claims of injuries, death, damage to property, patent claims, suits, liabilities, judgments, losses, costs and expenses, including but not limited to costs of investigation, all reasonable attorneys' fees (whether or not litigation results), and the cost of any appeal, occurring or arising in connection with the Contractor's, its agents', subcontractors', employees', or volunteers' negligence or wrongful acts or omissions in connection with its performance of any Contract. The Contractor shall, at his or her own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and if any judgment shall be rendered against the County in any such action, the Contractor shall, at his or her own expenses, satisfy and discharge the same. Contractor expressly understands and agrees that any performance bond or insurance protection required by any Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County as herein provided. Nothing contained in this Solicitation or the Contract shall be deemed to be a waiver of the County's sovereign immunity.

55. DRUG-FREE WORKPLACE: Pursuant to Virginia Code § 2.2-4312, in every Contract over \$10,000.00 the following provisions apply: During the performance of any Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a Statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all Solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the

foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this Section, “*drug-free workplace*” means a site for the performance of work done in connection with a specific Contract awarded to a Contractor in accordance with this the VPPA and the County’s Procurement Procedures, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Contract.

56. TERMINATION: Contracts will remain in force for full periods specified and/or until all articles ordered before date of termination shall have been satisfactorily delivered and accepted and thereafter until all requirements and conditions shall have been met, unless:

- a. Terminated prior to expiration date by satisfactory deliveries of entire Contract requirements;
- b. Terminated by the County upon thirty (30) days written notice to the Contractor at the County’s convenience in the County’s sole discretion (“termination for convenience”), unless a termination for convenience is specifically and expressly prohibited by the Contract. Any Contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of the termination;
- c. Terminated by the County for cause, default or negligence on the part of the Contractor. However, pursuant to Section 51 of these General Conditions, the County may hold the Contractor responsible for any resulting additional purchase and administrative costs. There is no advance notice requirement in the event of Termination for Cause and termination is effective immediately upon notice to Contractor of the termination for cause;
- d. Extended upon written authorization of County and accepted by Contractor, to permit ordering of unordered balances or additional quantities at Contract prices and in accordance with Contract terms.

57. APPROPRIATIONS: Notwithstanding any other provision of any Contract, the payment of the County's obligations under any Contract shall be subject to annual appropriations by the Board of Supervisors of the County in each fiscal year of monies sufficient to satisfy the same.

58. REFERENCES TO VIRGINIA LAW: Any reference in these General Conditions to the Code of Virginia or other relevant Federal, State or local law is incorporated in whole herein by reference as in effect at the time of the Solicitation or Contract as such statutory provisions may be amended or replaced by any statute dealing with the same or similar subject matter.

59. COOPERATIVE PROCUREMENT: Except as prohibited by the current Code of Virginia, all resultant Contracts will be extended to other Public Bodies of the Commonwealth of Virginia, to permit their ordering of Goods, supplies and/or Services at the prices and terms of the resulting Contract (“cooperative procurement”). By submitting any Bid or entering into any Contract with the County a Bidder/Contractor expressly authorizes cooperative procurement under Virginia Code § 2.2-4304 to the full extent permitted by law. If any other public body decides to use any Contract, the Contractor must deal directly with that public body concerning all matters relating thereto, including but not limited to, the placement or orders, issuance of the purchase order, contractual disputes, invoicing and payment. The County acts only as the “Contracting Agent” for these public bodies. Any resulting contract with other public bodies shall be governed by the laws of that specific entity. It is the Contractor’s responsibility to notify the public bodies of the availability of the Contract. Fluvanna County shall not be held liable for any direct or indirect costs, damages or other claim of any kind incurred by another public body or any Contractor as a result of any cooperative procurement.

60. AUDIT: The Contractor hereby agrees to retain all books, records and other documents relative to any Contract for five (5) years after final payment, or until audited by the County, whichever is sooner. The County, its authorized agents, and/or County auditors shall have full access to and right to examine any of said materials during said period.

61. GUARANTIES AND WARRANTIES: All guarantees, representations and warranties required shall be furnished by the Contractor and shall be delivered to the Purchasing Agent before final payment on any Contract is made. In addition to any guarantees, representations and warranties required under the Contract, the Contractor agrees to:

- a. Save the County, its agents and employees harmless from liability of any nature or kind for the use of any copyrighted or un-copyrighted composition; secret process, patented or unpatented; invention; article or appliance furnished or used in the performance of a Contract for which the Contractor is not the patentee, assignee, licensee or owner;
- b. Protect the County against latent defective material or workmanship and to repair or replace any damages or marring occasioned in transit or delivery;
- c. Furnish adequate protection against damage to all work and to repair damages of any kind to the building or equipment, to the Contractor’s own work or to the work of other contractors, for which the Contractor’s workers are responsible;
- d. Pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the County; and
- e. Protect the County from loss or damage to County owned property while it is in the custody of the Contractor;

- f. At minimum supply all Goods or Services with the manufacturer's standard warranty, if applicable; and
 - g. For any Contract involving Services of any nature, the Contractor further agrees to:
 - i. Enter upon the performance of Services with all due diligence and dispatch, assiduously press to its complete performance, and exercise therein the highest degree of skill and competence;
 - ii. Allow Services to be inspected or reviewed by an employee of the County at any reasonable time and place selected by the County;
 - iii. Acknowledges that the County shall be under no obligation to compensate Contractor for any Services not rendered in strict conformity with the Contract; and
 - iv. Stipulates that the presence of a County Inspector shall not lessen the obligation of the Contractor for performance in accordance with the Contract requirements, or be deemed a defense on the part of the Contractor for infraction thereof. The Inspector is not authorized to revoke, alter, enlarge, relax, or release any of the requirements of any Contract. Any omission or failure on the part of the Inspector to disapprove or reject any work or material shall not be construed to be an acceptance of any such defective work or material.
- 62. PRICE REDUCTIONS:** If at any time after the date of the Bid/Contract the Contractor makes a general price reduction in the comparable price of any material covered by the Contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to any Contract for the duration of the Contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. For purpose of this provision, a "general price reduction" shall mean any horizontal reduction in the price of an article or service offered (1) to Contractor's customers generally, or (2) in the Contractor's price schedule for the class of customers, i.e., wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this Solicitation. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a "general price reduction" under this provision. The Contractor shall submit his or her invoice at such reduced prices indicating on the invoice that the reduction is pursuant to the "Price Reduction" provision of the Contract documents. The Contractor in addition will within ten (10) days of any general price reduction notify the County of such reduction by letter. FAILURE TO DO SO IS A DEFAULT UNDER THE CONTRACT AND MAY RESULT IN TERMINATION OF THE CONTRACT IN THE COUNTY'S DISCRETION. The Contractor, if requested, shall furnish, within ten (10) days after the end of the Contract period, a statement certifying either (1) that no general price reduction, as defined above, was made after the date of the Bid or Contract, or (2) if any such general price reductions were made, that as provided above, they were reported to the County within ten (10) days and the County was billed at the reduced prices. Where one or more such general price reductions were made, the statement furnished by

the Contractor shall include with respect to each price reduction (1) the date when notice of any such reduction was issued, (2) the effective date of the reduction, and (3) the date when the County was notified of any such reduction.

63. COMPLIANCE WITH IMMIGRATION LAW: Pursuant to Virginia Code § 2.2-4311.1, in every Contract the following provision applies: the Contractor does not, and shall not during the performance of the Contract, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

64. VIRGINIA STATE CORPORATION COMMISSION: Pursuant to Virginia Code § 2.2-4311.2, Any Bidder or Contractor organized as a stock or non-stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia, or as otherwise required by law, at the time of the Bid, Proposal or any response to Solicitation and during the term of the Contract and any Contract renewal. The Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required, to be revoked or cancelled at any time during the term or any renewal of the Contract. If the Contractor fails to remain in compliance with the provisions of this Section 64, the Contract may become void at the option of the County.

65. CLAIMS PROCEDURE:

- a. The procedure for consideration by the County of contractual claims for any Contract shall be that set forth in Virginia Code § 15.2-1243, *et seq.*
- b. In addition, pursuant to Virginia Code § 2.2-4364, contractual claims, whether for money or other relief, shall be submitted in writing to the County Administrator no later than sixty (60) days after final payment; however, written notice of the Contractor's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. Nothing herein shall preclude a Contract from requiring submission of an invoice for final payment within a certain time after completion and acceptance of the work or acceptance of the Goods. Pendency of claims shall not delay payment of amount agreed due in the final payment.
- c. No written decision denying a claim or addressing issues related to the claim shall be considered a denial of the claim unless the written decision is signed by the Board or the County Administrator. The contractor may not institute legal action prior to receipt of the final written decision on the claim unless the County fails to render a decision within ninety (90) days of submission of the claim. Failure of the County to render a decision within ninety (90) days shall not result in the contractor being awarded the relief claimed or in any other relief or penalty. The sole remedy for the County's failure to render a decision within 90 days shall be the contractor's right to institute immediate legal action.

- d. A Contractor may not institute legal action, prior to receipt of the County's decision on the claim, unless the County fails to render such decision within the time specified by law. A failure by the County to render a decision within the time provided by law shall be deemed a final decision denying the claim by the County.
 - e. The decision of the Board or the County Administrator shall be final and conclusive unless the Contractor appeals within six (6) months of the date of the final written decision by instituting legal action as provided in Virginia Code § 2.2-4364.
 - f. No administrative appeals procedure pursuant to Virginia Code § 2.2-4365 has been adopted for contractual claims by the County.
 - g. Nothing herein shall be construed to prevent the County from instituting legal action against any Contractor or Bidder.
- 66. NOTICES:** All written notices required or permitted under any Solicitation, Bid or Contract shall be deemed sufficient if delivered in person to the County Purchasing Agent or Bidder/Contractor, as applicable, or sent by first class mail to the County or Bidder/Contractor at the addresses set forth in the Solicitation, Bid or Contract or at such other address as a party may designate from time to time by notice given in accordance with the terms of this Section 66; except that where a Solicitation, Bid or Contract expressly requires notice to a specific individual or at a specific location, such shall control. Such notices are deemed received when actually delivered to the party or its representative or agent if hand delivered, or one (1) business day after deposited into the United States mail, if mailed.

DELIVERY

- 67. SHIPPING INSTRUCTIONS-CONSIGNMENT:** Unless otherwise specified in the Solicitation or Contract, as applicable, each case, crate, barrel, package, etc., delivered under the Contract must be plainly stenciled or securely tagged, stating the Contractor's name, purchase order number, and delivery address as indicated in the order. Where shipping containers are to be used, each container must be marked with the purchase order number, name of the Contractor, the name of the item, the item number, and the quantity contained therein. Deliveries must be made within the hours of 8:00 a.m. – 3:00 p.m. Deliveries at any other time will not be accepted unless specific arrangements have been previously made with the designated individual at the delivery point. No deliveries will be accepted on Saturdays, Sundays and holidays unless previous arrangements have been made. It shall be the responsibility of the Contractor to insure compliance with these instructions for items that are drop-shipped.
- 68. RESPONSIBILITY FOR SUPPLIES TENDERED:** The Contractor shall be responsible for the materials or supplies covered by the Contract until they are delivered

at the designated point. The Contractor shall additionally bear all risk on rejected materials or supplies after notice of rejection is tendered by the County. Rejected materials or supplies must be removed by and at the expense of the Contractor promptly after notification of rejection, unless public health and safety require immediate destruction or other disposal of rejected delivery. If rejected materials are not removed by the Contractor within ten (10) days after date of notification, the County may return the rejected materials or supplies to the Contractor at the Contractor's risk and expense or dispose of them as abandoned property.

- 69. INSPECTIONS:** The County reserves the right to conduct any test/inspection it may deem advisable to assure supplies and Services conform to the specification in the Solicitation, Bid or Contract, as applicable. Inspection and acceptance of materials or supplies will be made after delivery at destinations herein specified unless otherwise stated. Unless otherwise specified in the Contract, if inspection is made after delivery at the destination specified, the County will bear the expense of inspection except for the value of samples used in case of rejection. Final inspection shall be conclusive except in regard to latent defects, fraud or such gross mistakes as to amount to fraud. Final inspection and acceptance or rejection of the materials or supplies will be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the County for such materials or supplies as are not in accordance with the specifications.
- 70. COMPLIANCE:** Delivery must be made as ordered and in accordance with the Solicitation, Bid or Contract, as applicable, or as directed by the County when not in conflict with the Bid/Contract. The decision as to reasonable compliance with delivery terms shall be final. Burden of proof of delay in receipt of Goods by the purchaser shall rest with the Contractor. Any request for extension of time of delivery from that specified must be approved by the County, such extension applying only to the particular item or shipment affected. Unless otherwise specified in the Contract, should the Contractor be unreasonably delayed by the County, there shall be added to the time of completion a time equal to the period of such delay caused by the County. However, the Contractor shall not be entitled to claim damages or extra compensation for such delay or suspension. These conditions may vary for construction Contracts.
- 71. POINT OF DESTINATION:** All materials shipped to the County must be shipped F.O.B. DESTINATION unless otherwise stated specifically in the Solicitation, Bid or Contract, as applicable. The materials must be delivered to the "Ship To" address indicated on the purchase order or Solicitation, as applicable.
- 72. REPLACEMENT:** Materials or components that have been rejected by the County, in accordance with the terms of the Contract, shall be replaced by the Contractor at no cost to the County.
- 73. DAMAGES:** Any and all damages to property of the "County" that is the direct result of the Contractor, the employees of the Contractor and/or its subcontractors, agents, licensees, successors, or assigns, shall be the sole responsibility of the Contractor. The

property shall be repaired to its last known condition prior to the damages and/or replaced at no cost to the County. The County shall approve any and all repairs/replacements prior to acceptance of the repairs/replacement.

74. PACKING SLIPS OR DELIVERY TICKETS: All shipments shall be accompanied by Packing Slips or Delivery Tickets and shall contain the following information for each item delivered:

- a. Purchase Order Number;
- b. Name of Article and Stock Number;
- c. Quantity Ordered;
- d. Quantity Shipped;
- e. Quantity Back Ordered; and
- f. The Name of the Contractor.

Contractors are cautioned that failure to comply with these conditions shall be considered sufficient reason for refusal to accept the Goods.

75. ADDITIONAL CHARGES: No delivery charges of any kind shall be added to any invoice; except that (i) if Goods are expressly bought F.O.B. "shipping point" under the Contract and the Contractor prepays transportation, then delivery charges shall be added to invoices; and (ii) if express delivery is authorized and substituted by the County on orders for the method specified in the Contract, then the difference between freight or mail and express charges may be added to invoice.

76. METHOD AND CONTAINERS: Unless otherwise specified, Goods shall be delivered in commercial packages in standard commercial containers, so constructed as to ensure acceptance by common or other carrier for safe transportation to the point of delivery. Containers become the property of the County unless otherwise specified by bidder.

VENDOR DATA SHEET

Note: The following information is required as part of your response to this solicitation. Failure to complete and provide this sheet may result in finding your bid nonresponsive.

1. Qualification: The vendor must have the capability and capacity in all respects to satisfy fully all of the contractual requirements.

2. Vendor's Primary Contact:

Name: Kevin Sandridge Phone: 434-953-5153

3. Years in Business: Indicate the length of time you have been in business providing this type of good or service;

11 Years 4 Months

4. Vendor Information:

FIN or FEI Number: 27-3187193 If Company, Corporation, or Partnership

5. Indicate below a listing of at least four (4) current or recent accounts, either commercial or governmental, that your company is servicing, has serviced, or has provided similar goods. Include the length of service and the name, address, and telephone number of the point of contact.

Company: Henrico County Virginia	Contact: Dave Wood
Phone: 804-349-2213	Email: woo36@co.henrico.va.us
Dates of Service: 3-25-2020	\$\$ Value: \$2,799,206.00

Company: Goochland County, VA	Contact: Wanda Tomey
Phone: 804-556-5802	Email: wtomey@goochlandva.us
Dates of Service: 8-12-21	\$\$ Value: \$1,400,577.00

Company: County of Albemarle, VA	Contact: Chip Walker
Phone: 434-825-8432	Email: jwalker2@albemarle.org
Dates of Service: 8-3-21	\$\$ Value: \$886,125.00

Company: Louisa County, VA	Contact: Fire Chief Robert Dube
Phone: 540-967-3491	Email: rdube@louisa.org
Dates of Service: 1-7-21	\$\$ Value:

I certify the accuracy of this information.

Signed: 1-12-22  Title: Vice President Date:

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment A)

PROOF OF AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

THIS FORM MUST BE SUBMITTED WITH YOUR PROPOSAL/BID. FAILURE TO INCLUDE THIS FORM MAY RESULT IN REJECTION OF YOUR PROPOSAL/BID

Pursuant to Virginia Code §2.2-4311.2, an Offeror/Bidder organized or authorized to transact business in The Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its proposal/bid the identification number issued to it by the State Corporation Commission ("SCC"). Any Offeror/Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its proposal/bid a statement describing why the Offeror/Bidder is not required to be so authorized. Any Offeror/Bidder described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the County Administrator, as applicable. If this quote for goods or services is accepted by the County of Fluvanna, Virginia, the undersigned agrees that the requirements of the Code of Virginia Article IV.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applies and providing the requested information. **PLEASE NOTE: The SCC number is NOT your federal ID number or business license number.**

A. ☒ Offeror/Bidder is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is 07262991.

B. ☐ Offeror/Bidder is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is _____.


C. ☐ Offeror/Bidder does not have an Identification Number issued to it by the SCC and such vendor is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

Please attach additional sheets if you need to explain why such Offeror/Bidder is not required to be authorized to transact business in Virginia.

Legal Name of Company (as listed on W-9) AtlantiE Emergency Solutions

Legal Name of Offeror/Bidder AtlantiE Emergency Solutions

Date 01/13/2022

Authorized Signature 

Print or Type Name and Title Jack Jackson, Secretary

PLEASE RETURN THIS PAGE WITH BID SUBMISSION (Attachment B)

CERTIFICATION OF NO COLLUSION

The undersigned, acting on behalf of Atlantic Emergency Solutions, does hereby certify in connection with the procurement and bid to which this Certification of No Collusion is attached that:

This bid is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce; nor is this bid the result of, or affected by, any act of fraud punishable under Article 1.1 of Chapter 12 of Title 18.2 Code of Virginia, 1950 as amended (&&18.2-498.1 et seq.)

[Signature], Secretary
Signature of Company Representative

Atlantic Emergency Solutions
Name of Company

01/13/2022
Date

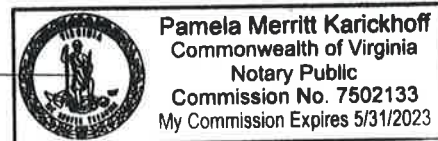
ACKNOWLEDGEMENT**STATE OF VIRGINIA**

York ~~FLUVANNA~~ COUNTY, to wit:

The foregoing Certification of No Collusion bearing the signature of Jack Jackson and dated January 13, 2022 was subscribed and sworn to before the undersigned notary public by Pamela Merritt Karickhoff on January 13, 2022.

[Signature]
Notary Public

My commission expires: May 31, 2023

**CODE OF VIRGINIA**

& 18.2-498.4. Duty to provide certified statement:

A. The Commonwealth, or any department or agency thereof, and any local government or any department or agency thereof, may require that any person seeking, offering or agreeing to transact business or commerce with it, or seeking, offering or agreeing to receive any portion of the public funds or moneys, submit a certification that the offer or agreement or any claim resulting thereon is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce, or any act of fraud punishable under this article.

B. Any person required to submit a certified statement as provided in paragraph A, above who knowingly makes a false statement shall be guilty of a Class 6 felony. (1980, c.472)

a false statement shall be guilty of a Class 6 felony. (1980, c.472)

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment C)

OFFEROR STATEMENT

Undersigned Bidder hereby certifies that he/she has carefully examined all conditions and specifications of this invitation for Bid and hereby submits this bid pursuant to such instructions and instructions.

Jack Jackson, Secretary

Type or Print Name & Title of Authorized Person

[Signature]

Signature of Authorized Person Submitting This Bid

01/13/2022

Date

SUBSCRIBED AND SWORN to before me by the above named

Jack Jackson on the 13 day of January, 2013 2022

Pamela Merritt Karickhoff

Notary Public in and for the State of Virginia

My commission expires: May 31, 2022



Pamela Merritt Karickhoff
Commonwealth of Virginia
Notary Public
Commission No. 7502133
My Commission Expires 5/31/2022

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment D)

KNOW ALL MEN BY THESE PRESENT:

That, _____ the Contractor ("Principal") whose principal place of business is located at _____ and _____ ("Surety") are held and firmly bound unto the County of Fluvanna, Virginia, the Owner ("Obligee") in the amount of Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated the ____ day of _____, 20__ entered into a contract with Obligee for which contract (the "Contract") is by reference expressly made a part hereof;

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly and faithfully perform said Contract in strict conformity with the plans, specifications and conditions of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Provided, that any alterations which may be made in the terms of the Contract, or in the Work to be done under it, or the giving by the Obligee of any extension of the time for the performance of the Contract, or any other alterations, extensions or forbearance on the part of either or both of the Obligee or the Principal to the other shall not in any way release the Principal and the Surety, or either of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety of any such alterations, extension, or forbearance being hereby waived.

No action shall be brought on this bond unless brought within one year after: (a) completion of the Contract and all Work thereunder, including expiration of all warranties and guarantees, or (b) discovery of the defect or breach of warranty or guarantee if the action be for such. The Surety represents to the Principal and to the Obligee that it is legally authorized to do business in the Commonwealth of Virginia. Exclusive venue and jurisdiction for any dispute arising hereunder shall be in the courts of the County of Fluvanna, Virginia.

Signed and sealed this ____ day of _____, 20__ .

Principal

Surety (must be signed by a Virginia Resident Agent of Surety)

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

Address: _____

Approved as to form:

Fluvanna County Attorney

Bond No.: _____

Fire Apparatus Purchase #3:

Contract between Fluvanna County and Atlantic Emergency Solutions for the purchase of a 2023 Pierce Enforcer Triple Combination Pumper totaling \$721,404.

This Purchase Agreement No. 3 (together with all attachments and exhibits referenced herein, the “**Agreement**”), dated this ____ day of January, 2022, made and entered into by and between Atlantic Emergency Solutions, Inc., a Virginia corporation (“**Atlantic**”), and Fluvanna County, a political subdivision of the Commonwealth of Virginia (“**Customer**”) is effective as of the date specified in Article 3 hereof.

1. **Definitions.** The words below when used in this Agreement are defined as follows:

- a. “**Cooperative Agreement**” means collectively Exhibits 1, 2, and 3 to this Agreement (as defined in Article 2 below).
- b. “**County’s General Terms**” means Exhibit 9 to this Agreement (as defined in Article 2 below).
- c. “**Atlantic Proposal**” means collectively the *Cooperative Agreement*, *Proposal Letter* (being Exhibit 4 hereto), *Proposal* (being Exhibit 7 hereto), *Worksheet* (being Exhibit 5 hereto), *Proposal Options* (being Exhibit 6 hereto), and *Warranties* (being Exhibit 8 hereto), each exhibit being more specifically defined in Article 2 below.
- d. “**Options**” means all those options and additional features, services, work and items set forth or listed in Exhibit 5 (the “*Worksheet*”), Exhibit 6 (the “*Proposal Options*”) or Exhibit 7 (the “*Proposal*”), to this Agreement.
- e. “**Specifications**” means all of the general and particular *Specifications*, warranties, technical *Specifications*, training, and testing requirements for the Product contained in the *Atlantic Proposal* for the *Products* and services being provided to *Customer* under this Agreement and *Specifications* shall include all provisions and requirements under the *Cooperative Agreement*, *Warranty*, and the *County’s General Terms*.
- f. “**Product**” means the fire apparatus and any associated equipment manufactured or furnished for the *Customer* by *Atlantic* pursuant to the *Atlantic Proposal* and consistent with all requirements of the *Atlantic Proposal* and the *Specifications*, and specifically including all *Options*, as defined below, and delivery of Product to the *Customer* in Fluvanna County, Virginia along with at minimum one (1) day new delivery training and all training as set out in the *Atlantic Proposal* (the “*Training*”) or more training at a time and place convenient for the *Customer* in the *Customer*’s reasonable discretion and two (2) engineering trips for three (3) department personnel (the “*Factory Trips*”) as set out in the *Worksheet*. Also included with the Product are those options, items, events, training, factory trips, airfare, meals, lodging and allowances set forth in the *Atlantic Proposal*, *Options* and *Worksheet* (as set out in Exhibit 5). *Options*, *Training*, *Factory Trips* and *Delivery* of Product are material parts of the Product under this Agreement.
- g. “**Delivery**” means the date *Atlantic* is prepared to make physical possession of the Product available to the *Customer* in Fluvanna County, Virginia at the following address: 5753 James Madison Hwy, Fork Union, VA 23055. **In any event Delivery and Training must occur no later than 16 months from the Agreement’s Effective Date, as defined below. Time is of the essence.**
- h. “**Acceptance**” The *Customer* shall have thirty (30) calendar days of *Delivery* or thirty (30) calendar days of completion of *Training*, whichever is later, to inspect the Product for conformance with the *Specifications*; unless the *Customer* sends *Atlantic* a Notice of Defect within thirty (30) calendar days of *Delivery* or the completion of *Training*, whichever is later, the Product will be deemed to be in conformance with the *Specifications* and accepted by the *Customer* excepting latent material defects. Nothing herein is intended to limit any repair, service or equipment covered under a *Warranty* (as defined below).
- i. “**Warranty**” means any and all warranties required under the *Cooperative Agreement*, *Atlantic Proposal*, including specifically the *Warranties* (as defined in Article 2), and the *County’s General Terms* (Exhibit 9).
- j. “**Purchase Agreement No. 1**” that Purchase Agreement No. 1 entered into on even date herewith between the *Customer* and *Atlantic* for purchase of a Lake Monticello Pierce Aerial Tower as more

specifically set forth therein. Certain exhibits to this Agreement are identical to exhibits attached to Purchase Agreement No.1 and for efficiency are incorporated by reference instead of attaching them repetitively to this related Agreement.

2. **Exhibits:** The following exhibits are attached to that Purchase Agreement No. 1 and incorporated herein by reference as material provisions of this Agreement:

- a. Exhibit 1 (being Exhibit 1 to Purchase Agreement No 1): Fire Service Apparatus (All Types) Contract No FS12-19 between Houston-Galveston Area Council of Governments (“HGAC”) and *Atlantic* Emergency Solutions, Inc., dated October 25, 2019, as amended by that Amendment No. 1 to Contract No. FS12-19 for Fire Service Apparatus (All Types) dated October 4, 2021, which extended the term through May 31, 2022, and as further amended by Exhibit 12.
- b. Exhibit 2 (being Exhibit 2 to Purchase Agreement No 1): HGAC solicitation for fire service apparatus (all types) FS12-19 issued June 27, 2019, including all suffixes, exhibits, attachments and amendments thereto (the “Solicitation”);
- c. Exhibit 3 (being Exhibit 3 to Purchase Agreement No 1): *Atlantic* Response to FS12-19, including, but not limited to, prices and options offered and all suffixes, exhibits, attachments and amendments thereto (the “Bid”) (***Atlantic’s pricing in this Exhibit 3 is proprietary and Atlantic requests that the pricing in Exhibit 3 be redacted from published versions of this Agreement***);
- d. Exhibit 10 (being Exhibit 10 to Purchase Agreement No 1): Vendor Data Sheet, Proof of Authority to Transact Business in Virginia, Certificate of No Collusion, and Offeror Statement (collectively the “Vendor Forms” executed by *Atlantic*); and
- e. Exhibit 12 (being Exhibit 12 to Purchase Agreement No 1): Amendment No 1 to Siddons Martin Emergency Group, LLC, (“Siddons”) agreement with HGAC under the Solicitation, Amendment No 1 to Pierce Manufacturing, Inc, (“Pierce”) agreement with HGAC under the Solicitation, those Contract Changes on Contract FS12-19 for the Supply of Fire Service Apparatus (All Types) letters both dated January 6, 2021, that letter from Siddons and Pierce to HGAC dated April 21, 2021, and that letter from HGAC to Siddons related to “Siddons-Martin 2021 HGAC FS12-19 Material Surcharge” dated May 3rd, 2021 (together the “Pricing Amendments”).

The following exhibits are attached hereto and incorporated herein as material provisions of this Agreement:

- f. Exhibit 4: Proposal Letter from *Atlantic* Emergency Solutions, the *Atlantic* authorized sales and service dealership in Virginia, dated December 10, 2021 (the “Proposal Letter”);
- g. Exhibit 5: Contract Pricing Worksheet dated December 3, 2021 (the “Worksheet”).
- h. Exhibit 6: Proposal Option List dated December 11, 2021 for the Palmyra FL Dryside Tanker (the “Proposal Options”);
- i. Exhibit 7: *Atlantic* Emergency Solutions Proposal to Fork Union Volunteer Fire Company (the “Proposal”);
- j. Exhibit 8: Product Warranty Information (the “Warranties”);
- k. Exhibit 9: Fluvanna County’s General Terms, Conditions and Instructions to Bidders and Contractors (the “County’s General Terms”); and
- l. Exhibit 11: **Performance Bond (to be provided by *Atlantic*).**

3. **Purpose.** This Agreement sets forth the terms and conditions of *Atlantic*’s sale of the Product to the *Customer*.

4. **Cooperative Procurement.** Pursuant to the Virginia Public Procurement Act, this a cooperatively procured contract off of the *Cooperative Agreement* for fire apparatus, incorporated herein by reference and made a material art of this Agreement. The Product must meet or exceed all requirements of the

Cooperative Agreement and *Atlantic* must meet or exceed all requirements, provisions and terms of the *Cooperative Agreement* relating to the *Products* to be provided hereunder. Notwithstanding any other provisions hereof, *Atlantic* represents and warrants that all pricing in this Agreement for the *Products* is consistent with or lower than the pricing set forth in the *Cooperative Agreement* and all *Products* purchased hereunder are available under the *Cooperative Agreement*. **Atlantic represents and warrants to Customer that: (i) all pricing offered to Customer is consistent with or less than the pricing under the Cooperative Agreement between Atlantic and HGAC, as amended from time to time, under the Solicitation; and (ii) further its Bid was a joint bid with Siddons and Pierce and that Atlantic is bound by Pricing Amendments entered into by Siddons and Pierce, and that the pricing in Atlantic's Cooperative Agreement with HGAC has been amended consistent with the Pricing Amendments.** Customer is materially relying on such representations and warranties in executing this Agreement as a cooperative procurement pursuant to Virginia law.

5. Term of Agreement. This Agreement will become effective as soon all of the following have occurred: (i) it is signed and approved by both *Customer* and *Atlantic's* authorized representatives (the “**Effective Date**”). This Agreement shall continue in full force and effect until the Completion Date or until sooner terminated consistent with the provisions hereof. Notwithstanding the foregoing, all training, continuing, guarantee and warranty provisions of this Agreement, included the *Warranty* as defined above, shall survive the Competition Date and shall continue for the specific warranty period beginning on the Completion Date until the applicable warranty period expires. Any and all provisions that by their terms are intended or implied to survive the Completion Date shall so survive.
6. Purchase and Payment. The *Customer* agrees to purchase the Product made pursuant to this Agreement, the *Atlantic Proposal* and the *Specifications*, with such Product being delivered and made consistent with all requirements of the *Cooperative Agreement* and the *County's General Terms*, for the total purchase price of **SEVEN HUNDRED TWENTY-ONE THOUSAND FOUR HUNDRED FOUR AND NO/100 DOLLARS (\$721,404.00)** (“**Purchase Price**”). Prices are in U.S. funds. The Purchase Price reflects a prepayment discount which requires the *Customer* to prepay SIX HUNDRED SIXTEEN THOUSAND NINE HUNDRED SIX AND NO/100 DOLLARS \$616,906.00 (the “**Prepayment**”) of the Purchase Price to *Atlantic* by the later of (i) within fourteen (14) days of the *Effective Date*; (ii) within five (5) days of the closing of that equipment financing (the “**Financing**”) from which the Customer will obtain the funds for making the payments under this Agreement which is anticipated to close February 2, 2022; or (iii) the date the Performance Bond is delivered by *Atlantic* to Customer. The remainder of the Purchase Price, being **\$104,498.00**, may be invoiced by *Atlantic* to the County only after the *Completion Date*, as defined below, and the County shall have forty-five (45) days to pay such proper invoice. Final payment shall be made in accordance with Section 47 “**Payment**” of the *County's General Terms*, and in no event shall *Atlantic* be finally paid prior to the *Completion Date*. The date that all *Products* are delivered and are fully operational and all services and work related to the *Products* or necessary for completion of the *Products* in full compliance with this Agreement and all requirements of this Agreement are satisfied, to the sole satisfaction of the County is the “**Completion Date**”. **Atlantic shall deliver to the Customer at Agreement execution a Performance Bond from a in a form acceptable to the Customer from a Virginia surety company for the full Purchase Price. A form of performance bond acceptable to the Customer is attached as Exhibit 11.**
7. Future Changes. Various state or federal regulatory agencies (e.g. NFPA, DOT, EPA) may require changes to the *Specifications* and/or the Product and in any such event any resulting actual cost increases, without mark-up of any kind, incurred to comply therewith will be added to the Purchase Price to be paid by the *Customer*. *Atlantic* will document and itemize any such price increases for the *Customer*. If *Customer* fails to appropriate such additional funds, then the *Customer* may terminate this Agreement

for cause and shall have no further liability of any kind hereunder and no cancellation charges of any kind shall apply; and any amounts prepaid to *Atlantic* shall be refunded to the *Customer* within ten (10) days of such termination. If such prepayment is not refunded within ten (10) days, a late fee of \$50.00 per day shall accrue for every day that such payment is delinquent.

8. Agreement Changes. The *Customer* may request that *Atlantic* incorporate a change to the *Products* or the *Specifications* for the *Products* by delivering a change order to *Atlantic*; provided, however, that any such change order must be in writing and include a description of the proposed change sufficient to permit *Atlantic* to evaluate the feasibility of such change ("Change Order"). Within seven (7) business days of receipt of a Change Order, *Atlantic* will inform the *Customer* in writing of the feasibility of the Change Order, the earliest possible implementation date for the Change Order, of any increase or decrease in the Purchase Price resulting from such Change Order, and of any effect on production scheduling or *Delivery* resulting from such Change Order. *Atlantic* shall not be liable to the *Customer* for any delay in performance or *Delivery* arising from any such Change Order unless the delay is caused by the fault, willful act or negligence of *Atlantic*. A Change Order is only effective when counter-signed by *Atlantic*'s authorized representative; except that *Atlantic* may not unreasonably withhold or delay approval and signature of any Change Order.
9. Cancellation/Termination. In the event this Agreement is cancelled or terminated by Customer without cause and solely for Customer's convenience before completion, *Atlantic* may charge a cancellation fee. The following cancellation fee charge schedule based on costs incurred may be applied: (a) 10% of the Purchase Price after the Effective Date; (b) 20% of the Purchase Price after completion of approval drawings, and; (c) 30% of the Purchase Price upon substantial material requisition. The cancellation fee will increase accordingly as actual costs are incurred as the order progresses through engineering and into manufacturing. Notwithstanding the foregoing, the cancellation fee may never exceed actual costs incurred by *Atlantic* under the Agreement up to cancellation or termination date and *Atlantic* must use its best efforts to mitigate any such costs through the sale of such Product to another purchaser; however Customer shall remain liable for the difference between the Purchase Price and, if applicable, the sale price obtained by *Atlantic* upon sale of the Product to another purchaser, plus any actual and reasonable costs incurred by *Atlantic* to conduct any such sale.
10. Delivery, Inspection and Acceptance.
 - (a) Delivery. *Delivery* of the Product is scheduled to be within 16 months' after the Effective Date. Time being of the essence. Risk of loss shall pass to *Customer* upon *Delivery* of the Product to the *Customer* at Customer location with prior noticed of the *Delivery* Date and time provided to *Customer* in advance.
 - (b) Inspection and Acceptance. From *Delivery* or the completion of Training, whichever occurs later, *Customer* shall have thirty (30) days within which to inspect the Product for conformance to the *Specifications*, and in the event of non-conformance to the *Specifications* to furnish *Atlantic* with written notice sufficient to permit *Atlantic* to evaluate such non-conformance ("Notice of Defect"). Any Product not in conformance to *Specifications* shall be remedied by *Atlantic* within thirty (30) days from the Notice of Defect. In the event *Atlantic* does not receive a Notice of Defect within thirty (30) days of *Delivery* or the completion of Training, whichever is later, Product will be deemed to be in conformance with *Specifications* and Accepted by *Customer*, excepting latent defects. In the event that *Atlantic* fails to remedy a defect within thirty (30) days as required under this Agreement, *Customer* may choose to: (1) Reject the Product in its entirety and receive a complete reimbursement of any and all payments made to *Atlantic* under this agreement, *Atlantic* shall also be required at its sole cost and expense to remove the non-confirming Product from Kents Store, Virginia, and this Agreement shall be deemed null and void

and of no further force and effect; or (2) Accept the non-conforming Product subject to a discount equal to either (i) the value of the missing or defective parts, equipment or portions of the Product including any cost to install or make such part, equipment or portion operable, or (ii) the actual cost of the missing or defective part, equipment or portion of the Product including any installation or service fees necessary to make such part, equipment or portion operable based on invoices and receipts. Nothing in this Article 10 is intended to limit any repairs, services or equipment covered under a *Warranty* provided with the Product and *Atlantic* agrees to respond to all *Warranty* claims and repairs promptly and with due diligence.

11. Notice. Any required or permitted notices hereunder must be given in writing at the address of each party set forth below, or to such other address as either party may substitute by written notice to the other in the manner contemplated herein, by one of the following methods: hand delivery; registered, express, or certified mail, return receipt requested, postage prepaid; or nationally-recognized private express courier:

Atlantic:

Atlantic Emergency Solutions, Inc.

Director of Order Management
12351 Randolph Ridge Lane
Manassas, Virginia 20109
Phone: (703) 393-9911

Customer:

Fluvanna County

Attn: Ms. Cyndi Toler, Purchasing Officer
132 Main Street
P.O. Box 540
Palmyra, VA 22963
Phone: (434) 591-1937
With a Copy to: Fluvanna Count Attorney
414 East Jefferson Street
Charlottesville, VA 22902

12. Standard Warranty. Any applicable warranties are set forth in the *Atlantic Proposal* and *Warranty* definition in Article 1 *supra* and are incorporated herein as if set out in the text of this Agreement. Additional warranties contained in any exhibits hereto are expressly approved by *Atlantic* and incorporated into this Agreement and made a material part hereof as if set out in the text of this Agreement. Any other warranties must be expressly approved in writing by *Atlantic's* authorized representative.

- a. Disclaimer. OTHER THAN AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER *ATLANTIC* EMERGENCY SOLUTIONS, AFFILIATES, SUBSIDIARIES, LICENSORS OR SUPPLIERS, THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, SHAREHOLDERS, AGENTS OR REPRESENTATIVES, MAKE ANY EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE *PRODUCTS* PROVIDED HEREUNDER OR OTHERWISE REGARDING THIS AGREEMENT, WHETHER ORAL OR WRITTEN, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, THE IMPLIED WARRANTY AGAINST INFRINGEMENT, AND THE IMPLIED WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED AND DISCLAIMED. STATEMENTS MADE BY SALES REPRESENTATIVES OR IN PROMOTIONAL MATERIALS DO NOT CONSTITUTE WARRANTIES.

b. Exclusions of Incidental and Consequential Damages. Other than as expressly set forth in this Agreement, in no event shall *Atlantic* be liable for consequential, incidental or punitive damages incurred by *Customer* or any third party in connection with any matter arising out of or relating to this Agreement, or the breach thereof, regardless of whether such damages arise out of breach of warranty, tort, contract, strict liability, statutory liability, indemnity, whether resulting from non-delivery or from *Atlantic's* own negligence, or otherwise. Notwithstanding the foregoing, in the event that a dispute arises between the parties that results in litigation any reasonable attorneys' fees and costs of the substantially prevailing party in such litigation shall be paid by the other party.

13. Insurance. *Atlantic* Emergency Solutions maintains the following limits of insurance with a carrier(s) rated A- or better by A.M. Best:

Commercial General Liability Insurance:

<i>Products/Completed Operations</i>	Aggregate:
\$1,000,000	Each Occurrence:
	\$1,000,000

Umbrella/Excess Liability Insurance:

Aggregate:	\$25,000,000
Each Occurrence:	\$25,000,000

Atlantic will provide to the *Customer* a copy of a current Certificate of Insurance with the coverage listed above or the coverage required under the *County's General Terms*, the higher coverage requirement shall control. Where appropriate *Atlantic* will add *Customer* an additional insured for Commercial General Liability (subject to the terms and conditions of the applicable *Atlantic* insurance policy); and all policies will provide a 30-day notice of cancellation to the named insured.

14. Other Terms. The *County's General Terms* are attached hereto as Exhibit 9 and incorporated herein by reference as a material part of this Agreement.
15. Force Majeure. *Atlantic* shall not be responsible nor deemed to be in default on account of delays in performance due to causes which are beyond *Atlantic's* control which make *Atlantic's* performance impracticable, including but not limited to civil wars, insurrections, strikes, riots, fires, storms, floods, other acts of nature, explosions, earthquakes, accidents, any act of government, allocation regulations or other governmental orders affecting materials, equipment, facilities or completed *Products*, failure to obtain any required license or certificates not being the fault of *Atlantic*, acts of God or the public enemy or terrorism, failure of transportation, epidemics, quarantine restrictions, failure of vendors (due to causes similar to those within the scope of this clause) to perform their contracts or labor troubles causing cessation, slowdown, or interruption of work. **All parties acknowledge that Customer's Financing requires the Products be delivered and paid for no later than August 1, 2023.**
16. Default. The occurrence of one or more of the following shall constitute a default under this Agreement: (a) the *Customer* fails to pay when due any amounts under this Agreement or to perform any of its obligations under this Agreement; (b) *Atlantic* fails to perform any of its obligations under this Agreement with time being of the essence; (c) either party becomes insolvent or become subject to a bankruptcy or insolvency proceedings; (d) any representation made by either party to induce the other to enter into this Agreement is false in any material respect; (e) the *Customer* dissolves, merges, consolidates or transfers a substantial portion of its property to another entity; or (f) the *Customer* is in default or has breached any other contract or agreement with *Atlantic*. Upon the occurrence of an event of default by *Atlantic*,

the *Customer* in its sole discretion may choose to immediately cancel and terminate this Agreement for cause with no further amounts due and payable hereunder to *Atlantic*. If *Customer* so chooses to cancel and terminate, then any amount already paid to *Atlantic* including any prepayments of any kind shall be immediately refunded to *Customer* with interest rate of (1%). This shall be in addition to any other remedies *Customer* may have in law or in equity owing to *Atlantic*'s default.

17. Manufacturer's Statement of Origin. It is agreed that the manufacturer's statement of origin ("MSO") for the Product covered by this Agreement shall remain in the possession of *Atlantic* until the entire Purchase Price has been paid or the Product has been delivered to *Customer*, whichever is sooner. If more than one Product is covered by this Agreement, then the MSO for each individual Product shall remain in the possession of *Atlantic* until the Purchase Price for that Product has been paid in full or the Product has been delivered to *Customer*, whichever is sooner. In case of any default in payment, *Atlantic* may take full possession of the Product, and any payments that have been made shall be applied as payment for the use of the Product up to the date of taking possession.
18. Independent Contractors. The relationship of the parties established under this Agreement is that of independent contractors and neither party is a partner, employee, agent, or joint venture of or with the other.
19. Assignment. Neither party may assign its rights and obligations under this Agreement unless it has obtained the prior written approval of the other party.
20. Governing Law; Jurisdiction. Without regard to any conflict of laws provisions, this Agreement is to be governed by and under the laws of the state of Virginia.
21. Facsimile Signatures. The delivery of signatures to this Agreement by facsimile transmission shall be binding as original signatures.
22. Entire Agreement. This Agreement shall be the exclusive agreement between the parties for the Product. Additional or different terms proposed by the *Customer* shall not be applicable, unless accepted in writing by *Atlantic*'s authorized representative. No change in, modification of, or revision of this Agreement shall be valid unless in writing and signed by *Atlantic*'s authorized representative.
23. Conflict. Whenever possible the Agreement and exhibits shall be read together and the requirements of all of the same shall be met. In the event of a direct conflict between this Agreement and any exhibit hereto, the following shall be the order of precedence: (i) this Agreement; (ii) the Proposal Letter; (iii) the Proposal; (iv) the *Worksheet*; (v) the *Proposal Options*; (vi) Warranties; (vii) the *Cooperative Agreement*; and (viii) the County' General Terms. For clarification, (i) would control over (ii) though (viii); (ii) would control over (iii) through (viii); and so forth.

[Signature Page to follow.]

In witness hereof the undersigned duly authorized representatives have executed this Contract on the dates set forth beside their respective signatures:

Atlantic:
Atlantic Emergency Solutions, Inc.

Customer:
County of Fluvanna, a political subdivision of the Commonwealth of Virginia

By: _____	Date: _____	By: _____	Date: _____
Name: _____		Name: _____	
Title: _____		Title: _____	

APPROVED AS TO FORM:

Fluvanna County Attorney, by Kristina M. Hofmann, Deputy Fluvanna County Attorney

December 10, 2021

Fire Chief Chris Aley
Fork Union Volunteer Company
Fork Union, VA 23055

Dear Chief, Aley,

Atlantic Emergency Solutions, the Pierce authorized Sales and Service dealership in Virginia, is pleased to offer the Fork Union Volunteer Fire Company our proposal on behalf of Pierce Manufacturing for a new 2023 Pierce Enforcer Triple Combination Pumper. We have thoughtfully tailored our proposal around the Department's requirements.

Pierce Manufacturing is North America's leader in the fire/rescue industry. Pierce has been building America's finest since 1917.

Currently we have six (6) factory trained service centers in Virginia with one (1) located in Charlottesville, VA to handle all of the specialized requirements for servicing your emergency apparatus. Mobile service vehicles and 24/7 Emergency Services are also available through our Chester Service Center.

This will provide Fluvanna County with the most experienced, fastest responding, and the most cost-effective solution to keep your emergency units in service. No other dealership in the Commonwealth of Virginia has made a greater commitment to service.

Pierce Enforcer Triple Combination Pumper proposal # 673	\$745,737.00
Prepayment discount when \$616,906.00 is received within two weeks of execution of contract (includes P-Bond).	<u>-24,333.00</u>

Total purchase price:	\$ 721,404.00
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***Pricing is valid until January 31, 2022 (PO or contract must be received by this date)**

As always, we remain at your disposal to answer any questions or provide further information.

Sincerely,

Kevin Sandridge
Vice President



5712 Hill Top Street
Crozet, Virginia 22932
(434) 953-5153 (Cell)

HGACBuy		CONTRACT PRICING WORKSHEET For MOTOR VEHICLES Only		Contract No.:	FS12-19	Date Prepared:	12/03/21
<i>This Worksheet is prepared by Contractor and given to End User. If a PO is issued, both documents MUST be faxed to H-GAC @ 713-993-4548. Therefore please type or print legibly.</i>							
Buying Agency:	County of Fluvanna, VA			Contractor:	Atlantic Emergency Solutions		
Contact Person:	Cyndi Toler			Prepared By:	Kevin Sandridge		
Phone:	434-591-1930 EXT 1124			Phone:	434-953-5153		
Fax:				Fax:			
Email:	ctoler@fluvannacounty.org			Email:	ksandridge@atlanticemergency.com		
Product Code:	FS19VC06	Description:	Saber Custom Chassis Pumper				
A. Product Item Base Unit Price Per Contractor's H-GAC Contract:							\$478,284.00
B. Published Options - Itemize below - Attach additional sheet(s) if necessary - Include Option Code in description if applicable.							
(Note: Published Options are options which were submitted and priced in Contractor's bid.)							
Description		Cost	Description		Cost		
			Subtotal From Additional Sheet(s):				\$259,453.00
			Subtotal B:				\$259,453.00
C. Unpublished Options - Itemize below / attach additional sheet(s) if necessary							
Description		Cost	Description		Cost		
			Subtotal From Additional Sheet(s):				\$0.00
			Subtotal C:				\$0.00
Check: Total cost of Unpublished Options (C) cannot exceed 25% of the total of the Base Unit Price plus Published Options (A+B).				For this transaction the percentage is:		0.00%	
D. Total Cost Before Any Applicable Trade-In / Other Allowances / Discounts (A+B+C)							
Quantity Ordered:	1	X Subtotal of A + B + C:	737737	=	Subtotal D:	\$737,737.00	
E. H-GAC Order Processing Charge (Amount Per Current Policy)						Subtotal E:	\$2,000.00
F. Trade-Ins / Other Allowances / Special Discounts / Freight / Installation							
Description		Cost	Description		Cost		
Two (2) trips for (3) department personnel		\$6,000.00	Discount				
Prepay Discount		-\$24,333.00			Subtotal F:		-\$18,333.00
Delivery Date:		16.5 months		G. Total Purchase Price (D+E+F):		\$721,404.00	

Pulse Number	Qty	Description	Published Options	Unpublished Options
102	1	Add Frame Liner Custom	\$1,902.00	
105	1	upgrade to 22,800# front axle	\$2,280.00	
107	1	upgrade to 31,000# rear	\$5,475.00	
109	1	TAK-4 Suspension	\$17,788.00	
117	1	Tire Chains - Rear Axle	\$4,580.00	
127	1	Mud Flaps	\$635.00	
128	1	Wheel Chocks and Mounts	\$1,013.00	
132	1	ABS upgrade to ESC/ABS/ATC	\$6,533.00	
134	1	Air inlet-outlet	\$759.00	
136	1	12 or 120 volt air compressor	\$1,945.00	
157	1	75 gallon fuel tank	\$1,251.00	
159	1	Add Extended Bumper	\$2,448.00	
161	1	Bumper tray with cover	\$1,015.00	
163	1	Bumper compartment for Winch	\$1,817.00	
170	1	Raised roof, custom cab	\$2,516.00	
172	1	Full height Cab doors - Raised Roof	\$2,384.00	
173	1	Stainless Door Jamb Scuffplates	\$756.00	
175	1	Electric Windows	\$2,195.00	
179	1	Safety System	\$10,601.00	
180	1	Driver Safety Seat	\$968.00	
181	5	SCBA Safety Seat	\$4,800.00	
186	2	EMS Compartment in Cab	\$5,594.00	
198	1	Upgrade Saber to Enforcer	\$9,422.00	
221	1	Camera System Rear only	\$1,140.00	
232	1	Intercom System (up to 6 position)	\$3,379.00	
234	6	Intercom Headset - Wired	\$3,348.00	
237	1	IOTA Charger	\$1,242.00	
249	1	Batteries 6 total	\$1,114.00	
262	2	12 volt-Hi Viz LED (per light)	\$4,584.00	
263	2	12 volt LED Flood Recessed or surface (per light) A	\$2,612.00	
265	2	12 volt LED Flood Pole light (per light)	\$4,160.00	
256	2	12 volt LED Scene - A	\$2,742.00	
272	1	Flush back body option	\$1,284.00	
278	1	Additional Hosebed Divider	\$559.00	
285	1	Long Pumper body	\$1,859.00	
288	1	Catwalk-Hatch Compartment, Each	\$3,764.00	
290	1	Add Right High Side Compartments	\$4,107.00	
292	1	Full Height - Depth Compartments	\$6,073.00	
293	1	Ladder Storage next to tank	\$5,077.00	
295	1	Winch 9000#	\$3,396.00	
296	1	LED Compartment Lighting base upgrade lighting	\$1,974.00	
307	2	trough - hard suction (each)	\$3,472.00	
310	11	Adjustable Compartment shelves	\$2,310.00	
312	2	Swing-out tool board	\$3,864.00	
313	1	Slide-out tool board in tray	\$1,269.00	
314	4	Slide-out floor tray	\$3,532.00	
315	1	Toolboard in Slide-out tray	\$1,285.00	
320	1	Vertical Partition	\$280.00	
319	2	PegBoard in compartment	\$1,168.00	
334	1	Increase Pump from 1250 to 1500 gpm	\$2,812.00	
337	1	add pump anodes (pair)	\$380.00	
338	1	Add Mechanical Seal to Pump	\$926.00	
340	1	MIV Valves Electric with manual back-up (each)	\$7,522.00	
344	1	2.5" Discharge front bumper	\$3,274.00	
347	1	Add Front Suction Inlet 4-6"	\$7,603.00	
350	2	2.5" Discharge	\$3,792.00	

[illegible]

F. Airport Rescue Fire-Fighting Vehicles		2021 Updated Pricing
FS19UF01	Oshkosh Striker 4x4, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (375/750 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (1500 gal.), Foam Tank Capacity (210 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$834,809.00
FS19UF02	Oshkosh Striker 6x6, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (3000 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi)	\$898,242.00
FS19UF03	Oshkosh Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Power divider driven Waterous CRQA, Single Stage Centrifugal, 1950 gpm at 240 psi)	\$1,048,535.00
FS19UF04	Oshkosh New Generation Striker 8x8, 2-Door, Aluminum Cab, 2 Passenger Seating, Roof Turret (600/1200 gpm), bumper Turret (300 gpm), One Handline (Foam/Water), Water Tank Capacity (4500 gal.), Foam Tank Capacity (420 gal.), Fire Pump (Waterous CRQB, Single Stage Centrifugal, 1950 gpm at 250 psi), dual engine driveline	\$1,215,945.00
FS19UF05	Oshkosh Stinger Class 2 ARFF vehicle; 2-Door Ford 4x4 F550 Cab/chassis, 2 Passenger Seating, Bumper Turret, one (1) twin agent handline, Water Tank Capacity (300 gal.), Foam Tank Capacity (40 gal.), Dry Chemical 500 pounds.	\$353,488.00
FS19UF06	Oshkosh H-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 50,000 GVWR, Single Axle	\$355,483.00
FS19UF07	Oshkosh HT-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 55,000 GVWR, Single Axle	\$410,225.00
FS19UF08	Oshkosh P-Series Chassis; 2-Door, Aluminum Cab, 2 Passenger Seating, 51,000 GVWR, Single Axle	\$312,991.00
V. Pierce		
A. Aerials (Booms/Platforms, Ladders, Ladder/Platforms)		
FS19VA01	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$896,731.00
FS19VA02	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 75' Steal Rear-Mounted Telescoping Ladder (500#)	\$931,959.00
FS19VA03	Pierce Enforcer Chassis 4-Door 75' Aluminum Rear Mounted Telescoping Ladder, Formed Aluminum Body	\$881,793.00
FS19VA04	Pierce Arrow Chassis 4-Door 100' Aluminum Rear Mount Aerial, Aluminum Body, Tandem Axle	\$1,181,318.00
FS19VA05	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Rear-Mounted Telescoping Ladder	\$995,504.00
FS19VA06	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 107' Rear-Mounted Telescoping Ladder	\$1,043,437.00
FS19VA07	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Rear Axle, 110' Rear-Mounted Telescoping Platform	\$1,095,017.00
FS19VA08	Pierce Enforcer Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 105' Rear-Mounted Telescoping Ladder (500#)	\$1,044,283.00
FS19VA09	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Mid-Mounted Telescoping Ladder with Platform	\$1,386,599.00
FS19VA10	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Tandem Axle, 100' Rear-Mounted Telescoping Ladder with Platform (750#)	\$1,315,704.00
FS19VA11	Pierce Arrow Chassis, 4-Door Full Tilt Aluminum Cab, Formed Aluminum Body, Single Axle, 107' Tractor Drawn - Mid-Mounted Telescoping Ladder (#500)	\$1,327,786.00

B. Wildland Fire Apparatus (Brush Fire)		
FS19VB01	Pierce Brush Fire Apparatus, Ford F450, Formed Aluminum Utility Body	\$145,605.00
FS19VB02	Pierce Brush Fire Apparatus, Ford F-550 Mini Pumper 500 gpm, 300 tank	\$225,803.00
FS19VB03	Freightliner 4-Door 4 x 4 Wildland, 500 water, 1000 gpm Pump	\$381,906.00
C. Pumper Fire Apparatus		
FS19VC01	M2 Freightliner, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$277,201.00
FS19VC02	IHC, 2-Door, OEM Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$286,400.00
FS19VC03	KW, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$280,129.00
FS19VC04	Peterbilt, 2-Door, OME Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$289,319.00
FS19VC05	Pierce Saber 4- Door Full Tilt Aluminum Cab, Ford Engine, Aluminum Body, 1250 gpm, mid-mounted Pump	\$424,457.00
FS19VC06	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$478,284.00
FS19VC07	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, Mid-Mounted Pumper	\$530,667.00
FS19VC08	Pierce Velocity, 4- Door Full Tilt Cab, Aluminum Long Body, 1250 gpm mid-mounted Pump	\$606,647.00
FS19VC09	Pierce Dash CF, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1250 GPM Pump, PUC Body Pumper	\$674,946.00
D. Special Service Apparatus (Walk-In & Non-Walk-in Bodies) Multi-use: Rescue, Re-Hab, Hazmat, Mobile Command Center		
FS19VD01	Ford F-550 4- Door, 12 'Non-Walk-in Formed Aluminum Body	\$161,755.00
FS19VD02	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$218,441.00
FS19VD03	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$220,384.00
FS19VD04	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$213,947.00
FS19VD05	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Body	\$225,380.00
FS19VD06	Pierce Saber FR, Full-Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Non-Walk-In Encore Body 18.5'	\$415,912.00
FS19VD07	Pierce Enforcer 4-Door, Aluminum Cab, Single Axle, Formed Aluminum Body, Non Walk-in HDR Body	\$535,557.00
FS19VD08	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Non-Walk-in HDR Body	\$639,536.00
FS19VD09	M2 Freightliner, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$314,977.00
FS19VD10	IHC, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$317,620.00
FS19VD11	Kenworth, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$312,502.00
FS19VD12	Peterbilt, 2-Door, OEM Cab, Single Axle, Formed Aluminum Body, Walk-In Body	\$319,978.00
FS19VD13	Pierce Enforcer 4-Door, Full Tilt, Aluminum Cab, Single Axle, Formed Aluminum Body, Walk-in HDR Body	\$641,716.00
FS19VD14	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in HDR Body	\$738,751.00

FS19VD15	Pierce Velocity 2-Door, Aluminum Cab, Tandem Axle, Combination Formed Aluminum Body	\$783,656.00
FS19VD16	Pierce Velocity 4-Door Aluminum Cab, Tandem Axle Walk-in Communications Body	\$814,594.00
E. Pumper/Tankers & Tankers		
FS19VE01	Freightliner 2 Door, Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,692.00
FS19VE02	IHC 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$292,562.00
FS19VE03	Kenworth 2dr Single Axle Tanker, Aluminum Body w/2000 water & 500 pump	\$289,900.00
FS19VE04	Peterbilt 2dr Single Axle Tanker, Aluminum w/2000 water & 500 pump	\$318,265.00
FS19VE05	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted	\$533,395.00
FS19VE06	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Pumper/Tanker, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted	\$626,487.00
FS19VE07	Freightliner 2dr, Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$319,685.00
FS19VE08	IHC 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$332,494.00
FS19VE09	Kenworth 2dr Tandem Axle Tanker, Aluminum Body w/3000 water & 500 pump	\$308,869.00
FS19VE10	Peterbilt 2dr Tandem Axle Tanker, Aluminum w/3000 water & 500 pump	\$320,587.00
FS19VE11	Pierce Saber FR, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$531,620.00
FS19VE12	Pierce Enforcer, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Tandem Axle, 1000 GPM Pump, Mid-Mounted Elliptical Tanker	\$646,141.00
FS19VE13	Pierce Velocity, 4-Door Aluminum Cab, Tandem Axle, Aluminum Pumper/Tanker 2000 Gallon Body, 1500 GPM Pump	\$660,849.00

FORM E - PUBLISHED OPTIONS		Procurement	FS12-19
Offeror Name:			
Notes: (Important)	<p>1) Bid each Option on a single separate line. Bidder is responsible to identify each item with a specific code or part number.</p> <p>2) Use a single Form E for ALL items. Add/Insert additional lines as necessary.</p> <p>3) Completely describe each option, including manufacturer's code or part numbers as appropriate. Each item listed MUST have a unique code or part number.</p> <p>4) Options which replace standard equipment on a base bid Item on Form D should be priced net of any credit due for the replaced item.</p> <p>5) Options which are shown as upgrades/downgrades of a base bid item on Form D should be priced at the differential amount between the base bid item and the option.</p> <p>6) You encouraged to offer specific manufacturer's catalogs (eg. Whelan, Fed Signal, etc.) as options, with 'List Less' or 'Cost Plus' percentages for pricing. Copy of catalog should be supplied w/bid.</p>		
Note: Bidder must identify each option bid with an identifying Code or Part No. that should be referenced on all Contract Pricing Worksheets			
Code or Part No.	Option Description	2021 Pricing	
OSK-1	110 volt auxiliary air compressor with auto-eject shore power connection	\$2,353.00	
OSK-2	110 volt engine preheater with auto-eject shore power connection	\$610.00	
OSK-3	Battery charger with auto-eject shore power connection	\$835.00	
OSK-4	Air inlet at rear or on either side of cab with auto-eject connection	\$424.00	
OSK-5	Air outlet on either side of cab with 50' of hose and a tire gauge	\$166.00	
OSK-6	Air hose reel in upper compartment with 150' of 1/2" hose	\$3,107.00	
OSK-7	Alternating flashing feature for headlights "wig wag"	\$173.00	
OSK-8	Two driving and two fog lights	\$413.00	
OSK-9	LED ground lighting	\$552.00	
OSK-10	Monitoring and Data Acquisition System [MADAS]	\$8,544.00	
OSK-11	Two defroster fans in cab	\$143.00	
OSK-12	Additional seat (3 seats are standard)	\$999.00	
OSK-13	Upgrade to Smartdock hands' free SCBA bracket for one crew seat	\$547.00	
OSK-14	Add roof hatch access step in cab	\$776.00	
OSK-15	High output dual air conditioning	\$5,894.00	
OSK-16	Streamlight brand rechargeable flashlights in cab - qty 2	\$495.00	
OSK-17	Streamlight brand rechargeable flashlights in cab - qty 4	\$989.00	
OSK-18	Medical storage compartment in cab	\$2,066.00	
OSK-19	Power strip in cab with shore power provisions	\$757.00	
OSK-20	Ladders with fixed mounting on roof - Duo Safety 900A-24 and Little Giant Model 26	\$2,614.00	
OSK-21	Height adjustable roll-out shelf in lower storage compartment	\$797.00	
OSK-22	Height adjustable fixed shelf in lower storage compartment	\$690.00	
OSK-23	Slide out, tilt down tray in an upper compartment	\$1,150.00	
OSK-24	Stowable step for upper compartment access	\$1,488.00	
OSK-25	Storage for two spare SCBA cylinders in the cab	\$783.00	
OSK-26	Driver and turret operator foot switches for siren and air horns	\$537.00	
OSK-27	Rear vision camera system including a rear facing color camera mounted at the top rear of the vehicle	\$2,982.00	
OSK-28	Forward Looking Infrared (FLIR) camera with pan and tilt	\$19,358.00	
OSK-29	Digital recorder with forward facing camera	\$2,425.00	
OSK-30	Continuous duty cycle central lubrication system	\$6,751.00	
OSK-31	Spare tire and wheel	\$3,723.00	
OSK-32	Central tire inflation/deflation system for 4x4 vehicle	\$27,170.00	
OSK-33	Central tire inflation/deflation system for 6x6 vehicle	\$32,606.00	

OSK-34	Central tire inflation/deflation system for 8x8 vehicle	\$38,038.00
OSK-35	Beadlocks for 4x4 vehicle including spare	\$2,656.00
OSK-36	Beadlocks for 6x6 vehicle including spare	\$3,985.00
OSK-37	Beadlocks for 8x8 vehicle including spare	\$5,311.00
OSK-38	Beadlock press	\$1,241.00
OSK-39	Bronze water pump housing in place of standard cast iron housing	\$10,475.00
OSK-40	Water/foam hose reel with 150' of 1.25" hose and 95 gpm nozzle in a lower compartment	\$9,087.00
OSK-41	Swing-out feature for hose reel	\$638.00
OSK-42	Limited structural panel on the left side - no suction connections	\$3,381.00
OSK-43	Structural panel with one 2-1/2" suction inlet, one 5" suction inlet and a priming pump on the LH side	\$5,407.00
OSK-44	Structural panel with one 2-1/2" suction inlet, one 5" suction inlet and a priming pump on the LH side with "Fill from Draft" provisions	\$6,031.00
OSK-45	One 2-1/2" foam / water producing discharge outlet with a bleeder valve on each side - 2 total	\$2,722.00
OSK-46	Two 2-1/2" foam / water producing discharge outlets with bleeder valves on each side - 4 total	\$5,026.00
OSK-47	Water tank shut-off	\$2,504.00
OSK-48	One 2-1/2" and 4-1/2" water tank fill connection on right hand side	\$1,996.00
OSK-49	550 lb. dry chemical system with fixed dual agent hosereel holding 100' of 1" twinned hose and a Hydro-Chem type nozzle in a lower compartment. Includes agent vessel and propellant system with system indicators in cab	\$28,106.00
OSK-50	Spare nitrogen cylinder for dry chemical system.	\$1,470.00
OSK-51	Foam transfer pump - electric	\$9,421.00
OSK-52	Foam transfer pump - pneumatic	\$4,409.00
OSK-53	Electronic foam proportioning system in place of standard fixed rate, around the pump foam proportioning system	\$20,893.00
OSK-54	375/750 gpm high volume, dual rate bumper turret in place of standard 300 gpm bumper turret - 4x4 only	\$5,870.00
OSK-55	375/750 gpm high volume, dual rate, low-attack type bumper turret in place of standard 300 gpm bumper turret - 4x4 only	\$24,895.00
OSK-56	625/1250 gpm high volume bumper turret in place of standard 300 gpm bumper turret - 6x6 and 8x8 only	\$5,870.00
OSK-57	625/1250 gpm high volume, low attack bumper turret in place of standard 300 gpm bumper turret - 6x6 and 8x8 only	\$24,895.00
OSK-58	Hydro-Chem type direct injection foam/water/dry chemical nozzle option added for any dual rate roof or bumper turret	\$6,361.00
OSK-59	Exterior mounted water and foam tank level lights each side	\$613.00
OSK-60	Compartment mounted water and foam tank level lights each side	\$409.00
OSK-61	One HID light on roof turret	\$518.00
OSK-62	One HID light on bumper turret	\$648.00
OSK-63	One LED spotlight on roof turret	\$692.00
OSK-64	One LED spotlight on bumper turret	\$858.00
OSK-65	Snozzle 50' High Reach Extendable Turret (HRET) with piercing nozzle in place of standard roof turret *(Available on Oshkosh 4x4, 6x6 and 8x8 chassis)	\$222,934.00
OSK-66	Snozzle 65' High Reach Extendable Turret (HRET) with piercing nozzle in place of standard roof turret. *(Only available on Striker 6x6, 8x8 vehicle)	\$265,072.00
OSK-67	One HID light on Snozzle boom end	\$648.00
OSK-68	One LED light on Snozzle boom end	\$858.00
OSK-69	Forward Looking Infrared (FLIR) camera on Snozzle boom end	\$18,542.00
OSK-70	Color video camera on Snozzle boom end	\$2,385.00
OSK-71	Undertruck nozzles	\$2,766.00

OSK-72	Winterization system for vehicle's firefighting compartments	\$12,397.00
OSK-73	460 lb. Halotron clean agent system with fixed hosereel holding 150' of 1" hose and a Halotron nozzle in an upper compartment. Includes agent vessel and propellant system with system indicators in cab.	\$30,099.00
OSK-74	Spare argon cylinder for Halotron I system.	\$1,417.00
OSK-75	10 Kw Onan hydraulic generator.	\$16,311.00
OSK-76	Two 110 volt 750 watt sidelights above windshield (Requires generator)	\$1,165.00
OSK-77	Two 110 volt LED sidelights above windshield (Requires generator)	\$4,043.00
OSK-78	Two 110 volt 1000 watt pneumatic telescoping sidelights on each side - four total (Requires generator)	\$8,472.00
OSK-79	Two 110 volt LED manually telescoping sidelights on each side - four total (Requires generator)	\$12,367.00
OSK-80	Two cab mounted HID worklights - 24VDC	\$965.00
OSK-81	Two cab mounted LED worklights - 24 VDC	\$1,144.00
OSK-82	Two HID worklights per side four total - 24VDC	\$1,635.00
OSK-83	Two LED worklights per side four total - 24VDC	\$2,138.00
OSK-84	Two HID worklights at rear - 24VDC	\$814.00
OSK-85	Two LED worklights at rear - 24VDC	\$1,068.00
OSK-86	110 volt electric cable reel in an upper compartment with 200' of 12/3 SO safety yellow cord. (Requires generator)	\$3,928.00
OSK-87	Two 110 volt duplex (straight/twist) receptacles on each side of truck in a lower compartment. (Requires generator)	\$378.00
OSK-88	Four red LED mini light bars in place of standard red LED beacons on roof	\$4,211.00
OSK-89	Four premium red LED mini light bars in place of standard red LED beacons on roof	\$8,230.00
OSK-90	Lower perimeter red LED warning light system with two front facing, two rear facing and three lights per side in place of standard warning lights	\$714.00
OSK-91	Premium lower perimeter red LED warning light system with two front facing, two rear facing and three lights per side	\$2,086.00
OSK-92	Lower perimeter emergency warning switch to disable lower emergency lights when needed	\$173.00
OSK-93	Eco EFP Foam Testing System (EFP Proportioner)	\$11,097.00
OSK-94	Eco EFP Foam Testing System (Poppet Proportioner)	\$24,412.00
H1	Lubrication data plate	\$50.00
H2	Pintle hook at rear	\$156.00
H4	Aluminum tool box frame mounted	\$1,533.00
H5	Auto lube system for chassis only	\$4,791.00
H7	Coolant heater 1500 watt block type	\$448.00
H8	Scania DC13 500hp drive engine lieu of 350hp	\$10,847.00
H9	Engine oil pan heater (includes both engines, if applicable)	\$182.00
H11	Side access drain valves for engine fluids (includes engine oil, coolant & hydraulic oil on both engines, if applicable)	\$450.00
H15	29,000 LB front axle capacity in lieu of 27,000 LB capacity	\$3,122.00
H16	26,000 LB rear axle capacity with All Steer in lieu of 23,000 LB non AS	\$24,295.00
H17	Shock absorbers for one axle	\$837.00
H18	Spare tire mounted on rim	\$2,495.00
H19	Air conditioning	\$7,996.00
H21	Deluge system for cab	\$1,656.00
H22	5lb fire extinguisher in cab	\$195.00
H23	Radio in cab - AM/FM/Weather/CD	\$517.00
H24	Premium heated hi back seat or driver	\$165.00
H26	Heated wiper blades front	\$1,258.00
H27	Side window wipers unheated	\$769.00
H28	Side window wipers heated	\$1,032.00

H29	Cab mounted defroster fans	\$251.00
H31	Rear view back up camera	\$641.00
H32	Amber plow lights on cab light bar	\$346.00
H33	HID lights - one pair - on cab light bar	\$866.00
BL-DEB	Standard "Dual Engine Blower" snow blower package - 550 hp auxiliary engine	\$337,267.00
BL-SEB	Standard "Single Engine Blower" snow blower package	\$322,124.00
BL-RB	Standard "Road Blower" snow blower package - 550 hp auxiliary engine	\$472,220.00
BL1	670hp blower engine in lieu of standard 550	\$11,027.00
BL2	Aux engine oil pan heater	\$179.00
BL4	Spot cast chute - inc. 29K front and ballast bumper	\$16,157.00
BL5	Truck loading chute - inc. 29K front and ballast bumper	\$37,483.00
BL6	High speed blower system - variable torque ribbon motors (dedicated blower)	\$17,500.00
BL7	Hydraulic relief block	\$1,642.00
BL8	Add 18' broom head for multipurpose snow chassis	\$141,378.00
BR-XF	Standard front mount broom package - 350 hp auxiliary engine	\$308,993.00
BR1	Broom aux engine 500hp lieu of 350hp base	\$3,729.00
BR2	20 foot head in lieu of 18' head base	\$15,057.00
BR3	22 foot head in lieu of 18' head base	\$20,235.00
BR4	50/50 wire poly in lieu of all poly base	\$920.00
BR5	All wire in lieu of all poly base	\$1,125.00
BR8	Broom quick disconnect hoses	\$7,603.00
BR10	Marker lights on broom	\$728.00
BR11	Vibrator on broom head	\$2,637.00
BR12	Snow shed hood 18 foot length	\$8,895.00
BR13	Snow shed hood 20 foot length	\$9,361.00
BR14	Snow shed hood 22 foot length	\$9,743.00
HT1	Single side fuel fill	\$1,453.00
HT4	26,000 LB rear axle capacity with All Steer in lieu of 23,000 LB non AS	\$39,216.00
HT5	Rear tandem 46K LB capacity in lieu of single axle 23K	\$20,373.00
HT6	Rear tandem 46K LB capacity with All Steer in lieu of single axle 23K	\$71,167.00
HT7	500hp drive engine on HT lieu of base standard 350hp drive engine	\$3,729.00
HT8	Air conditioning	\$11,798.00
HT9	Cab deluge	\$2,994.00
HT10	Radio in cab - AM/FM/Weather/CD	\$1,052.00
HT11	Premium heated hi back seat or driver	\$781.00
HT13	Heated wiper blades front	\$1,163.00
HT14	Side window wipers unheated	\$1,177.00
HT15	Side window wipers heated	\$2,105.00
HT16	Cab mounted defroster fans	\$298.00
HT18	Rear view back up camera	\$3,062.00
HT19	Amber plow lights on cab light bar	\$409.00
HT20	HID lights - one pair - on cab light bar	\$1,079.00
HT21	Oshkosh XT towed broom 18' width, all poly, 350 HP aux	\$400,429.00
HT22	500 HP aux engine in lieu of 385 HP base	\$3,812.00
HT23	20 foot head in lieu of 18' head base	\$15,389.00
HT24	22 foot head in lieu of 18' head base	\$20,682.00
HT25	50/50 wire poly lieu of all poly base	\$3,812.00
HT26	All wire in lieu of all poly base	\$3,912.00
HT27	Broom aux engine oil pan heater	\$387.00

HT28	Broom aux engine block heater	\$397.00
HT30	Marker lights on broom	\$745.00
HT31	Vibrator on broom head	\$2,695.00
HT32	Snow shed hood 18 foot length	\$11,543.00
HT33	Snow shed hood 20 foot length	\$12,659.00
HT34	Snow shed hood 22 foot length	\$13,000.00
HT35	20' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$54,892.00
HT36	22' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$56,196.00
HT37	24' flared snow plow with Hand's Free Din Hitch, steel cutting edge	\$57,400.00
P1	6x6 chassis in lieu of 4x4, 51,000 pounds GVWR, 175" CT	\$14,160.00
P2	Engine hp upgrade package	\$4,876.00
P3	Engine brake	\$4,890.00
P4	75 gallon fuel tank lieu of 50 gallon std	\$547.00
P5	5-speed tranmission in lieu of 4-speed	\$519.00
P8	26,000 LB rear axle capacity in lieu of 23,000 base	\$7,223.00
P9	30,000 LB rear axle capacity in lieu of 23,000 base	\$16,605.00
P11	26,000 LB rear axle capacity with All Steer in lieu of 23,000 base	\$31,998.00
P12	46,000 LB tandem rear axle capacity with All Steer in lieu of base	\$33,577.00
P13	Air suspension cab	\$1,304.00
P14	Heated front wipers	\$503.00
P15	Heated front windshield	\$3,557.00
P16	Side window wipers	\$918.00
P17	Power side windows	\$872.00
P18	Air conditioning	\$3,757.00
P19	Radio in cab - AM/FM/Weather/CD	\$999.00
P20	High idle and cruise control	\$683.00
P21	Alternator upgrade	\$1,171.00
P22	Trailer electrical system	\$366.00
P25	10-12 yd dump body (painted steel), 18' flared plow with hands free DIN hitch, central hydraulics (4x4 chassis)	\$100,779.00
P26	V-box 14' Stainless Steel Spreader, twin spinner discs, 18' Flared Plow with hands free DIN hitch, 800 gallow de-icing tanks/pre-wet, central hydraulics, tarp system (Must select 6x6 Chassis above)	\$218,822.00
101	Add Frame liner Commercial	\$1,137.00
102	Add Frame Liner Custom	\$1,902.00
103	Aerial Frame liner	\$4,840.00
104	Galvanized Frame structure	\$3,390.00
105	upgrade to 22,800# front axle	\$2,280.00
106	upgrade to 27,000# rear axle	\$2,295.00
107	upgrade to 31,000# rear	\$5,475.00
108	upgrade rear single axle to 33,500	\$5,124.00
109	TAK-4 Suspension	\$17,788.00
110	T3 Single Suspension	\$13,559.00
111	T3 Tandem Suspension	\$22,356.00
112	Change to Air Ride Suspension, Single	\$3,075.00
113	Change to Air Ride Suspension, Tandem	\$7,182.00
114	Change to Dynalastic Suspension	\$5,066.00
115	4 x 4 Option Commercial	\$27,458.00
116	4 x 4 Option Custom	\$25,768.00
117	Tire Chains - Rear Axle	\$4,580.00

118	Auto Lube, 22 point	\$5,708.00
119	Auto Lube Lincoln 34 Point	\$14,258.00
120	Aluminum Wheels Commercial (Split Rear)	\$1,013.00
121	Credit Custom Aluminum Wheels, front	-\$2,166.00
122	Credit Aluminum Wheels, Rear Single Axle	-\$3,901.00
123	Credit Aluminum Wheels Tandem Axle	-\$4,977.00
124	Spare Steel Wheel and Mounted tire	\$2,488.00
125	Electronic Tire Pressure Management	\$1,548.00
126	Safety Bands (pair)	\$1,104.00
127	Mud Flaps	\$635.00
128	Wheel Chocks and Mounts	\$1,013.00
129	Disc Brakes Front	\$1,307.00
130	Disc Brakes, Rear, Single	\$848.00
131	Disc Brakes, Rear, Tandem (per)	\$1,689.00
132	ABS upgrade to ESC/ABS/ATC	\$6,533.00
133	Collision Mitigation	\$2,904.00
134	Air inlet-outlet	\$759.00
135	Additional Air Tanks	\$404.00
136	12 or 120 volt air compressor	\$1,945.00
137	Brake fittings compression type	\$1,507.00
138	Cummins ISB 360 to ISL 330	\$3,161.00
139	Paccar 330 to 380	\$1,483.00
140	Cummins L9 400hp to 450hp L9	\$2,205.00
141	Cummins L9 450hp to Detroit DD13 470 hp	\$21,166.00
142	Detroit DD13 470 to 525	\$5,020.00
143	Cummins 450 to x12	\$26,163.00
144	Cummins X12 to X15	\$23,314.00
145	Cummins x15 565 to 600 hp	\$7,762.00
146	Emergency Shutdown for Engine, Air w/ reset	\$1,455.00
147	1000 Watt Immersion Heater	\$625.00
148	Exhaust brake to Engine Brake Commercial	\$1,619.00
149	EVS 3000 TO 4000	\$10,130.00
150	EVS 4000 TO 4500 PR	\$11,843.00
151	Aggressive Down shift	\$150.00
152	Telma Retarder, Single Axle	\$15,895.00
153	Exhaust Extension Plymo or Nederman	\$696.00
154	Magnetic Grabber	\$1,041.00
155	Exhaust Diffuser - Care	\$696.00
156	Increase DEF Capacity	\$536.00
157	75 gallon fuel tank	\$1,251.00
158	Steering with controls	\$1,627.00
159	Add Extended Bumper	\$2,448.00
160	Add 26" Extended underslung Bumper	\$5,574.00
161	Bumper tray with cover	\$1,015.00
162	Bumper Sight Rod	\$574.00
163	Bumper compartment for Winch	\$1,817.00
164	Bumper Equipment Tray with cover	\$2,658.00
165	Bumper warning light recess	\$957.00
166	Linex Bumper Coating	\$479.00
167	Mirrors - change to Bus style cab corner	\$3,277.00
168	Mirrors - change to door mount bus style	\$2,247.00
169	Mirrors - change to One-Eleven style	\$2,414.00

170	Raised roof, custom cab	\$2,516.00
171	84" Extended Cab	\$5,724.00
172	Full height Cab doors - Raised Roof	\$2,384.00
173	Stainless Door Jamb Scuffplates	\$756.00
174	Mounting plate on engine tunnel	\$529.00
175	Electric Windows	\$2,195.00
176	Electric Door locks	\$1,215.00
177	110 Volt cab A/C	\$2,414.00
178	Danhard Style A/C	\$6,831.00
179	Safety System	\$10,601.00
180	Driver Safety Seat	\$968.00
181	SCBA Safety Seat	\$960.00
182	Bostrom Officer SCBA	\$1,788.00
183	Bostrom 2 F-Facing Crew	\$2,618.00
184	3 Seat to Crew (Commercial)	\$2,315.00
185	Clean Cab base option	\$1,619.00
186	EMS Compartment in Cab	\$2,797.00
187	EMS Compartment w outside access (each)	\$2,968.00
188	Upgrade SCBA Bracket to Hands Free	\$804.00
189	Cab step 2" larger mid and bottom	\$1,233.00
190	Handrail with LED Lighting Cab	\$604.00
191	Full height Cab doors - Raised Roof	\$2,009.00
192	Cab Windows Factory Tint	\$528.00
193	Comercial step upgrade package	\$1,383.00
194	Upgrade Freightliner M2-106 to M2-112	\$43,296.00
195	Upgrade International 2 door to 4 door	\$11,510.00
196	Upgrade to extended cab	\$4,825.00
197	Upgrade to Freightliner 2 door to 4 door	\$8,584.00
198	Upgrade Saber to Enforcer	\$9,422.00
199	Upgrade Enforcer to Impel	\$2,500.00
200	Upgrade Enforcer to Arrow	\$44,981.00
201	Upgrade Enforcer to Velocity	\$48,801.00
202	Upgrade Arrow to Velocity	\$13,689.00
203	Upgrade Arrow to Quantum	\$18,433.00
204	Upgrade Arrow to Dash CF	\$7,668.00
205	Velocity to Quantum	\$14,612.00
206	Upgrade Velocity to Dash CF	\$3,847.00
207	Remote Control Spot Lights	\$1,367.00
208	Spare 12 volt power (each)	\$146.00
209	Radio with Weatherband	\$1,122.00
210	Additional MUX Screen	\$3,000.00
211	GPS Navigation and preplan capable	\$816.00
212	install Customer MDT with power wiring	\$1,091.00
213	Install Customer Antenna	\$63.00
214	Install Customer GPS	\$399.00
215	install Customer radio	\$993.00
216	install customer Knox	\$190.00
217	install customer drug vault	\$458.00
218	Medi-Kool mk18	\$5,724.00
219	2 Person Command Center Configuration	\$14,190.00
220	Roll Alert System	\$4,093.00
221	Camera System Rear only	\$1,140.00

222	Camera System, Sides and rear to mux	\$4,228.00
223	Camera System, Sides and rear to monitor	\$2,246.00
224	Camera System with DVR	\$3,206.00
225	Camera System interior cab and exterior body	\$8,347.00
226	Camera System Fotokite modem portable	\$45,584.00
227	Camera System Fotokite Compartment mounted	\$48,645.00
227m	Camera System Fotokite w modem Compartment mounted	\$50,800.00
228	Camera body to weatherprof panel monitor	\$1,537.00
229	Camera Stabilizer without lazer	\$4,336.00
230	Camera, Stabilizer Placement with Command Zone Display with Laser	\$6,177.00
231	Intercom System (BASIC)	\$2,624.00
232	Intercom System (up to 6 position)	\$3,379.00
233	Intercom Wireless System	\$5,323.00
234	Intercom Headset - Wired	\$558.00
235	Intercom Headset - wireless	\$1,069.00
236	Idle Reduction Technology	\$4,227.00
237	IOTA Charger	\$1,242.00
238	Blue Sea 40 amp	\$1,795.00
239	Dual Pro Charger	\$909.00
240	Kussmaul Charger	\$1,915.00
241	Kussmaul Pump plus	\$2,791.00
242	Progressive p2180 (per unit)	\$1,893.00
243	Newmar Charger	\$1,633.00
244	Auto-eject 15 amp	\$541.00
245	Auto-eject 20 amp	\$567.00
246	Auto-eject 30 amp	\$1,283.00
247	Transfer switch	\$658.00
248	Sub Feed Box	\$225.00
249	Batteries 6 total	\$1,114.00
250	320 amp to 360	\$2,171.00
251	430 Amp Niehoff alternator	\$4,796.00
252	430 amp Delco alternator	\$4,101.00
253	LED cab lighting	\$1,020.00
254	LED body perimeter additional	\$2,284.00
255	LED Headlights	\$2,081.00
256	12 volt LED Scene - A	\$1,371.00
257	12 volt LED Scene - B	\$1,564.00
258	12 volt LED Flood Brow light A	\$2,102.00
259	12 volt LED Flood Brow light B	\$3,428.00
260	12 volt LED Hi-Viz Brow Full single	\$5,467.00
261	12 volt LED Hi-Viz Brow Double Lights	\$3,099.00
262	12 volt-Hi Viz LED (per light)	\$2,292.00
263	12 volt LED Flood Recessed or surface (per light) A	\$1,306.00
264	12 volt LED Flood Recessed or surface (per light) B	\$1,942.00
265	12 volt LED Flood Pole light (per light)	\$2,080.00
266	Tail lighting LED Upgrade	\$1,548.00
267	Tail Board Upgrade Package	\$1,903.00
268	Tanker Hose bed Package	\$4,859.00
269	Tanker folding tank storage manual	\$3,717.00
270	Tanker folding tank storage electric	\$10,232.00
271	Upgrade Tanker Step Package	\$1,861.00

272	Flush back body option	\$1,284.00
273	Rear step package with wrap bumper	\$2,825.00
274	Add Vinyl Cover for Crosslay Hose Bed	\$492.00
275	Hose Bed Cover, Aluminum	\$6,137.00
276	Hose Bed Cover, Vinyl	\$690.00
277	Hose Bed Cover, Roll-up	\$8,453.00
278	Additional Hosebed Divider	\$559.00
279	NY Hose Bed	\$3,013.00
280	PUC Body Configuration	\$13,629.00
281	Aerial body full depth per side	\$6,395.00
282	Pumper Body to Galvaneal	-\$2,779.00
283	Pumper Body to Stainless	\$11,250.00
284	Aerial Aluminum to stainless body	\$9,795.00
285	Long Pumper body	\$1,859.00
286	Compartment door locks (each)	\$83.00
287	PUC Flip-out steps	\$1,003.00
288	Catwalk-Hatch Compartment, Each	\$3,764.00
289	Underbody Compartments, each	\$2,788.00
290	Add Right High Side Compartments	\$4,107.00
291	Add Electric / Hydraulic Ladder Rack	\$11,294.00
292	Full Height - Depth Compartments	\$6,073.00
293	Ladder Storage next to tank	\$5,077.00
294	Winch 12,000#	\$6,009.00
295	Winch 9000#	\$3,396.00
296	LED Compartment Lighting base upgrade lighting	\$1,974.00
297	LED Compartment Lighting premium	\$3,375.00
298	Increase Booster Tank to: 1000 Gallons	\$993.00
299	Increase Booster Tank to: 1250 Gallons	\$4,174.00
300	Increase Booster Tank to: 1500 Gallons	\$6,920.00
301	2.5" Direct Tank Fill to Main Intake	\$4,740.00
302	Rear Direct tank fill electric	\$5,352.00
303	Direct Tank Fill Manual	\$1,411.00
304	manual rear dump with 90	\$4,564.00
305	air-electric rear dump	\$3,939.00
306	air-electric side dump with extender (each)	\$8,836.00
307	trough - hard suction (each)	\$1,736.00
308	hard suction hose (each)	\$1,297.00
309	Mate Flex in Enclosed Compartments Per Shelf	\$134.00
310	Adjustable Compartment shelves	\$210.00
311	Slide-out tool board	\$1,302.00
312	Swing-out tool board	\$1,932.00
313	Slide-out tool board in tray	\$1,269.00
314	Slide-out floor tray	\$883.00
315	Toolboard in Slide-out tray	\$1,285.00
316	Adjustable slide-out tray	\$760.00
317	Tilt-out adjustable tray	\$738.00
318	PacTrac in compartment	\$985.00
319	PegBoard in compartment	\$584.00
320	Vertical Partition	\$280.00
321	Horizontal Partition	\$311.00
322	3 Drawer C-Tech 24 wide	\$989.00
323	3 Drawer C-Tech 36 wide	\$2,118.00

324	4 Drawer C-Tech 48 wide	\$3,082.00
325	SCBA Cylinder storage in fender panel single (each)	\$715.00
326	SCBA Cylinder storage in fender panel double (each)	\$943.00
327	SCBA Cylinder storage in fender panel triple (each)	\$1,006.00
328	SCBA Storage in fender panel	\$1,166.00
329	Extinguisher Compartment	\$702.00
330	SCBA Storage Bins (each)	\$170.00
331	Add Dura Surf (per each)	\$26.00
332	Electric Cord Reel Compartment	\$577.00
333	750 GPM Pump to 1000 GPM Pump	\$2,314.00
334	Increase Pump from 1250 to 1500 gpm	\$2,812.00
335	Increase Pump from 1500 to 1750 gpm	\$3,577.00
336	Increase Pump from 1500 to 2000 gpm	\$4,179.00
337	add pump anodes (pair)	\$380.00
338	Add Mechanical Seal to Pump	\$926.00
339	Flow Meters, each	\$1,954.00
340	MIV Valves Electric with manual back-up (each)	\$7,522.00
341	Manual Ball Intake Valve	\$2,797.00
342	add 2.5" suction inlet	\$1,320.00
343	1.5" discharge front bumper	\$2,368.00
344	2.5" Discharge front bumper	\$3,274.00
345	Preconnect 1.5" with 2.0" plumbing - Speed or cross	\$2,542.00
346	Preconnect 2.5 or 3" plumbing - Speed or Cross	\$3,603.00
347	Add Front Suction Inlet 4-6"	\$7,603.00
348	Add Rear Suction Inlet	\$5,669.00
349	1.5" discharge	\$1,527.00
350	2.5" Discharge	\$1,896.00
351	3" Discharge	\$2,805.00
352	Add Large Diameter Rear Discharge	\$5,894.00
353	Add Large Diameter Side Discharge	\$6,015.00
354	add electric valve deluge plumbing	\$5,510.00
355	Dual voltage water heater with tanker	\$4,770.00
356	Extenda-gun 12"	\$4,279.00
357	Extenda-gun 18"	\$4,477.00
358	Electric Extenda Gun	\$6,671.00
359	Electric Deluge riser	\$7,405.00
360	Electric Deluge with foam by-pass	\$10,008.00
361	Wireless remote monitor	\$12,364.00
362	Provide (2) Speedlays IPO Crosslay with Rollers	\$5,905.00
363	Provide (2) Speedlays w/ Tray's IPO Crosslay with Rollers	\$8,134.00
364	Add Hinged-Type Aluminum Cover to Crosslay (per set of 2)	\$730.00
365	Add 1" Cargo Netting to cross/speedlay (2)	\$442.00
366	Crosslay roll-up door enclosure	\$2,814.00
367	Poly Tray additional	\$575.00
368	Hose Reel, Rear Compartment Mounted w/ 150' Hose	\$3,804.00
369	Hose Reel, above pump w/ 150' Hose	\$3,505.00
370	Hose Reel, Under Cab w/ 100' Hose	\$9,584.00
371	Akron 3096-95 gpm Single Agent System	\$6,114.00
372	Akron 3096-95 gpm Dual Agent System	\$7,616.00
373	Elkhart 240-95 Single Agent	\$6,465.00
374	Elkhart 240-95 Dual Agent	\$7,969.00
375	Foam Pro 1600 Single Agent to (3) Discharges	\$9,716.00

376	Foam Pro 2001 Dual Agent to (3) Discharges	\$1,896.00
377	Foam Pro 2002 Dual Agent to (3) Discharges	\$21,985.00
378	Pierce Husky 3, Single Agent (3) discharges	\$10,732.00
379	Pierce Husky 12 Single Agent (5) discharge	\$19,201.00
380	Pierce Husky 12 Dual Agent (5) Discharge	\$22,834.00
381	Pierce Husky 300 Industrial Foam System	\$112,135.00
382	Foam Cell 20 Gallons	\$1,644.00
383	Foam Cell 40 Gallons	\$2,050.00
384	Foam Cell 50 Gallons	\$2,732.00
385	Foam system by-pass to deluge or aerial	\$4,821.00
386	Foam Cell 300 Gallons	\$3,670.00
387	Pierce Hercules CAFS to (5) Discharges	\$31,888.00
388	Pump Panel Enclosure	\$3,930.00
389	Cold Climate Pump Package	\$9,734.00
390	Airhorn at activation pump panel	\$193.00
391	Add Top Pump Control	\$8,844.00
392	Tank Level LED Group	\$1,434.00
393	Tank level LED (Individual lights)	\$2,977.00
394	LED Backlite Gauges each	\$108.00
395	D-TEC	\$1,208.00
396	Will-Burt 7-30 Mast with Nycoil	\$13,498.00
397	Will-Burt 7-42 Mast with Nycoil	\$19,577.00
398	4 Channel Flash drive DVR	\$2,720.00
399	120 volt Body A/C, roof mounted with heat	\$2,531.00
400	2 person Command Center	\$14,605.00
401	Fire Pump 250 gpm	\$32,442.00
402	Haz-Mat Upgrade	\$23,190.00
403	LED Emergency Light Package	\$13,071.00
404	Upgrade to HDR Body	\$47,564.00
405	HDR Stainless Body	\$11,299.00
406	Water Tank - Rescue	\$11,848.00
407	Communications Center, 2 Desk with Conference	\$265,353.00
408	LED Interior Lighting	\$4,761.00
409	Tool Drawer(each)	\$1,302.00
410	Airbag Rack (each)	\$195.00
411	Rack, Plywood (10)	\$1,105.00
412	120 v Refrigerator 23 cu ft.	\$2,803.00
413	Vertical Exhaust in Compartment	\$799.00
414	Slide-out Module up to 132" each	\$19,259.00
415	Leveling System	\$10,242.00
416	Awning	\$3,940.00
417	Electric Awning	\$8,135.00
418	Quic-Ladder Access Ladder	\$2,239.00
419	Air Horns with 2 foot switches	\$170.00
420	Additional Speaker	\$676.00
421	Howler	\$1,179.00
422	Q2B Siren	\$4,322.00
423	Chrome Bell with manual pull string	\$1,785.00
424	GTT Emitter Roof/remote mounted	\$5,211.00
425	Roto Ray Emergency Light	\$2,881.00
426	Mini Lightbar over crew cab Doors	\$4,459.00
427	3 Mini LED Light over each side cab door	\$1,396.00

428	Traffic Directing light bar "A"	\$1,610.00
429	Traffic Directing light bar "B"	\$2,544.00
430	Dual Traffic Advisor Lights	\$2,552.00
431	Inverter	\$3,178.00
432	Diesel 7.5 KW	\$15,966.00
433	Diesel 10 KW Generator w/ Monitor Package	\$19,748.00
434	Diesel 20 KW water cooled	\$24,767.00
435	Gas EM400 3.5	\$6,305.00
436	Gas 5.5 KW	\$7,922.00
437	Hydraulic 3.6 kw	\$13,023.00
438	Hydraulic 6 KW	\$19,883.00
439	Hydraulic 8 KW	\$22,671.00
440	Hydraulic 10 KW	\$23,486.00
441	Hydraulic 15 KW	\$36,202.00
442	Hydraulic 30 KW	\$45,477.00
443	PTO Drive 15 KW	\$18,256.00
444	PTO Drive 25 kw	\$19,688.00
445	PTO Drive 40 Kw	\$23,918.00
446	500 Watt Tripod Flood Light	\$2,152.00
447	750 Watt Flood Light w/ pole	\$2,279.00
448	1000 Watt Flood Light w/pole	\$2,376.00
449	1500 Watt Flood Light - recessed	\$2,378.00
450	120 volt LED visor light	\$1,802.00
451	750 Watt Visor light	\$1,877.00
452	120 volt 150 watt LED w/ pole	\$2,742.00
453	120 volt 150 watt LED recessed/flush mount	\$2,215.00
454	120 volt 150 watt LED Pedestal	\$2,848.00
455	Light Tower 9000 watt	\$24,935.00
456	Light Tower 6000 watt	\$21,881.00
457	Light Tower 3000 Watt	\$18,215.00
458	Light Tower 12 volt 4 - Lights	\$14,100.00
459	Electric Cord Reel with 200' of 10/3	\$2,859.00
460	Electric Cord Reel with 200' of 10/3 in Front Bumper	\$3,215.00
461	Electrical Receptacle duplex (per each) 15 or 20 amp	\$314.00
462	Electrical Receptacle 30 amp (per each)	\$384.00
463	Cascade - 6 - 6000 PSI UN	\$16,553.00
464	Breathing air compressor	\$81,424.00
465	Breathing air booster pump	\$2,830.00
466	Breathing air fill-frag station	\$9,957.00
467	High Pressure Breathing Air Reel (200' hose)	\$3,478.00
468	Tool air reel with 150' hose	\$2,744.00
469	Hydraulic Reel, 100' x .25" Hose	\$6,509.00
470	Hydraulics package (2 reels with 100' hoses and 2 connector 12' hoses	\$15,069.00
471	Hannay reel with 100' Core Tech hose	\$8,506.00
472	Rescue Bulkhead fittings	\$2,007.00
473	AC Power to Tip	\$7,330.00
474	Full Depth & Full Height Compartments	\$6,800.00
475	Quick lock waterway	\$5,562.00
476	Provide Breathing Air to Tip	\$14,044.00
477	Add PUC pump, tank and crosslay to Tiller	\$97,386.00
478	Provide Super Duty 100' Aerial Ladder, In Addition to Base Price	\$108,790.00
479	Pumper Style Body for Single Axle 75'	-\$10,144.00

480	Remote Tip Controls, Ladder	\$6,715.00
481	Aerial Control Wireless MUX Aerials	\$10,133.00
482	Lyfe Brackets 3 in 1	\$1,820.00
483	LED Emergency Light Package Upgrade	\$9,502.00
484	Two (2) Monitors with Platforms	\$23,239.00
485	Single VUM Monitor Valve	\$2,449.00
486	2- VUM Manual Monitor Valves	\$5,571.00
487	Stokes Brackets behind Boom	\$903.00
488	Enclosed Stokes Box	\$2,028.00
489	Collision Avoidance	\$7,776.00
490	Aerial warning lighting A	\$4,804.00
491	Aerial Warning Lighting B	\$5,143.00
492	LED Rung Lighting	\$4,671.00
493	High Flow Waterway	\$8,447.00
494	12 Volt LED Tracking/tip lights	\$3,391.00
495	Two-tone Cab paint	\$2,341.00
496	Undercoating, Cab & Body, Ziebart	\$1,227.00
497	E-Coat Under body Chassis	\$1,912.00
498	Corrosion Prevention Treatment, ECK, Dissimilar Metal	\$2,172.00
499	Painted Grill	\$1,306.00
500	Pump Panel Drawing	\$1,316.00
501	50' Snozzle - P-50	\$221,886.00
502	65' Snozzle HS-2 65'	\$243,618.00
503	Graphics upgrade 1	\$1,973.00
504	Graphics Upgrade 2	\$2,960.00
505	Graphics Upgrade 3	\$3,948.00
506	Graphics Upgraded 4	\$4,934.00
507	Extended Chassis Warranty (per year)	\$5,016.00
508	Extended Body Warranty (per year)	\$6,499.00
509	Emergency Equipment Upfitting	
510	Responder Lighting Package	\$3,773.00
511	Squad Package	\$6,532.00
512	Commander Package	\$8,859.00
513	Arrestor Package	\$11,036.00
514	Director Package	\$13,619.00
515	Lieutenant Package	\$20,294.00
516	Chief's Package	\$25,333.00
517	Executive Package	\$25,714.00
518	Whelen Lighting and parts (Red 19 or PL 19.1)	43% Off List
519	Havis (HS 6/19)	32% Off List
520	ProGard (ProGard 2019 Catalog)	25% Off list
521	Minor P. M.	\$1,271.00
522	Major P. M.	\$2,084.00
523	Major P. M. w/ Transend	\$2,511.00
524	Aerial Maintenance	\$1,861.00
525	ARFF Unit Annual Inspection	\$1,804.00
526	ARFF Minor Service	\$2,621.00
527	ARFF Major Service	\$3,670.00
528	HRET Upgrade - Attackmaster 3	\$20,446.00
529	HRET Upgrade - Attackmaster 4	\$26,737.00
530	Foam System Maintenance Husky or similar (in shop)	\$1,358.00
531	Foam Testing ARFF	\$813.00

532	CAFS Service	\$1,358.00
533	Annual Pump Test (in shop)	\$446.00
534	Quantum Step Maintenance	\$393.00
535	Wheels off brake inspection - Single	\$315.00
536	Wheels off brake inspection - Tandem	\$524.00
537	A/C System Service	\$917.00
538	Power steering Flush	\$624.00
539	TAK4 Inspection	\$603.00
540	Husky/CAFS/Foam Service	\$1,504.00
541	Aerial Testing	\$1,835.00
542	Labor Rate, per hour	\$139.00
543	Each 150' Lengths of Utility Rope	\$222.00
544	150' life safety rope, at least 1/2" (12 mm) diameter meeting NFPA	\$289.00
545	150' Life Safety Rope, at least 5/8" (16 mm) diameter meeting NFPA	\$318.00
546	2.5 Gallon Water Extinguisher	\$183.00
547	Hose 1.75" x 50 Double Jacket with 1.50" couplings	\$230.00
548	Hose 2.50" x 50' Double Jacket with 2.50" Couplings	\$273.00
549	Hose 3.0" x 50' Double Jacket with 2.5" Couplings	\$340.00
550	4.00" x 100' Rubber Lined Hose	\$725.00
551	5.00" x 100' Rubber Lined Hose	\$798.00
552	Additional 10' Folding Ladder	\$579.00
553	Additional 14' Roof with Hooks	\$707.00
554	Air Bags - 56 Ton System	\$8,454.00
555	Thermal Imager Camera with charger	\$15,573.00
556	Combination Spanner Wrench with Bracket	\$183.00
557	Complete SCBA	\$9,961.00
558	Deck Gun with Tips, Manual	\$4,894.00
559	Deck Gun with Tips, Electric	\$9,567.00
560	1.5" Nozzle with shut-off	\$1,587.00
561	2.5" Nozzle with shut-off	\$1,766.00
562	Portable Monitor 2.5" Inlet	\$6,264.00
563	Each Approved Portable Fire Extinguisher: ABC	\$220.00
564	Each Approved Portable Fire Extinguisher: CO2	\$283.00
565	Each Hydrant Wrench Set	\$220.00
566	Each Portable Hand Light w/ Mounting Brackets	\$145.00
567	Each Scoop Shovel	\$105.00
568	First Aid Kit, 24 units, Fire Department Assortment	\$318.00
569	Little Giant Ladder	\$670.00
570	One Assorted Tool Box	\$556.00
571	One Hose Roller	\$406.00
572	One Pair of Bolt Cutters 24"	\$273.00
573	Cut-off Circular Saw	\$2,669.00
574	Chain Saw	\$2,268.00
575	Piston Intake	\$2,097.00
576	Rescue Tools - Power Unit, (2) Rams, Cutter, Spreader, Hoses	\$41,940.00
577	Silent Witness	\$1,446.00
578	Spare SCBA Bottles	\$1,573.00
579	Thermal Imager Camera System	\$35,596.00
580	Hose Clamp	\$651.00
581	Axe, Pick	\$145.00
582	Axe, Flat	\$139.00
583	PPV Fan, Gas	\$2,726.00

584	PPV Electric Fan	\$5,452.00
585	Poly mounts for tools, Rescue Equipment	\$1,296.00
586	380 Camera 8003040	\$9,832.00
587	380 Camera 8003030	\$11,631.00
588	Poly Console Box	\$1,944.00
589	Small poly console box	\$1,296.00
590	Pumper Custom Poly Mount Package	\$7,452.00
591	Aerial Custom Poly Mount Package	\$9,936.00
592	Rescue Custom Poly Mount Package	\$13,338.00
593	Engine Tunnel Custom Poly Console	\$1,728.00



Option List

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12/11/2021

Customer: Fluvanna County, VA
Representative Sandridge, Kevin
Organization: Atlantic Emergency Solutions, Inc
Requirements Manager:
Description: Fork Union 161" Body Pumper
Body: Pumper, Long, Aluminum, 2nd Gen
Chassis: Enforcer Chassis

Bid Number: 673
Job Number:
Number of Units: 1
Bid Date: 08/30/2019
Stock Number:
Price Level: 40 (Current: 40)
Lane:

Line	Option	Type	Option Description	Qty
1	0766611		Boiler Plates, Pumper	1
			Fire Department/Customer - Fork Union Volunteer Fire Company	
			Operating/In conjunction W-Service Center - Operating	
			Miles - 50 Miles	
			Number of Fire Dept/Municipalities - 20	
			Bidder/Sales Organization - Atlantic Emergency Solutions	
			Delivery - Delivery representative	
			Dealership/Sales Organization, Service - Atlantic Emergency Solutions	
2	0661794		Single Source Compliance	1
3	0584456		Manufacture Location, Appleton, Wisconsin	1
4	0584452		RFP Location: Appleton, Wisconsin	1
5	0588609		Vehicle Destination, US	1
6	0610784		Comply NFPA 1901 Changes Effective Jan 1, 2016, With Exceptions	1
7	0533347		Pumper/Pumper with Aerial Device Fire Apparatus	1
8	0588611		Vehicle Certification, Pumper	1
9	0661778		Agency, Apparatus Certification, Pumper/Tanker, U.L.	1
10	0536644		Customer Service Website	1
11	0620362		Consortium, HGAC	1
12	0537375		Unit of Measure, US Gallons	1
13	0529326		Bid Bond, 10%, Pierce Built Chassis	1
14	0540326		Performance Bond, Not Requested	1
15	0000007		Approval Drawing	1
16	0002928		Electrical Diagrams	1
17	0649754		Enforcer Chassis	1
18	0000110		Wheelbase	1
			Wheelbase - 197"	
19	0655642		GVW Rating, Special Requirement	1
			GVW rating - 50,000 lbs	
20	0649713		Frame Rails, 10.25" x 3.50" x .375", Saber FR/Enf	1
21	0648354		Frame Liner, Internal "C", 9.38" x 3.13" x .25", Saber FR/Enf, 26" Qval	1
22	0629940		Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Enforcer	1
23	0010427		Suspension, Front TAK-4, 22,800 lb, Qtm/AXT/Imp/Vel/DCF/Enf	1
24	0087572		Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	1
25	0000322		Oil Seals, Front Axle	1
26	0899438		Tires, Front, Goodyear, Armor MAX MSA, 425/65R22.50, 20 ply	1
27	0052887		Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Dura-Bright, Hub Pilot	1
28	0640710		Axle, Rear, Dana S30-190, 31,000 lb Saber/Enforcer	1
29	0544250		Top Speed of Vehicle, 65 MPH	1
30	0635109		Suspen, Rear, Single Slipper Spring, 31,000 lb, Saber FR/Enforcer	1
31	0000485		Oil Seals, Rear Axle	1
32	0798161		Tires, Rear, Goodyear, G751 MSA, 315/80R22.50, LRL, Single, Fire Service Speed R	1
33	0654730		Wheels, Rear, Alcoa-Accuride, 22.50" x 9.00", Alum-Stl, Dura-Bright, Hub Pt, Single	1
34	0568081		Tire Balancing, Counteract Beads	1
35	0620570		Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Single Axle	1
			Qty, Tire Pressure Ind - 6	
36	0003245		Axle Hub Covers w/center hole, S/S, Front Axle	1
37	0001960		Axle Hub Covers, Rear, S/S, High Hat (Pair)	1
38	0002045		Mud Flap, Front and Rear, Pierce Logo	1
39	0759842		Chains, Rud automatic tire, 6 strand	1
40	0759594		Switch, Locking Rocker, Tire Chains w/Separate Red Ind. Light, MUX	1

Line	Option	Type	Option Description	Qty
41	0544802		Chocks, Wheel, SAC-44-E, Folding	1
			Qty, Pair - 01	
42	0544806		Mounting Brackets, Chocks, SAC-44-E, Folding, Horizontal	1
			Qty, Pair - 01	
			Location, Wheel Chocks - Left Side Rear Tire, Forward and Rearward	
43	0593760		ESC/ABS/ATC Wabco Brake System, Single Rear Axle, 2010	1
44	0030185		Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	1
45	0581433		Brakes, Bendix, Cam, Rear, 16.50 x 7.00"	1
46	0020784		Air Compressor, Brake, Cummins/Wabco 18.7 CFM	1
47	0610527		Brake Reservoirs, 5,376 Cubic Inch Min Capacity, Polished Alum,Saber FR/Enforcer	1
48	0644228		Air Dryer, Wabco System Saver 1200 IWT, Heated, 10" Frame, Standen, SFR/Enf	1
49	0000790		Brake Lines, Nylon	1
50	0000858		Inlet/Outlet, Air, w/Disconnect Fitting	1
			Location, Air Coupling(s) - a) DS Step Well, Forward	
			Qty, Air Coupling (s) - 1	
51	0003155		Compressor, Air, Kussmaul 091-9B-1, 120V Brake System	1
			Location - behind the driver's seat	
52	0736437		Engine, Cummins L9, 450 hp, 1250 lb-ft, W/OBD, EPA 2021, Saber FR/Enforcer	1
53	0001244		High Idle w/Electronic Engine, Custom	1
54	0687994		Engine Brake, Jacobs Compression Brake, Cummins Engine	1
			Switch, Engine Brake - e) ISC/ISM/ISL9/ISX Hi Med Lo	
55	0644227		Clutch, Fan, Air Actuated, Saber FR/Enforcer	1
56	0640477		Air Intake, Metal Screen, Saber FR/Enforcer	1
57	0794761		Exhaust System, 4", 2017 L9 Engine, Horizontal, Right Side	1
58	0788765		Radiator, Saber FR/Enforcer	1
59	0001090		Cooling Hoses, Rubber	1
60	0051125		Fuel Tank, 75 Gallon, Left Side Fill, Qtm/AXT/Vel/Imp/DCF/SFR/Enf	1
			Finish - Painted, Chassis Frame Color	
61	0001129		Lines, Fuel	1
62	0582182		DEF Tank, 4.5 Gallon, DS Fill, Rear of Rear Axle, Common Door	1
			Door, Material & Finish, DEF Tank - Polished Stainless	
63	0723716		Fuel Priming Pump, Electronic, Automatic, Cummins, No Swt Req'd	1
64	0582243		Shutoff Valves, Fuel Line @ Primary Filter, Cummins	1
65	0699437		Cooler, Chassis Fuel, Not Req'd.	1
66	0690880		No Selection Required From This Category	1
67	0642572		Trans, Allison 5th Gen, 3000 EVS P, w/Prognostics, Imp/Vel/DCF/SFR/Enf	1
68	0625329		Transmission, Shifter, 5-Spd, Push Button, 3000 EVS	1
69	0684459		Transmission Oil Cooler, Modine, External	1
70	0630574		Informational, Transmission Program, Shift To Neutral w/Prk Brk	1
71	0001370		Driveline, Spicer 1710	1
72	0669988		Steering, Sheppard M110 w/Tilt, TAK-4, Eaton Pump, w/Cooler	1
73	0605356		Steering Wheel, 4 Spoke without Controls, Saber FR/Enforcer	1
74	0690274		Logo/Emblem, on Dash	1
			Text, Row (1) One - Fork Union	
			Text, Row (2) Two - Volunteer Fire Co.	
			Text, Row (3) Three - *	
75	0096752		Winch, Warn, 9,000 lb. XD9000i, Portable Receiver, Synthetic, Polished Fairlead	1
76	0012246		Bumper, 22" Extended, Saber FR/Enforcer	1
77	0637795		Tray, (1) Hose Left Side of Bumper, 16" Deep, 13" Below & 3" Above	1
			Grating, Bumper extension - Grating, Rubber	
			Capacity, Bumper Tray - 20) 125' of 1.75"	
78	0606368		Hose Restraint, Bumper Tray, 2.00" Strap, Fasteners, Each	1
			Qty, - 01	
			Type of fastener - seat belt buckle	
79	0614646		No Lift & Tow Package, Imp/Vel, AXT, SFR/Enf	1
80	0511353		Tow Eyes, S/S, Below Deck, Extd To Hit Ground Prior to Bumper	1
81	0048682		Bumper, Center Section Hinged, w/Winch Receiver, w/Tray	1
82	0648332		Cab, Enforcer, 7010	1
83	0647919		Engine Tunnel, ISL, Saber FR/Enforcer	1
84	0633594		Rear Wall, Interior, Adjustable Seating	1

Line	Option	Type	Option Description	Qty
85	0632103		Rear Wall, Exterior, Cab, Saber FR/Enforcer	1
			Material, Exterior Rear Wall - Aluminum Treadplate	
86	0639727		Cab Lift, Elec/Hyd, Manual Override, Saber FR/Enforcer	1
87	0695930		Grille, Bright Finished, Front of Cab, Dash CF/Enforcer	1
88	0002224		Scuffplates, S/S At Cab Door Jambs, 4-Door Cab	1
			Material Trim/Scuffplate - c) S/S, Polished	
89	0647932		Not Required, Trim, S/S Band, Across Cab Face, AXT/Dash CF/Saber/Enforcer	1
90	0015440		No Chrome Molding, On side of cab	1
91	0521669		Mirrors, Retractable, West Coast Style, Htd/Rmt, w/Htd/Rmt Convex	1
92	0648170		Door, Half-Height, Saber FR/Enforcer 4-Door Cab, Raised Roof	1
			Key Model, Cab Doors - 751	
			Cab, Exterior Door Handle, Finish - 4-Door, Chrome/Black	
93	0655543		Door Panel, Brushed Stainless Steel, Saber/Enforcer 4-Door Cab	1
94	0630636		Controls, Electric Roll-Up Windows, 4dr, 4 Driver Controls, Saber FR/Enforcer	1
95	0638310		Steps, 4-Door Cab, Saber FR/Enforcer	1
			Step Well Material - Aluminum Treadplate	
96	0770194		Handrail, Exterior, Knurled, Alum, 4-Door Cab	1
97	0892638		Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 6lts	1
			Color, Trim - Chrome Housing	
98	0583698		Fenders, S/S on cab, Extra Wide, Saber/Enf	1
99	0637984		Window, Side of C/C, Fixed, Saber FR/Enforcer	1
100	0012090		Not Required, Windows, Front/Side of raised roof	1
101	0779033		Not Required, Windows Rear of Crew Cab, Saber FR/Enforcer	1
102	0722796		Dash, Poly, Saber FR/Enforcer	1
103	0750824		Cab Interior, Vinyl Headliner, Saber FR/Enforcer, CARE	1
			Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Silver/Gray	
			Engine Tunnel Cover - Dark Silver Gray Endure Vinyl	
			Cab Interior Rear Wall Material - Painted Aluminum	
104	0753903		Cab Interior, Paint Color, Saber FR/Enforcer	1
			Color, Cab Interior Paint - i) fire smoke gray	
105	0052100		Floor, Rubber Padded, Cab & Crew Cab, Saber/Enforcer	1
106	0722696		HVAC, Enforcer, CARE	1
			HVAC System, Filter Access - Removable Panel	
			Auxiliary Cab Heater - Both	
			HVAC System, Control Loc. - Panel Position #12	
			Plenum Cover Material - Formed Plastic	
107	0639675		Sun Visor, Smoked Lexan, AXT, Imp/Vel, Saber FR/Enforcer	1
			Sun Visor Retention - Thumb Latch	
108	0634328		Grab Handles, Driver and Officer Door Posts, Saber FR/Enforcer	1
109	0002526		Light, Engine Compmt, All Custom Chassis	1
110	0631830		Fluid Check Access, Saber FR/Enforcer, Arrow XT	1
111	0583042		Side Roll and Frontal Impact Protection	1
112	0622617		Seating Capacity, 6 Seats	1
113	0636955		Seat, Driver, Pierce PSV, Air Ride, High Back, Safety, Saber FR/Enforcer	1
114	0632926		Seat, Officer, Pierce PSV, Air Ride, SCBA, Safety, Saber FR/Enforcer	1
115	0002517		Not Required, Radio Compartment	1
116	0635973		Seat, Rear Facing C/C, DS Outboard, Pierce PSV, SCBA, Safety, Saber FR/Enforcer	1
117	0102783		Not Required, Seat, Rr Facing C/C, Center	1
118	0635969		Seat, Rear Facing C/C, PS Outboard, Pierce PSV, SCBA, Safety, Saber FR/Enforcer	1
119	0781672		Cabinet, Forward Facing, LS, 22 W x 50 H x 16.25 D, Roll, SFR/Enf	1
			Material Finish, Shelf - Painted - Cab Interior	
			Shelf/Tray, Cabinet - (2) Shelves, Adjustable 1.25" Flange Down	
			Door, Cab Interior Cabinet - Rollup, Amdor, White, Locking #751	
			Light, Tall Cabinet - Amdor, Interior, White, Right Side	
			Louvers, Cabinet - 0-No Louvers	
120	0635957		Seat, Forward Facing C/C, Center, (2) Pierce PSV, SCBA, Safety, Saber FR/Enf	1
121	0781307		Cabinet, Forward Facing, RS, 22 W x 50 H x 16.25 D, Roll, SFR/Enf	1
			Material Finish, Shelf - Painted - Cab Interior	
			Shelf/Tray, Cabinet - (2) Shelves, Adjustable, 1.25" Up-Turned Lip	
			Door, Cab Interior Cabinet - Rollup, Amdor, White, Locking #751	
			Light, Tall Cabinet - Amdor, Interior, White, Left Side	

Line	Option	Type	Option Description	Qty
121			Louvers, Cabinet - 0-No Louvers	
122	0766467		Upholstery, Seats In Cab, All Vinyl, Seats Inc, CARE	6
			Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Red	
			Qty, - 06	
123	0543991		Bracket, Air Bottle, Hands-Free II, Cab Seats	5
			Qty, - 05	
124	0603866		Seat Belt, Dual Retractor, ReadyReach, Saber FR/Enforcer	1
			Seat Belt Color - Red	
125	0543914		Helmet Storage, In Body Compartment	1
126	0647647		Lights, Dome, FRP Dual LED 4 Lts	1
			Color, Dome Lt - Red & White	
			Color, Dome Lt Bzl - Black	
			Control, Dome Lt White - Door Switches and Lens Switch	
			Control, Dome Lt Color - Lens Switch	
127	0602637		Portable Hand Light, Provided by Fire Dept, Pumper NFPA 2016 Classification	1
128	0622803		Cab Instruments, Black Gauges, Black Bezels, Enforcer MUX	1
			Emergency Switching - Individual Switches	
129	0509511		Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	1
130	0543751		Light, Do Not Move Apparatus	1
			Alarm, Do Not Move Truck - Steady Alarm	
131	0509042		Messages, Open Dr/DNMT, Color Dsply,	1
132	0611683		Switching, Cab Instrument Lower Console & Overhead, Membrane, Enforcer WiFi MUX	1
133	0622921		Wiper Control, 2-Speed with Intermittent, Wired to Prk Brk, MUX, Enforcer	1
134	0548009		Wiring, Spare, 20 A 12V DC 1st	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Wire termination - 10-Place Bus Bar w/Cover	
			Location, Spare Wiring - EMS Compt	
135	0615386		Vehicle Information Center, 7" Color Display, Touchscreen, MUX	1
			System Of Measurement - US Customary	
136	0734857		Collision Mitigation, HAAS Alert (R2V), HA5	1
			Subscription, HAAS R2V - R2V - 5 Year Data Plan Subscription	
137	0606247		Vehicle Data Recorder w/CZ Display Seat Belt Monitor	1
138	0731227		Intercom, David Clark, 6-Pos, 2-Radio, D, O, 4C, 3805	1
			Location, Intercom, C Cab - 4) 2 outside & dual center station (Dave C/Setcom)	
139	0637058		David Clark Universal Radio Interfaces Included with Single/Dual System	1
			Location, Radio Interface - TBD	
140	0597914		Headset, David Clark, H3442 Under Helmet, Flex Mic	5
			Qty, - 05	
			Location - Officer and crew cab seating positions.	
141	0597906		Headset, David Clark, H3441 Under Helmet, Flex Mic, One Slotted Ear Cup	1
			Qty, - 01	
			Location - Drivers position	
142	0681408		Hangers For Headsets, NFPA, Each	6
			Qty, - 06	
			Location, Headset Hangers - Driver Seat, Officer Seat, DS Inbrd, Fwrd Fcng Seat, DS Outbrd, Rear Fcng Seat, PS Inbrd, Fwrd Fcng Seat and PS Outbrd, Rear Fcng Seat	
143	0696439		Antenna Mount, Custom Chassis, Cable Routed to Instrument Panel Area	1
			Qty, - 01	
			Location, Antenna Mount - Left Side	
144	0696438		Antenna Mount, Custom Chassis, Cable Routed to Radio Box	1
			Location - Rear of the lightbar	
			Qty, - 01	
145	0540118		Camera, Safety Vision, Driver Mux, Rear Camera Only	1
			Camera System Audio - Speaker Behind Driver	
146	0523921		Recess, Rear Vision Camera	1
			Location, Camera, Recessed - Center Rear	
147	0615112		Pierce Command Zone, Advanced Electronics & Control System, Enforcer, WiFi	1
148	0624253		Electrical System, Enforcer MUX	1
149	0079211		Batteries, (6) Exide Grp 31, 950 CCA each, Threaded Stud	1
150	0008621		Battery System, Single Start, All Custom Chassis	1

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.1003/1306
151	0002698		Battery Compartment, Saber/Enforcer	1
152	0531315		Charger, Sngl Sys, IOTA, DSL-75, 75 Amp, Kussmaul 091-94-12 Ind, Qtm/Enf/SFR	1
153	0786339		Location, Charger, Cab Behind Driver Seat, Saber FR/Enforcer	1
154	0530949		Location, Bat Chrg Ind, Driver's Seat Riser	1
155	0016837		Shoreline, 20A 120V, Straight Blade NEMA 5-20	1
			Qty, - 01	
			Connection, Shoreline - Battery charger, 120V air compressor and shoreline receptacles.	
156	0026800		Shoreline Location	1
			Location, Shoreline(s) - DS Step Well	
157	0009429		Electric Power Only, Portable Winch	4
			Location - front, side and rear receivers	
			Qty, Receptacles - 04	
158	0647729		Alternator, 320 amp, Delco Remy 40SI	1
159	0698237		Override Switch, Prk Brk Interlock for Windshield Wipers	1
			Location - Drivers panel	
160	0092582		Load Manager/Sequencer, MUX	1
			Enable/Disable Hi-Idle - e)High Idle enable	
161	0783153		Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	1
			Color, Headlight Bez - Chrome Bezel	
162	0625953		Light, Directional, Wln 600 Cmb, Cab Crn, Wrp Bzl Out HD Lts, Enf, Sab FR	1
			Color, Lens, LED's - m)match LED's	
163	0620054		Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	1
164	0647802		Lights, Clearance/Marker/ID, Front, P25 LED 5 Lts, Saber FR/Enforcer	1
165	0625210		Lights, Directional, Cab Front Side, Truck-Lite 19036Y LED, AXT/Enf	1
166	0088869		Lights, Clearance/Marker/ID, Rear, Truck-Lite 26250R LED 7Lts	1
167	0564683		Lights, Tail, Wln M6BTT* Red LED Stop/Tail & M6T* Amber LED Dir Arw For Hsg	1
			Color, Lens - Colored	
168	0561471		Lights, Backup, Wln M6BUW, LED, For Tail Lt Housing	1
169	0664481		Bracket, License Plate & Light, P25 LED	1
170	0556842		Bezels, Wln, (2) M6 Chrome Pierce, For mtg (4) Wln M6 lights	1
171	0589905		Alarm, Back-up Warning, PRECO 1040	1
172	0564535		Light, Marker, Britax Rubber Arm, Model L427.203.L12 LED, Red/Amb, Qty/Loc	1
			Location, Lights - lower rear body corners	
			Qty, Lights (pair) - 1	
173	0769420		Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 4Dr	1
174	0769572		Lights, Perimeter Pump House, Amdor AY-LB-12HW020 LED 2lts	1
175	0770056		Lights, Perimeter Body, Amdor AY-LB-12HW020 LED 2lts, Rear Step	1
			Control, Perimeter Lts - Parking Brake Applied and Directional Light Activation	
176	0566799		Lights, Step, P25 LED 4lts, Ign, Prk Brk Activated	1
177	0640629		Light, Wln, 12V PCPSM1* Pioneer LED Fld/Spt, Surface Mount 1st	1
			Location, Lights - DS above the crew cab window.	
			Qty, - 01	
			Switch, Lt Control 1 DC,1 - a) DS Switch Panel	
			Switch, Lt Control 2 DC,2 - f) Pump Operator's Panel	
			Switch, Lt Control 3 DC,3 - f) PS Switch Panel	
			Switch, Lt Control 4 DC,4 - d) No Control	
			Color, Wln Lt Housing - Chrome Flange	
178	0640627		Light, Wln, 12V PCPSM1* Pioneer LED Fld/Spt, Surface Mount 2nd	1
			Location, Lights - PS Cab above the crew cab windows	
			Qty, - 01	
			Switch, Lt Control 1 DC,1 - a) DS Switch Panel	
			Switch, Lt Control 2 DC,2 - g) PS Switch Panel	
			Switch, Lt Control 3 DC,3 - e) Pump Operators Panel	
			Switch, Lt Control 4 DC,4 - d) No Control	
			Color, Wln Lt Housing - Chrome Flange	
179	0692056		Light, FRC, 12V SPA530-Q20* LED, Push Up, Side Mount 1st	1
			Location, Lights - DS Back of cab	
			Qty, - 01	
			To Do Not Move Truck Lt - c) Connected to Lt	
			Switch, Lt Control 1 DC,1 - e) Pump Operators Panel	
			Switch, Lt Control 2 DC,2 - e) No Control	

Line	Option	Type	Option Description	Qty
179			Switch, Lt Control 3 DC,3 - d) No Control	
			Switch, Lt Control 4 DC,4 - d) No Control	
			Color, FRC/Rom Lt Housing - FRC, White	
180	0692054		Light, FRC, 12V SPA530-Q20* LED, Push Up, Side Mount 2nd	1
			Location, Lights - PS back of cab	
			Qty, - 01	
			To Do Not Move Truck Lt - c) Connected to Lt	
			Switch, Lt Control 1 DC,1 - e) Pump Operators Panel	
			Switch, Lt Control 2 DC,2 - e) No Control	
			Switch, Lt Control 3 DC,3 - d) No Control	
			Switch, Lt Control 4 DC,4 - d) No Control	
			Color, FRC/Rom Lt Housing - FRC, White	
181	0776357		Light, Visor, WIn, 12V P*H2* Pioneer, Cnt Feature, 1st	1
			Qty, - 01	
			Location, driver's/passenger's/center - Centered	
			Color, WIn Lt Housing - White Paint	
			Control, Scene Lts - Cab Sw Panel DS and Cab Sw Panel PS	
			Scene Light Optics - Flood/Spot	
182	0774296		Housing, Recessed Light, Horizontal Mt	1
			Location - DS Hatch Compartment	
			Qty, - 1	
			Material, Bracket - Painted Aluminum	
183	0756029		Lights, HiViz FT-MB-18-TR-* 25.20", 2nd	1
			Location - DS body catwalk	
			Qty, - 01	
			Control, Scene Lts - DS Scene Lts	
			Color, Lt Housing HiViz - White	
			Scene Light Optics - combination	
184	0756031		Lights, HiViz FT-MB-18-TR-* 25.20", 1st	1
			Location - PS body catwalk	
			Qty, - 01	
			Control, Scene Lts - PS Scene Lts	
			Color, Lt Housing HiViz - White	
			Scene Light Optics - combination	
185	0532358		Not Required, Deck Lights, Other Hose Bed & Rear Lighting	1
186	0645877		Lights, Hose Bed, Sides, Dual LED Light Strips	1
			Control, Hose Bed Lts - Cup Switch At Rear	
187	0645677		Lights, Not Required, Rear Work, Alt. 12 Volt Lights At Rear Body	1
188	0645683		Lights, Rear Scene, WIn, M9LZC LED	2
			Qty, - 02	
			Control, Rear Scene Lts - Cab Switch Panel DS and Cup Switch At Rear	
			SS	
			Location, Scene Lights - DS Rear Body Bulkhead, High, 1lt and PS Rear	
			Body Bulkhead, High, 1lt	
189	0787447		Lights, Walk Surf, Dual LED Light Strips, Cargo Area, Bdy Stp Lt	1
190	0753285		Switch, White Warning Lights, Front	1
			Function Reset - On	
191	0060016		Pumper, Long, Aluminum, 2nd Gen	1
192	0554271		Body Skirt Height, 20"	1
193	0028297		Tank, Water, 750 Gallon, Poly, Long	1
194	0003405		Overflow, 4.00" Water Tank, Poly	1
195	0028104		Foam Cell Required	1
196	0770851		Mounting Provisions, Top of Tank Only, Foam System	1
			Size - Husky 3	
197	0635329		Modified Poly Tank & Cradle, Ext'd To Rear, Pumper	1
198	0633066		Sleeve, Through Tank	1
			Qty, Sleeve - 1	
			Water Tank Sleeve - Plumbing/Hydraulic Diameter - 3" Plumbing	
199	0553729		Not Required, Restraint, Water Tank, Heavy Duty	1
200	0003429		Not Required, Direct Tank Fill	1
201	0003424		Not Required, Dump Valve	1
202	0048710		Not Required, Jet Assist	1
203	0030007		Not Required, Dump Valve Chute	1
204	0514778		Not Required, Switch, Tank Dump Master	1

Line	Option	Type	Option Description	Qty
205	0126633		Hose Bed, Aluminum, Pumper	1
206	0723549		Painted Hose Bed	1
			Paint Color, Hose Bed Interior - Match Lower Body	
207	0003481		Hose Bed Capacity, Special	1
			Capacity, Hosebed - L-R: 100' of 1.75" over 200' of 2.5" 1000' of 4" , 800' of 3"/ 200' of 2.5"	
208	0003488		Divider, Hose Bed, Unpainted	3
			Qty, Hosebed Dividers - 3	
209	0615183		Pull Bar w/1" Strap for Seat Belt Buckle Fasteners	1
			Location - Rear hose bed restraint	
			Qty, - 01	
			Fill in Blank - The seat belt buckles at the top of the hosebed.	
			Color - 2) red	
210	0589278		Hose Restraint, Hose Bed, Velcro Strap on Top, 2" Heavy Nylon Web at Rear	1
			Type of fastener - seat belt buckle	
			Nylon Web Color - Black	
			Type of fastener, Rear - seat belt buckle - bottom of hosebed	
211	0013512		Running Boards, 12.75" Deep	1
212	0681766		Tailboard, 16" Deep, Full Width, Extended Substructure, Angled Corners	1
213	0690027		Wall, Rear, Smooth Aluminum/Body Material, Flush Rear Wall	1
214	0078558		Tow Bars, (2) w/Hitch Receiver, Rear/Sides, Under Body, No Wiring	1
215	0003561		Construction, Compt, Alum, Pumper	1
216	0083691		LS 161" Rollup, Full Height & Depth Front & Rear	1
217	0063669		RS 161" Rollup, Full Height Front & Rear, FDLER	1
218	0594005		Doors, Rollup, Amdor, Side Compartments	6
			Qty, Door Accessory - 06	
			Color, Roll-up Door - AMDOR Painted to Match Lower Body	
			Latch, Roll-up Door - Non-Locking Liftbar	
219	0545606		Compt, Flush Rear, Rollup, 37.75" FF, 25.88" D	1
220	0594003		Door, Amdor, Rollup, Rear Compartment	1
			Color, Roll-up Door - AMDOR Satin Aluminum	
			Latch, Roll-up Door - Non-Locking Liftbar	
221	0554995		No Body Modification Required	1
222	0659353		Lights, Compt, Amdor AY-9220 LED, Dual Lt Strip	7
			Qty, - 07	
223	0562348		Fasteners, Mechanical, Strip Lighting In Compartments	1
224	0739915		Hatch, (2) Liftup, Pumper	1
			Location, Hatch Compt - Left Side	
			Qty, Hatch Compt - 1	
			Trim, Body/Hatch Compt Seam, Horizontal - Molding	
			Hatch Compt, Width - 28"	
			Latch, Hatch Compt - D-Handle Latch	
225	0730092		Not Required	1
226	0522640		No Hatch Compartments or Lights	1
227	0733221		Lights, Hatch Compt, Amdor AY-9220-42, LED, Light Strips, 1-Sides 2 Dr	1
228	0687146		Shelf Tracks, Painted	7
			Qty, Shelf Track - 07	
			Location, Shelf Track - LS1, LS2, LS3, RS1, RS2, RS3 and B1	
229	0600350		Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations	11
			Qty, Shelf - 11	
			Material Finish, Shelf - Brushed	
			Location, Shelves/Trays, Predefined - .Location To Be Determined, LS1- Transition Point, RS2-Centered and RS3-Centered	
230	0647091		Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides	4
			Qty, - 04	
			Location, Tray Slide-Out, Floor Mounted - RS1 - Left of Partition, RS3, LS1 and B1	
			Material Finish, Tray - Painted - Spatter Gray	
231	0540317		Toolboard, Swing-out, Alum, .188", Peg Board	2
			Qty - 2	
			Location, Pivot - Back	
			Mounting, Toolboard - Adjustable Frt-back	
			Hole Diameter, Pegboard/Toolboard - .281" diameter	
			Finish, Pegboard/Toolboard - Brushed Finish	

Line	Option	Type	Option Description	Qty
231			Location, Toolboard - LS2 and RS2	
232	0590939		Toolboard, Alum, .188", Peg Board, Added to Slide-Out Tray	1
			location - Mounted to the tray in RS1 rear of the vertical divider.	
			Qty - 1	
			Hole Diameter, Pegboard/Toolboard - .281" diameter	
233	0726457		Partition, Vertical Compt, Predefined Locations	1
			Qty, Partition - 01	
			Location, Partition/Toolboard, Predefined - RS1- 30.00" From Forward	
			Door Frame	
			Material Finish, Partition - Brushed	
234	0539811		Box, Poly Tool	4
			Location - Ship loose	
			Qty, Comp. Accessory - 04	
			Color - 1) black	
			Length - 20.00"	
			Width - 10.00"	
			Depth - 10.00"	
235	0539812		Box, Poly Tool, Additional	6
			Location - Ship Loose	
			Qty, Comp. Accessory - 06	
			Color - 1) black	
			Length - 20.00"	
			Width - 8.00"	
			Depth - 10.00"	
236	0044903		Netting, Retention 1.00" Nylon Strap, Side Fastened, 2.00" Box Pattern	1
			Location - Compartment RS1 between the vertical divider and the front bulkhead (full height).	
			Qty, - 1	
			Type of fastener - 1" side release	
237	0054014		Floor, Aluminum Treadplate, Angled for Cribbing	1
			Location - Compartment RS1 forward of the vertical divider.	
			Qty, Comp. Accessory - 01	
238	0755638		Pegboard, Back Wall Mounted, 3/16" Alum, Full Height Compt	2
			Qty, Comp. Accessory - 02	
			Hole Diameter, Pegboard/Toolboard - .281" diameter	
			Finish, Pegboard/Toolboard - Brushed Finish	
			Location, Compartment, Predefined - LS2 and RS2	
239	0004016		Rub Rail, Aluminum Extruded, Side of Body	1
240	0784810		Fender Crowns, Rear, Stainless, Wider Than Std, w/Removable Liner	1
			Material Finish, Fender Liner - Painted Lower Body	
241	0602347		Hose, Hard Suction, Provided by Fire Department, Pumper NFPA 2016 Classification	2
			Qty, Hard Suction Hose - 2	
			Length, Hard Suction Hose - 10	
			Diameter, Hard Suction Hose - 6.00"	
			Type of Hose Ends, Coupling, HSH - Long Handle	
242	0612959		Trough, HSH, (2), Compartment Top Mount, Angle Bracket	1
			Location, Hose Trough/Compartment - b) right side	
			Trough, Material - Alum - Painted (2)	
			Trough, Latch Type - clamps	
243	0626229		Handrails, Side Pump Panels, Per Print	1
244	0004126		Handrails, Beavertail, Standard	1
245	0004146		Handrail, Rear, Below Hose Bed, Full Width	1
246	0657651		Compt, Air Bottle, Double, Full Width Door, Fender Panel	3
			Qty, Air Bottle Comp - 3	
			Door Finish, Fender Compt - Polished	
			Location, Fender Compt - Double - LS Fwd, Double - RS Fwd and	
			Double - RS Rear	
			Latch, Air Bottle Compt - Flush Lift & Turn	
			Insert, Air Bottle Compt - W-Shaped Insert	
247	0064217		Storage Bin, Extinguisher(s)	2
			Location, Bracket/comp. - Mounted to the bottom of the permanent shelf in compartment D1 to the front bulkhead wall (1 X 1 - side by side)	
			Qty, - 02	

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.1007/1306
248	0004225		Ladder, 24' Duo-Safety 900A 2-Section	1
249	0004230		Ladder, 14' Duo-Safety 775A Roof	1
250	0049958		Ladders Btwn Tank & S.Sht, RS, Ext'd Rr, Encl'd Complete, RPH	1
			Door, Material & Finish, Ladder Storage - smooth aluminum	
			Latch, Door Ladder Storage - D-Handle latch	
			Hinge Location - Left Side	
251	0733387		Ladder, 10' Duo-Safety Folding 585A	1
252	0733796		Trough, Folding Ladder, Ladder Storage Btwn Tank & S.Sht	1
			Location, Left Side, Right Side - Right Side	
253	0004259		Slides, Dura-Surf, Ladder Storage Rack	1
254	0725371		Backboard Storage, Compt w/Door, Over Pump	1
			Door, Material & Finish, Storage - Aluminum Treadplate	
			Latch, Door, Storage - Lift and Turn Latch, Flush, Pair	
			Qty, Backboard Troughs - 1	
			Hinge Location - Rearward	
			Location, BB/Stokes/Long Tool Storage Over Pump - Rearward, Cargo Area	
			Access, Backboard/Stokes/Long Tool Compt - Both	
			Size, Backboard, Predefined - 72"L x 16" W x 2"H	
255	0547754		Not Required, Pike, Pole, 8'	1
256	0549137		Not Required, Pike Pole, 6'	1
257	0004361		Tubes, Alum, Pike Pole Storage	2
			Qty, Pike Pole Tubes - 02	
			Location, Pike Pole Tube - Ladder Storage	
258	0785102		Steps, Folding, Front of Body, Cargo Bed Access, w/LED, Trident	1
			Coating, Step - black	
			Location, Steps - Full Height Left Side w/LED Light	
259	0592994		Steps, Folding, Rear of Body, w/LED, Trident	1
			Coating, Step - black	
260	0724153		Step, Folding - Extra, Body Only, w/LED, Trident	3
			Qty, Folding Step - 03	
			Location, Additional Step - PS front body bulkhead	
			Coating, Step - luminescent	
261	0007575		Pump House, Side Control, 48", Control Zone	1
262	0037731		Pump House Structure, Raised, Included with Ladder Storage	1
263	0004425		Pump, Waterous, CSU, 1500 GPM, Single Stage	1
264	0004482		Seal, Mechanical, Waterous	1
265	0559769		Trans, Pump, Waterous C20 Series	1
266	0635600		Pumping Mode, Stationary Only	1
267	0605126		Pump Shift, Air Mnl Override, Split Shaft, Interlocked, Waterous	1
268	0003148		Transmission Lock-up, EVS	1
269	0004547		Auxiliary Cooling System	1
270	0014486		Not Required, Transfer Valve, Stage Pump	1
271	0746511		Valve, Relief Intake, TFT	1
			Pressure Setting - 150 psig	
272	0721609		Controller, Pressure, Pierce LCD, Custom Chassis	1
			Pressure Governor Throttle Control - Clockwise	
			Pressure Governor Default Mode - Pressure Setting	
273	0673872		Primer, Trident, Air Prime, Air Operated, Automatic	1
274	0780364		Manuals, Pump, (2) Total, Electronic Copies	1
275	0602512		Plumbing, Stainless Steel and Hose, Single Stage Pump, Control Zone	1
276	0795135		Plumbing, Stainless Steel, w/Foam System	1
277	0004645		Inlets, 6.00" - 1250 GPM or Larger Pump	1
278	0767389		Valve, w/Relief, Right Inlet, 6", Akron 9333 Elec Controller, Jamesbury,Override	1
			Qty, Main Inlet Valves - 1	
279	0004646		Cap, Main Pump Inlet, Long Handle, NST, VLH	1
280	0084610		Valves, Akron 8000 series- All	1
281	0016158		Valve, Inlet(s) Recessed, Side Cntrl, "Control Zone"	1
			Qty, Inlets - 1	
282	0004700		Control, Inlet, at Valve	1
283	0004660		Inlet (1), Left Side, 2.50"	1
284	0029147		Not Required, Inlet, Right Side	1
285	0505132		Anode, Zinc, Pair, Pump, 1-Inlet & 1 Discharge Side	1

Line	Option	Type	Option Description	Qty
286	0897257		Inlet, 4" to 6" Front, 5" Plumbing, w/Bleeder Valve, Top of Bumper	1
			Inlet, Size - Six	
			Drain, Suction - Swing Handle	
			Inlet, Front, Valve - Bray 5.00"	
			Inlet, Front, Plumbing - Black Iron Pipe	
287	0014823		Control, Front Inlet, Electric, w/Indicator Lights	1
288	0755138		Valve, Relief Intake, Front Inlet, Akron	1
			Pressure Setting - 125 psig	
289	0732444		Swivel, Front Inlet, 4.00" to 6.00", w/Drain	1
			Inlet, Size - 6.00" inlet	
			Inlet Bleeder - Quarter-Turn Style Bleeder	
			Finish, Front Inlet Elbow/Adapter - Chrome	
290	0004788		Cap, Front Inlet, Long Handle, VLH	1
291	0540345	SP	Inlet, Rear, 4"-6" w/4" Plmb, Below Ladder Compt, RS, w/Bleeder Valve	1
			Inlet, Size - Six	
292	0024831		Control, Rear Inlet, Electric, w/Indicator Lights	1
293	0037183		Elbow & Cap, Rear Inlet, 6" FNST x 4" Storz	1
294	0746862		Valve, Relief Intake, Rear Inlet, TFT	1
			Pressure Setting - 125 psig	
295	0092568		No Rear Auxiliary Inlet Requested	1
296	0563738		Valve, .75" Bleeder, Aux. Side Inlet, Swing Handle	1
297	0029043		Tank to Pump, (1) 3.00" Valve, 3.00" Plumbing	1
298	0004905		Outlet, Tank Fill, 1.50"	1
299	0062133		Control, Outlets, Manual, Pierce HW if applicable	1
300	0004940		Outlet, Left Side, 2.50"	2
			Qty, Discharges - 02	
301	0005091		Elbow, Left Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
302	0092570		Not Required, Outlets, Left Side Additional	1
303	0035094		Not Required, Elbow, Left Side Outlets, Additional	1
304	0004945		Outlet, Right Side, 2.50"	1
			Qty, Discharges - 01	
305	0025091		Elbow, Right Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
306	0092571		Not Required, Outlets, Right Side Additional	1
307	0089584		Not Required, Elbow, Right Side Outlets, Additional	1
308	0005047		Outlet, 4" w/4" Right, Handwheel	1
			Valve, Brand - Akron	
309	0552802		Elbow, Large Dia Outlet, 30 Deg, 4.00" FNST x 4.00" MNST	1
310	0648906		Outlet, Front, 2.50" w/2.50" Plumbing	1
			Fitting, Outlet - 2.50" NST with 90 degree swivel	
			Drain, Front Outlet - Automatic	
			Location, Front, Single - top of left bumper	
311	0004995		Outlet, Rear, 2.50"	1
			Qty, Discharges - 01	
			Location, Outlet - a) right side	
312	0045091		Elbow, Rear Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
313	0092574		Not Required, Outlet, Rear, Additional	1
314	0085695		Not Required, Elbow, Rear Outlets, Large, Additional	1
315	0004990		Outlet, Front HB, 2.50" w/2.50" Plumbing	2
			Location - Beds 1 & 4	
			Qty, Discharges - 02	
316	0752097		Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	1
317	0563739		Valve, 0.75" Bleeder, Discharges, Swing Handle	1
318	0092504		Reducer, 2.50" FNST x 1.50" MNST, No Cap	3
			Qty, Adapter for Outlets - 03	
			Location, Adapter(s) - Front bumper and the two hose bed discharges.	
319	0090927		Outlet, 3.00" Deluge w/TFT Extend-a-Gun XG18	1
320	0770359		No Monitor Requested, Customer/Dealer Furnished and Installed	1
			Fill in Blank - TBD	
321	0029304		No Nozzle Req'd	1
322	0005070		Deluge Mount, NPT	1
323	0723726		Speedlay Module Not Required	1
324	0722432		Hose Restraint Not Required, No Speedlay Module	1

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.1009/1306
325	0723395		Speedlays, Not Required	1
326	0723394		Speedlays, Not Required	1
327	0029167		Crosslays Sngl Sheet Unpainted, (2+) 1.50", Std. Cap	2
			Qty, Crosslays - 2	
328	0029196		Not Required, 2.50" Crosslay	1
329	0769652	SP	Hose Restraint, Crosslays, 2" Nylon Web, Seat Belt Buckle, Orange Tether, Bar	2
			Qty, - 02	
330	0029260		Not Required, Speedlays	1
331	0750536		Hose Restr, Spdly, Not Required, No Spdly	1
332	0019853		Crosslays, 8.00" Lower Than Standard - Control Zone w/9.00" Raised PH	1
333	0622237		Roller Assembly, Additional	2
			Location - Top flange of pump cargo area each side (used to assist with cord reel deployment on opposite side of truck)	
			Qty, - 02	
334	0624939		Foam Sys, Husky 3, Single Agent, Multi Select Feature	1
			Discharge, Foam Locations - Front Bumper Left Side, Rear Outlet Left Side, Crosslay Front and Crosslay Rear	
335	0012126		Not Required, CAF Compressor	1
336	0592527		Refill, Foam Tank, Integral, Husky 3	1
337	0745930		Husky 3 Foam System Power Unit Location	1
			Location - Forward of HB cross sheet next to fill domes.	
338	0031896		Demonstration, Foam System, Dealer Provided	1
339	0559077		Foam Cell, 30 Gallon, Not Reduce Water	1
			Type of Foam - Class "A"	
			Foam, Brand Name - National Knockdown	
340	0771512		Drain, 1.00", Foam Tank #1, Husky 3 Foam System, Swing Handle	1
341	0091079		Not Required, Foam Tank #2	1
342	0091112		Not Required, Foam Tank #2 Drain	1
343	0746445		Approval Dwg, Pump Operator's Panel, Includes Color And Label Tags	1
			Num Of Truck(s) or Sim Unit, OPER Pump Pnl, Dwg - 01	
344	0032479		Pump Panel Configuration, Control Zone	1
345	0005525		Material, Pump Panels, Side Control Brushed Stainless	1
346	0721765		Panel, Pump Access - Right Side Only, Side Control	1
			Latch, Pump Panel Access, Side Mount - Swell Latch, Black	
347	0583824		Light, Pump Compt, WIn 3SC0CDCR LED White	1
			Qty, - 01	
348	0586382		Gauges, Engine, Included With Pressure Controller	1
349	0005601		Throttle, Engine, Incl'd w/Press Controller	1
350	0739224		Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle, Green	1
351	0549333		Indicators, Engine, Included with Pressure Controller	1
352	0745568		Indicator Light, Pump Panel, Ok To Pump, Green	1
353	0080713		Control, Air Horn At Pmp Pnl, Red Button, Labeled "Evacuation"	1
354	0005689		Gauges, 4.50" Master, Class 1, 30"-0-600psi	1
355	0005714		Gauge, 2.50" Pressure, Class 1, 0-400psi	1
356	0750526		Gauge, Water Level, Pierce, In pressure Controller, Lt Driver	1
357	0750438		Water Level Gauge, WIn PSTANK2, LED 1-Light, 4-Level	3
			Qty, - 03	
			Activation, Water Level G - pb) parking brake is applied	
			Location, Water Level Gauge, Multi-Select - Cab, Behind Left Cab Door, Cab, Behind Right Cab Door and Rear Body - LS	
			Color, Trim - Chrome Trim	
358	0062992		Gauge, Foam Level, (1) Tank, Class 1, GAAAR 5lt	1
359	0663944		Light Shield/Step 8", LED, P25 LED Stp Lt, Prk Brk Activation	1
360	0682261		Light Shield/Step 8", DS LED, P25 LED Step Lt	1
361	0606696		Air Horns, (2) Grover, Stutter Tone, In Bumper	1
362	0606831		Location, Air Horns, Bumper, Right Side, Outside Frame, Same Side (Pos #1 & #2)	1
363	0757092		Control, Air Horn, Multi Select	1
364	0757080		Control, Air Horn, Ft Sw, RS	1
365	0757081		Control, Air Horn, Ft Sw, LS	1
366	0602734		Siren, WIn 295SLSA1, 100 or 200W, Sw Batt, Other Speaker, Non-NFPA 2016	1
367	0510206		Location, Elect Siren, Recessed Overhead In Console	1
			Location, Elec Siren - Overhead, Above Eng Tunnel DS	

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.1010/1306
368	0006145		Control, Elec Siren, Horn Ring, PS Foot Sw	1
369	0601330		Speaker, (1) Federal, ES100C w/ESFMT-EF Recess Mnt & S/S Grille	1
			Connection, Speaker - siren head	
370	0601555		Location, Speaker, Frt Bumper, Recessed, Left Side, Outside Frame, Outbrd (Pos 7)	1
371	0895310		Siren, Federal Q2B	1
			Finish, Q2B Siren - Chrome	
372	0006095		Siren, Mechanical, Mounted Above Deckplate	1
			Location, Siren, Mech - b) right	
373	0748305		Control, Mech Siren, Multi Select	1
374	0748281		Control Mech Siren, Ft Sw RS	1
375	0748282		Control Mech Siren, Ft Sw LS	1
376	0740834		Sw, Siren Brake, Momentary Red, LS Overhead Sw Pnl	1
377	0740392		Sw, Siren Brake, Momentary Red, RS Overhead Sw Pnl	1
378	0746353		Not Required, Warning Lights Intensity	1
379	0607737		Lightbar, Wln, Freedom IV-Q, 81", RRRRRW_____WRRRRR	1
			Filter, Whl Freedom Ltbrs - No Filters	
380	0605598		Lightbars, Wln, Freedom IV-Q, 2-21.5", RRRRR RRRRR	1
			Lightbar Location, Cab/Crew Cab - c)over the cab doors	
			Filter, Whl Freedom Ltbrs - No Filters	
381	0016380		No Additional Lights Req'd, Side Zone Upper	1
382	0761731		Lights, Front Zone, Wln M6** M6** M6** M6**, 4lts Q Bezel, Clr Fet	1
			Color, Lens, LED's - m)match LED's	
			Color, Lt DS Frnt Outside - DS Front Outside Red	
			Color, Lt PS Frnt Outside - PS Front Outside Red	
			Color, Lt DS Front Inside - w) DS Front Inside White	
			Color, Lt PS Front Inside - w) PS Front Inside White	
			Color, Q Bezel and Trim - Polished Chrome	
383	0757440		Light, Front, Roto Ray 4000W, PAR46 LED, 2-R, 1-W, Hidden Mt Top Section Grl	1
384	0747228		Lights, Side Zone Lower, Wln M6**, M6**, M6**, 6Lts	1
			Location, Lights Front Side - b)each side bumper	
			Color, Lens, LED's - Colored	
			Location, Lights Mid Side - Rearward of Crew Cab Doors	
			Location, Lights Rear Side - Over Rear Wheels	
			Color, Trim - Chrome Trim	
			Color, Lt Side Front, DS - Red	
			Color, Lt Side Front, PS - Red	
			Color, Lt Side Mid DS - Red	
			Color, Lt Side Mid PS - Red	
			Color, Lt Side Rear PS - Red	
			Color, Lt Side Rear DS - Red	
385	0745867		Lights, Side, Wln M9** LED, Trm Fet 1st	2
			Location, Lights - One each side forward body.	
			Qty, - 02	
			Color, Lights, Warning - Red	
			Control, Light - a) rear upper warning	
			Color, Lens, LED's - Colored	
			Color, Trim - Chrome Trim	
386	0587935		Lights, Side, Wln RS*02ZCR, Horizontally Mntd/Rec in Rub Rail, 1st	4
			Location, Lights - One in each side body rubrail	
			Qty, - 04	
			Color, Lights, Warning - gla) red	
			Control, Light - b) side warning	
387	0540777		Lights, Rear Zone Lower, Wln M6* LED, Colored Lens	1
			Color, Lt DS Rear - r) DS Rear Lt Red	
			Color, Lt PS Rear - r) PS Rear Lt Red	
388	0734069		Lights, Rear/Side Up Zone, Wln M9** M9** M9** M9** 4lts	1
			Color, Lens, LED's - Colored	
			Color, Lt, Side Rear Upper DS - Red	
			Color, Lt, Side Rear Upper PS - Red	
			Color, Lt, Rear Upper DS - Red	
			Color, Lt, Rear Upper PS - Red	
			Color, Trim - Chrome Trim	
389	0006551		Not Required, Lights, Rear Upper Zone Blocking	1
390	0537807		Mtg, Rear Warn Lts, Side Sheets & Rear of Body Bulkheads	1

Line	Option	Type	Option Description	Qty
				BOS 2022-01-19 p.1011/1306
391	0791528		Light, Traffic Directing, WIn TAL65, 36.00" Long, TACTL5	1
			Activation, Traffic Dir L - Not Connected	
392	0551728		Location, Traf Dir Lt, Recessed with S/S Trim	1
393	0530266		Location, Traf Dir Lt Controller, Engine Tunnel	1
394	0006646		Electrical System, 120/240VAC, General Design	1
395	0602101		Generator, Harrison 3.6 kW Hydraulic, 30A 120VAC Hotshift PTO	1
			Generator Interlocks - Parking Brake	
396	0006645		Location, Hydraulic Generator Above Pump	1
			Location, Generator(s) - Over Pump, Right Side	
397	0016752		Starting Sw, Truck Engine Powered Gen, Cab Sw Pnl	1
398	0071054		Remote Start, Hydraulic Generator, PTO and Field - SAME SWITCH	1
			Location, Remote Start - d) cab/pp	
399	0016740		Not Required, Fuel System	1
400	0016767		Not Required, Oil Drain Extension, Generator	1
401	0036738		Circuit Breaker Panel, Included With PTO Generator	1
			Location, Circuit Breaker Panel - LS3, Left Wall High	
402	0076829		Guard, S/S Splash Guard for Generator Over Pump	1
403	0016771		Not Required, Routing Exhaust, Generator	1
404	0006825		Reel, Elect Cable, Hannay, 1600, (3) Wire	1
			Qty, Cord Reels - 1	
			Reel Guide - b) Captive roller	
			Finish, Reel - Painted Gray	
			Location, Electric Cord Reel - Above Pump, Right Side, 1 Reel	
405	0016828		Cord, Electric, 10/3 Black, 3 Wire	1
			Lengths of Elect Cord - 1	
			Feet of Black Cord - d)200	
			Connection, Cord - Direct connection	
406	0053942		Enclosure, Reel, Feed Through Side Sheet	1
			Location - Reel installed in the PS cargo area above the pump	
			Qty, - 1	
407	0010748		Switch, Second To Control Reel Rewind	1
			Location - DS Pump Panel	
			Qty, - 01	
408	0780350		Receptacle Strip, 15A 120V 6-Place, Interior Cab	2
			Qty, - 02	
			Location 1 - IN the bottom of the PS and DS FF EMS Compartments	
			AC Power Source - Shoreline	
409	0779698		Receptacle Strip, 15A 120V 6-Place, Interior Body	2
			Qty, - 02	
			Location 1 - Mount high on back wall of RS2 and TBD	
			AC Power Source - Shoreline	
410	0519545		Brand, Hydraulic Tool System, Amkus	1
411	0649753		Not Required, PTO Driven Hydraulic Tool System	1
412	0649748		Not Required, Hydraulic Hose	1
413	0652716		Reel, Hyd, Mounting Provisions for Future Installation	2
			Qty, Reel - 2	
			Brand, Model, Age of Tool - Amkus	
			Location - Compartment B1	
414	0007150		Bag of Nuts and Bolts	1
			Qty, Bag Nuts and Bolts - 1	
415	0602516		NFPA Required Loose Equipment, Pumper, NFPA 2016, Provided by Fire Department	1
416	0602407		Soft Suction Hose, Provided by Fire Department, Pumper NFPA 2016 Classification	1
417	0602390		Strainer, Provided by Fire Department, Pumper NFPA 2016 Classification	1
418	0602538		Extinguisher, Dry Chemical, Pumper NFPA 2016 Class, Provided by Fire Department	1
419	0602360		Extinguisher, 2.5 Gal. Pressurized Water, Pumper NFPA 2016, Provided by Fire Dept	1
420	0602679		Axe, Flathead, Pumper NFPA 2016 Classification, Provided by Fire Department	1
421	0602667		Axe, Pickhead, Pumper NFPA 2016 Classification, Provided by Fire Department	1
422	0741569		Paint Process / Environmental Requirements, Appleton	1
423	0709566		Paint, Two-Tone Color, Enforcer	1
			Paint Color, Upper Area, Predefined - #101 Black	
			Shield, Cab - Deep Shield - Enforcer	

Line	Option	Type	Option Description	Qty
423			Paint Color, Lower Area, Predefined - #90 Red	
			Paint Break, Cab - Standard Two-Tone Cab Break	
424	0709845		Paint, Single Color, Body	1
			Paint, Body - Match Lower Cab	
425	0646901		Paint Chassis Frame Assy, With Liner, E-Coat, Standard	1
			Paint Color, Frame Assembly, Predefined - Gloss Black	
426	0693797		No Paint Required, Aluminum Front Wheels	1
427	0687653		Paint, Rear Wheels, Single Axle, Alum-Stl	1
			Paint, Wheels - Black #101	
428	0733739		Paint, Axle Hubs	1
			Paint, Axle Hub - Lower Job Color	
429	0007230		Compartment, Painted, Spatter Gray	1
430	0664968	SP	Reflective Band, 1"- .50"- 4"- .50"- 1", No Gap	1
			Color, Reflect Band - A - e) black	
			Color, Reflective - e) black	
			Color, Reflect Band - B - p) black	
			Color, Reflect Band - C - ze) gold	
			Color, Reflect Band - D - gold	
431	0007356		Reflective across Cab Face	1
432	0536954		Stripe, Chevron, Rear, Diamond Grade, Pumper	1
			Color, Rear Chevron DG - fluorescent yellow green	
433	0027341		Jog, In Reflective Stripe, Single or Multiple	1
			Qty, - 1	
434	0567374		Stripe, Black Outline each Chevron Stripe @ Rear (Not Warranted)	1
435	0547458		Reverse Cut Reflective, Cab Doors Interior	1
			Color, Reflect Band - A - e) black	
436	0680371		Stripe, Gold Leaf, Two-Tone Paint Break with Shield, IPO Chrome Molding	1
437	0010197		Stripe, Gold Leaf, Side of Cab, Over Fender Only	1
438	0027372		Lettering Specifications, (GOLD STAR Process)	1
439	0686428		Lettering, Gold Leaf, 3.00", (41-60)	1
			Outline, Lettering - Outline and Shade	
440	0017773		Stripe, Gold Leaf, Side of Body, Over Fender Only, Single Axle	1
441	0686236		Lettering, Gold Leaf, 5.00", Each	4
			Qty, Lettering - 04	
			Outline, Lettering - Outline and Shade	
442	0686084		Lettering, Reflective, 3.00", Each	6
			Qty, Lettering - 06	
			Outline, Lettering - Outline and Shade	
443	0686018		Lettering, Reflective, 5.00", Each	2
			Qty, Lettering - 02	
			Outline, Lettering - Outline	
444	0686288		Lettering, Gold Leaf, 3.00", Each	5
			Qty, Lettering - 05	
			Outline, Lettering - Outline and Shade	
445	0686215		Lettering, Gold Leaf, 8.00", Each	18
			Qty, Lettering - 18	
			Outline, Lettering - Outline and Shade	
446	0686002		Lettering, Reflective, 8.00", Each	3
			Qty, Lettering - 03	
			Outline, Lettering - Outline and Shade	
447	0611716	SP	Plate, Painted Smooth Aluminum Panel, on H.S.H. Trough, for Graphics/Lettering	1
			Location - Passenger side hard suction hose trough	
			Qty, - 1	
448	0522815		Emblem, American Flag, Waving, Gerber Vision, Pair	1
			Location, Emblem - upper crew cab door windows	
449	0017273		Emblem, Maltese Cross, Gold Leaf, 12"-14", Pair	1
			Qty, - 01	
			Location, Emblem - behind crew cab doors (up high) - Fluvanna seal	
450	0772003		Manual, Fire Apparatus Parts, USB Flash Drive, Custom	1
			Qty, - 01	
451	0772037		Manual, Chassis Service, USB Flash Drive, Custom	1
			Qty, - 01	
452	0773381		Manual, Chassis Operation, (1) USB Flash Drive, Custom	1

Line	Option	Type	Option Description	Qty
453	0030008		Warranty, Basic, 1 Year, Apparatus, WA0008	1
454	0696698		Warranty, Engine, Cummins, 5 Year, WA0181	1
455	0684953		Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	1
456	0596017		Warranty, Frame, 50 Year, Custom Chassis, WA0013	1
457	0595698		Warranty, Axle, 3 Year, TAK-4, WA0050	1
458	0610485		Warranty, Axle, Eaton/Dana, 5 Year/100,000 Mile, Parts and Labor	1
459	0652758		Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	1
460	0019914		Warranty, Structure, 10 Year, Custom Cab, WA0012	1
461	0744240		Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	1
462	0524627		Warranty, Electronics, 5 Year, MUX, WA0014	1
463	0708760		Warranty, Not Applicable, LED Strip Lights	1
464	0046369		Warranty, 5-year EVS Transmission, Standard Custom, WA0187	1
465	0685945		Warranty, Transmission Cooler, WA0216	1
466	0688798		Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	1
467	0596025		Warranty, Structure, 10 Year, Body, WA0009	1
468	0693126		Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	1
469	0734463		Warranty, Pump, Waterous, 7 Year Parts, WA0382	1
470	0648675		Warranty, 10 Year S/S Pumbing, WA0035	1
471	0657990		Warranty, Foam System, Husky 3, WA0231	1
472	0725636		Warranty, Harrison Generator, 2 Year	1
473	0595820		Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	1
474	0595421		Warranty, Goldstar, 3 Year, Apparatus, WA0018	1
475	0683627		Certification, Vehicle Stability, CD0156	1
476	0736238		Certification, Engine Installation, Saber FR/Enf, Cummins L9, 2021	1
477	0686786		Certification, Power Steering, CD0098	1
478	0631980		Certification, Cab Integrity, Saber FR/Enforcer, CD0130	1
479	0631973		Certification, Cab Door Durability, Saber FR/Enforcer, CD0137	1
480	0631978		Certification, Windshield Wiper Durability, Saber FR/Enforcer, CD0132	1
481	0631974		Certification, Electric Window Durability, Saber FR/Enforcer, CD0133	1
482	0631977		Certification, Seat Belt Anchors and Mounting, Saber FR/Enforcer, CD0134	1
483	0735949		Certification, Cab HVAC System Performance, SFR/Enf, CD0165/CD0167/CD0174/CD0175	1
484	0545073		Amp Draw Report, NFPA Current Edition	1
485	0002758		Amp Draw, NFPA/ULC Radio Allowance	1
486	0799248		Appleton/Florida BTO	1
487	0000018		PUMPER, 2ND GEN	1
488	0000012		PIERCE CHASSIS	1
489	0004713		ENGINE, OTHER	1
490	0046395		EVS 3000 Series TRANSMISSION	1
491	0020011		WATEROUS PUMP	1
492	0020009		POLY TANK	1
493	0028048		FOAM SYSTEM	1
494	0020006		SIDE CONTROL	1
495	0020007		AKRON VALVES	1
496	0020014		FRONT SUCTION	1
497	0020015		ABS SYSTEM	1
498	0658751		PUMPER BASE	1

Atlantic Emergency Solutions is pleased to submit a proposal to Fork Union Volunteer Fire Company for a **Pierce® triple combination pumper** per your request for quotation. The following paragraphs will describe in detail the apparatus, construction methods, and equipment proposed. This proposal will indicate size, type, model and make of components parts and equipment, providing proof of compliance with each and every item (except where noted) in the departments advertised specifications.

PIERCE MANUFACTURING was founded in 1913. Since then we have been building bodies with one philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 75 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 62,500 apparatus, including more than 33,900 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 870,000 total square feet of floor space situated on approximately 105 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land.

Our beliefs in high ethical standards are carried through in all of our commitments and to everyone with whom we do business. Honesty, Integrity, Accountability and Citizenship are global tenets by which we all live and work. Consequently, we neither engage in, nor have we ever been convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

Pierce has only one brand of fire apparatus "Pierce", ensuring you are receiving top of the line product that meets your specification.

In accordance with the current edition of NFPA 1901 standards, this proposal will specify whether the fire department, manufacturer, or apparatus dealership will provide required loose equipment.

Images and illustrative material in this proposal are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.

GENERAL DESIGN AND CONSTRUCTION

To control quality, ensure compatibility, and provide a single source for service and warranty, the custom cab, chassis, pump module and body will be entirely designed, assembled/welded and painted in Pierce owned manufacturing facilities. This includes, but not limited to the cab weldment, the pumphouse module assembly, the chassis assembly, the body and the electrical system.

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American welding Society B2.1-2000 requirements for structural welding of sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American Welding Society standards A5.20-E70T1. Furthermore, all employees classified as welders are tested

and certified to meet the American welding Society codes upon hire and every three (3) years thereafter. Pierce also employs an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal.

In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to insure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

To demonstrate the quality of our products and services, a list of at least twenty (20) fire departments/municipalities that have purchased vehicles for a second time is provided.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty. A qualified delivery representative shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered.

MANUAL AND SERVICE INFORMATION

At time of delivery, complete operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery Pierce will also provide one (1) 39-minute, professionally produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, pump operation, aerial operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle. The apparatus will meet NFPA 1901 acceleration and braking requirements.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Atlantic Emergency Solutions by operating a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within fifty (50) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operators manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24 hour 7 day a week toll free hot line, four (4) on staff EVTs, and offers hands-on repair and maintenance training classes multiple times a year.

LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

INSURANCE PROVIDED BY BIDDER

COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Personal and Advertising Injury\$1,000,000

General Aggregate\$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form:

Each Accident Combined Single Limit:\$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate:\$3,000,000

Each Occurrence:\$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

INSURANCE PROVIDED BY MANUFACTURER**PRODUCT LIABILITY INSURANCE**

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when required by written contract between the Owner and a Pierce authorized dealer.

UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence:\$25,000,000

Aggregate:\$25,000,000

The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.

SINGLE SOURCE MANUFACTURER

Pierce Manufacturing, Inc. provides an integrated approach to the design and manufacture of our products that delivers superior apparatus and a dedicated support team. From our facilities, the chassis, cab weldment, cab, pumphouse (including the sheet metal enclosure, valve controls, piping and operators panel) and body will be entirely designed, tested, and hand assembled to the customer's exact specifications. The electrical system either hardwired or multiplexed, will be both designed and integrated by Pierce Manufacturing. The warranties relative to these major components (excluding component warranties such as engine, transmission, axles, pump, etc.) will be provided by Pierce as a single source manufacturer. Pierce's single source solution adds value by providing a fully engineered product that offers durability, reliability, maintainability, performance, and a high level of quality.

Your apparatus will be manufactured in Appleton, Wisconsin.

NFPA 2016 STANDARDS

This unit will comply with the NFPA standards effective January 1, 2016, except for fire department directed exceptions. These exceptions will be set forth in the Statement of Exceptions.

Certification of slip resistance of all stepping, standing and walking surfaces will be supplied with delivery of the apparatus.

All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are

shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA".

VEHICLE INSPECTION PROGRAM CERTIFICATION

To assure the vehicle is built to current NFPA standards, the apparatus, in its entirety, will be third-party, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition of NFPA 1901. The certification will include: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus.

A placard will be affixed in the driver's side area stating the third party agency, the date, the standard and the certificate number of the whole vehicle audit.

PUMP TEST

Underwriters Laboratory (UL) will test, approve, and certify the pump. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the pump manufacturer's record of pump construction details will be forwarded to the Fire Department.

GENERATOR TEST

If the unit has a generator, Underwriters Laboratory (UL) will test, approve, and certify the generator. The test results will be provided to the Fire Department at the time of delivery.

BREATHING AIR TEST

If the unit has breathing air, Pierce Manufacturing will draw an air sample from the air system and have the sample certified that the air quality meets the requirements of NFPA 1989, *Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection*.

AFTERMARKET SUPPORT WEBSITE

Pierceparts.com will provide Pierce authorized dealer access to comprehensive information pertaining to the maintenance and service of their customer's apparatus. This tool will provide the Pierce

authorized dealer the ability to service and support their customers to the best of their ability with factory support at their fingertips.

Pierceparts.com is also accessible to the end user through the guest login. Limited access is available and vehicle specific parts information accessible by entering a specific VIN number. All end users should see their local authorized Pierce dealer for additional support and service.

The website will consist of the following screens at the dealer level:

My Fleet Screen

The My Fleet screen will provide access to truck detail information on the major components of the vehicle, warranty information, available vehicle photographs, vehicle drawings, sales options, applicable vehicle software downloads, etc.

Parts Screens

The Parts screens will provide parts look-up capability of Pierce Manufacturing sourced items, with the aid of digital photographs, part drawings and assembly drawings. The parts search application will permit the searching of parts by item description or function group (major system category). The parts application will provide the ability to submit electronically a parts order, parts quote, or parts return request directly to Pierce Manufacturing for processing.

Warranty Screen

The Warranty screens will provide dealers the ability to submit electronically warranty claims directly to Pierce Manufacturing for reimbursement.

My Reports Screens

The My Reports screens will provide access to multiple dealer reports to allow the dealership to maintain communication with the customer on the status of orders, claims, and phone contacts.

Technical Support Screens

The Technical Support screens will provide access to all currently published Operation and Maintenance and Service Publications. Access to Pierce Manufacturing Service Bulletins and Work Instructions, containing information on current service topics and recommendations will be provided.

Training

The Training screens will provide access to upcoming training classes offered by Pierce Manufacturing along with interactive electronic learning modules (Operators Guides) covering the operation of major vehicle components will be provided. Access to training manuals used in Pierce Manufacturing training classes will be provided.

About Pierce

Access to customer service articles, corporate news, quarterly newsletters, and key contacts within the Customer Service Department will be provided. The current Customer Service Policy and Procedure Manual, detailing the operation of the Customer Service group will also be accessible.

BID BOND

A bid bond as security for the bid in the form of a 10% bid bond will be provided with the proposal. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language which assures that the bidder/principal will give a bond or bonds, as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract.

Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.

PERFORMANCE BOND NOT REQUESTED

A performance bond will not be included. If requested at a later date, one will be provided to you for an additional cost and the following will apply:

The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required.

Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Bumper to Bumper warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed three (3) years from the date of such satisfactory acceptance and delivery, or the actual Bumper to Bumper warranty period, whichever is shorter.

APPROVAL DRAWING

A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This

drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.

A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the model of chassis and body, will be provided.

ENFORCER CHASSIS

The Pierce Enforcer™ is the custom chassis developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire apparatus. The chassis will be manufactured in the apparatus body builder's facility eliminating any split responsibility. The chassis will be designed and manufactured for heavy-duty service, with adequate strength, capacity for the intended load to be sustained, and the type of service required. The chassis will be the manufacturer's first line tilt cab.

WHEELBASE

The wheelbase of the vehicle will be 197".

GVW RATING

The gross vehicle weight rating will be 50,000 lbs.

FRAME

The chassis frame will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus. The side rails will be heat-treated steel measuring 10.25" x 3.50" x 0.375".

Each rail will have a section modulus of 16.00 cubic inches, yield strength of 120,000 psi, and a resisting bending moment (rbm) of 1,921,069 inch-pounds.

FRAME REINFORCEMENT

A full-length mainframe "C" liner will be provided.

The liner will be an internal "C" design, heat-treated steel measuring 9.38" x 3.13" x 0.25". Each reinforcement member will have a section modulus of 3.90 cubic inches, yield strength of 120,000 psi and resisting bending moment (rbm) of 938,762 in-lb.

FRONT NON DRIVE AXLE

The Oshkosh TAK-4® front axle will be of the independent suspension design with a ground rating of 22,800 lb.

Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron.

The center cross members and side plates will be constructed out of 80,000-psi yield strength steel.

Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations.

There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension.

The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load.

Camber at load will be zero degrees for optimum tire life.

The ball joint bearing shall be of low friction design and be maintenance free.

Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided.

The wheel ends will have little to no bump steer when the chassis encounters a hole or obstacle.

The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase.

The axle will have a third party certified turning angle of 45 degrees. Front discharge, front suction, or aluminum wheels will not infringe on this cramp angle.

FRONT SUSPENSION

Front Oshkosh TAK-4™ independent suspension will be provided with a minimum ground rating of 22,800 lb.

The independent suspension system will be designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.

Each wheel will have torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension.

The suspension design will be such that there is at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.

The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side.

The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.

FRONT SHOCK ABSORBERS

KONI heavy-duty telescoping shock absorbers will be provided on the front suspension.

FRONT OIL SEALS

Oil seals with viewing window will be provided on the front axle.

FRONT TIRES

Front tires will be Goodyear 425/65R22.50 radials, 20 ply Armor Max MSA, rated for 22,800 lb maximum axle load and 68 mph maximum speed.

The tires will be mounted on Alcoa® 22.50" x 12.25" Dura-Bright® polished aluminum disc type wheels with a ten (10) stud, 11.25" bolt circle.

REAR AXLE

The rear axle will be a Dana, Model S30-190, single axle assembly with a capacity of 31,000 lb.

TOP SPEED OF VEHICLE

A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 65 MPH.

REAR SUSPENSION

The rear suspension will be Standens, semi-elliptical, 3.00" wide x 53.00" long, 12-leaf pack with a ground rating of 31,000 lbs. The spring hangers will be castings.

The two (2) top leaves will wrap the forward spring hanger pin, and the rear of the spring will be a slipper style end that will ride in a rear slipper hanger. To reduce bending stress due to acceleration and braking, the front eye will be a berlin eye that will place the front spring pin in the horizontal plane within the main leaf.

A steel encased rubber bushing will be used in the spring eye. The steel encased rubber bushing will be maintenance free and require no lubrication.

REAR OIL SEALS

Oil seals will be provided on the rear axle(s).

REAR TIRES

Rear tires will be four (4) Goodyear 315/80R22.50 radials with load range L, all position, G751 MSA , rated for 33,080 lb maximum axle load and 75 mph maximum speed.

The outside tires will be mounted on Alcoa® 22.50" x 9.00" polished aluminum, with Dura-Bright® finish, disc wheels with a ten (10) stud, 11.25" bolt circle.

The inside tires will be mounted on Accuride® 22.50" x 9.00" steel disc wheels with a ten (10) stud, 11.25" bolt circle.

An isolator will be provided between the steel and aluminum rims.

TIRE BALANCE

All tires will be balanced with Counteract balancing beads. The beads will be inserted into the tire and eliminate the need for wheel weights.

TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

FRONT HUB COVERS

Stainless steel hub covers will be provided on the front axle. An oil level viewing window will be provided.

REAR HUB COVERS

A pair of stainless steel high hat hub covers will be provided on rear axle hubs.

MUD FLAPS

Mud flaps with a Pierce logo will be installed behind the front and rear wheels.

AUTOMATIC TIRE CHAINS

One (1) pair of Rud 6-strand automatic tire chains will be provided at the rear axle. The system will be an electric-over-air type. A switch to engage/disengage the chains will be provided on the cab instrument panel. This system will be operable at speeds up to 35 mph.

SWITCH

There will be a locking rocker provided in place of the standard membrane switch for the automatic tire chains, which will prevent accidental actuation of the switch.

A separate red indicator light will be included.

WHEEL CHOCKS

There will be one (1) pair of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.

Wheel Chock Brackets

There will be one (1) pair of Zico, Model SQCH-44-H, horizontal mounting wheel chock brackets provided for the Ziamatic, Model SAC-44-E, folding wheel chocks. The brackets will be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets will be mounted one (1) forward and one (1) rearward of the left side rear tire.

ELECTRONIC STABILITY CONTROL

A vehicle control system will be provided as an integral part of the ABS brake system from Meritor Wabco.

The system will monitor and update the lateral acceleration of the vehicle and compare it to a critical threshold where a side roll event may occur. If the critical threshold is met, the vehicle control system will automatically reduce engine RPM, engage the engine retarder (if equipped), and selectively apply brakes to the individual wheel ends of the front and rear axles to reduce the possibility of a side roll event.

The system will monitor directional stability through a lateral accelerometer, steer angle sensor and yaw rate sensor. If spinout or drift out is detected, the vehicle control system will selectively apply brakes to the individual wheel ends of the front and rear axles to bring the vehicle back to its intended direction.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco 4S4M, anti-lock braking system. The ABS will provide a four (4) channel anti-lock braking control on both the front and rear wheels. A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any wheel begins to lockup, a signal will be sent to the control unit. This control unit will then reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

AUTOMATIC TRACTION CONTROL

An anti-slip feature will be included with the ABS. The Automatic Traction Control will be used for traction in poor road and weather conditions. The Automatic Traction Control will act as an electronic differential lock that will not allow a driving wheel to spin, thereby supplying traction at all times. The ABS electronic control unit (ECU) will work with the engine ECU, sharing information concerning wheel slip. Engine ECU will use information to control engine speed, allowing only as much throttle application as required for the available traction, regardless of how much the driver is asking for. An "off road traction" switch will be provided on the instrument panel. Activation of the switch will allow additional tire slip to let the truck climb out and get on top of deep snow or mud.

BRAKES

The service brake system will be full air type.

The front brakes will be Knorr/Bendix disc type with a 17.00" ventilated rotor for improved stopping distance.

The brake system will be certified, third party inspected, for improved stopping distance.

The rear brakes will be Bendix®, Model ES1657D, 16.50" x 7.00" cam operated with automatic slack adjusters.

BRAKE SYSTEM AIR COMPRESSOR

The air compressor will be a Cummins/WABCO with 18.7 cubic feet per minute output.

BRAKE SYSTEM

The brake system will include:

- Brake treadle valve

- Heated automatic moisture ejector on air dryer
- Total air system minimum capacity of 5,376 cubic inches
- Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi
- Spring set parking brake system
- Parking brake operated by a push-pull style control valve
- A parking "brake on" indicator light on instrument panel
- Park brake relay/inversion and anti-compounding valve, in conjunction with a double check valve system, with an automatic spring brake application at 40 psi
- A pressure protection valve to prevent all air operated accessories from drawing air from the air system when the system pressure drops below 80 psi (550 kPa)

The air tank will be polished aluminum.

To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.

BRAKE SYSTEM AIR DRYER

The air dryer will be a WABCO System Saver 1200 IWT, with internal wet tank, spin-on coalescing filter cartridge and 100 watt heater.

BRAKE LINES

Color-coded nylon brake lines will be provided. The lines will be wrapped in a heat protective loom in the chassis areas that are subject to excessive heat.

AIR INLET/OUTLET

One (1) air inlet/outlet will be installed with the female coupling located forward in the driver side lower step well of cab. This system will tie into the "wet" tank of the brake system and include a check valve in the inlet line and an 85 psi pressure protection valve in the outlet line. The air outlet will be controlled by a needle valve.

A mating male fitting will be provided with the loose equipment.

The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure.

AIR COMPRESSOR, BRAKE SYSTEM MAINTENANCE

A Kussmaul, Model 091-9B-1 air compressor will be provided. It will be driven by the 120 volt shoreline electrical system and will be located behind the driver's seat.

The compressor will maintain the air pressure in the chassis air brake system while the vehicle is not in use.

A pressure switch will sense when the system pressure drops and automatically start the compressor, which then will run until pressure is restored.

ENGINE

The chassis will be powered by an electronically controlled engine as described below:

Make:	Cummins
Model:	L9
Power:	450 hp at 2100 rpm
Torque:	1250 lb-ft at 1400 rpm
Governed Speed:	2200 rpm
Emissions Level:	EPA 2021
Fuel:	Diesel
Cylinders:	Six (6)
Displacement:	543 cubic inches (8.9L)
Starter:	Delco 39MT™
Fuel Filters:	Spin-on style primary filter with water separator and water-in-fuel sensor. Secondary spin-on style filter.

The engine will include On-board diagnostics (OBD), which provides self diagnostic and reporting. The system will give the owner or repair technician access to state of health information for various vehicle sub systems. The system will monitor vehicle systems, engine and after treatment. The system will illuminate a malfunction indicator light on the dash console if a problem is detected.

HIGH IDLE

A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation.

The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle."

ENGINE BRAKE

A Jacobs® engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver.

The driver will be able to turn the engine brake system on/off and have a high, medium and low setting.

The engine brake will activate when the system is on and the throttle is released.

The high setting of the brake application will activate and work simultaneously with the variable geometry turbo (VGT) provided on the engine.

The engine brake will be installed in such a manner that when the engine brake is slowing the vehicle the brake lights are activated.

The ABS system will automatically disengage the auxiliary braking device, when required.

CLUTCH FAN

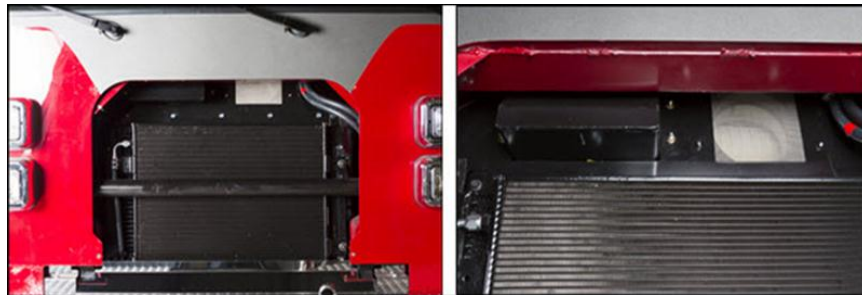
A fan clutch will be provided. The fan clutch will be automatic when the pump transmission is in "Road" position, and constantly engaged when in "Pump" position.

ENGINE AIR INTAKE

The engine air intake will be located above the engine cooling package. It will draw fresh air from the front of the apparatus through the radiator grille.

A stainless steel metal screen will be installed at the inlet of the air intake system that will meet NFPA 1901 requirements.

The air cleaner and stainless steel screen will be easily accessible by tilting the cab.



EXHAUST SYSTEM

The exhaust system will be stainless steel from the turbo to the engine's aftertreatment device, and will be 4.00" in diameter. The exhaust system will include a single module aftertreatment device to meet current EPA standards. An insulation wrap will be provided on all exhaust pipes between the turbo and aftertreatment device to minimize the heat loss to the aftertreatment device. The exhaust will terminate horizontally ahead of the right side rear wheels. A tailpipe diffuser will be provided to reduce the temperature of the exhaust as it exits. Heat deflector shields will be provided to isolate chassis and body components from the heat of the tailpipe diffuser.

RADIATOR

The radiator and the complete cooling system will meet or exceed NFPA and engine manufacturer cooling system standards.

For maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The radiator core will consist of aluminum fins, having a serpentine design, brazed to aluminum tubes.

The radiator core will have a minimum front area of 1060 square inches.

Supply tank will be made of heavy duty glass-reinforced nylon and the return tank will be made of aluminum. Both tanks will be crimped onto the core assembly using header tabs and a compression gasket to complete the radiator core assembly. There will be a full steel frame around the inserts to enhance cooling system durability and reliability.

The radiator will be compatible with commercial antifreeze solutions.

The radiator assembly will be isolated from the chassis frame rails with rubber isolators to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven terrain.

The radiator will include a de-aeration/expansion tank. For visual coolant level inspection, the radiator will have a built-in sight glass. The radiator will be equipped with a 15 psi pressure relief cap.

A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.

Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.

COOLANT LINES

Gates, or Goodyear, rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing.

Hose clamps will be stainless steel constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 75 gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of 12-gauge, hot rolled steel. It will be equipped with swash partitions and a vent. To eliminate the effects of corrosion, the fuel tank will be mounted with stainless steel straps.

A .75" drain plug will be located in a low point of the tank for drainage.

A fill inlet will be located on the left hand side of the body and is covered with a hinged, spring loaded, stainless steel door that is marked "Ultra Low Sulfur - Diesel Fuel Only." The fuel door will be painted to match the chassis frame

A .50" diameter vent will be installed from tank top to just below fuel fill inlet.

The fuel tank will meet all FHWA 393.67 requirements including a fill capacity of 95 percent of tank volume.

All fuel lines will be provided as recommended by the engine manufacturer.

DIESEL EXHAUST FLUID TANK

A 4.5 gallon diesel exhaust fluid (DEF) tank will be provided and mounted in the driver's side body rearward of the rear axle.

A 0.50" drain plug will be provided in a low point of the tank for drainage.

A fill inlet will be provided and marked "Diesel Exhaust Fluid Only". The fill inlet will be located adjacent to the engine fuel inlet behind a common hinged, spring loaded, polished stainless steel door on the driver side of the vehicle.

The tank will meet the engine manufacturers requirement for 10 percent expansion space in the event of tank freezing.

The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

FUEL PRIMING PUMP

A Cummins automatic electronic fuel priming pump will be integrated as part of the engine.

FUEL SHUTOFF

A fuel line shutoff valve will be installed on both the inlet and outlet of the primary fuel filter.

TRANSMISSION

An Allison 5th generation, Model EVS 3000P, electronic torque converting automatic transmission will be provided.

The transmission will be equipped with prognostics to monitor oil life, filter life, and transmission health. A wrench icon on the shift selector's digital display will indicate when service is due.

Two (2) PTO openings will be located on both sides of converter housing (positions 4 o'clock and 8 o'clock) as viewed from the rear.

A transmission temperature gauge with red light and audible alarm will be installed on the cab dash.

TRANSMISSION SHIFTER

A five (5)-speed push button shift module will be mounted to right of driver on console. Shift position indicator will be indirectly lit for after dark operation.

The transmission ratio will be:

1st	3.49 to 1.00
2nd	1.86 to 1.00
3rd	1.41 to 1.00
4th	1.00 to 1.00
5th	0.75 to 1.00
R	5.03 to 1.00

TRANSMISSION COOLER

A Modine plate and fin transmission oil cooler will be provided using engine coolant to control the transmission oil temperature.

TRANSMISSION PROGRAMMING

The transmission will be programmed to automatically shift the transmission to neutral when the parking brake is set to simplify operation and increase operational safety.

DRIVELINE

Drivelines will be a heavy-duty metal tube and be equipped with Spicer® 1710 universal joints.

The shafts will be dynamically balanced before installation.

A splined slip joint will be provided in each driveshaft where the driveline design requires it. The slip joint will be coated with Glidecoat® or equivalent.

STEERING

Dual Sheppard, Model M110, steering gears, with integral heavy-duty power steering, will be provided. For reduced system temperatures, the power steering will incorporate an air to oil cooler and an Eaton, Model VN20, hydraulic pump with integral pressure and flow control. All power steering lines will have wire braded lines with crimped fittings.

A tilt and telescopic steering column will be provided to improve fit for a broader range of driver configurations.

STEERING WHEEL

The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.

LOGO AND CUSTOMER DESIGNATION ON DASH

The dash panel will have an emblem containing the Pierce logo and customer name. The emblem will have three (3) rows of text for the customer's department name. There will be a maximum of eight (8) characters in the first row, 11 characters in the second row and 11 characters in the third row.

The first row of text will be: Fork Union

The second row of text will be: Volunteer Fire Co.

The third row of text will be: *

WINCH WITH SYNTHETIC ROPE

A Warn, model XD9000i multi-mount, 9,000 pound portable 12V electric winch will be provided.

The winch will mount to the vehicle receiver hitch and be held in place with a locking hardened pin. A heavy gauge wire and electrical plug will be provided for quick connection to the vehicle electrical system.

The winch will be provided with 100 feet of Warn nylon reinforced synthetic rope with a replaceable clevis hook.

Winch will have a minimum of a 30' remote control cable.

BUMPER

A one (1) piece, ten (10) gauge, 304-2B type polished stainless steel bumper, a minimum of 10.00" high, will be attached to a bolted modular extension frame constructed of 50,000 psi tensile steel "C" channel mounted directly behind it to provide adequate support strength.

The bumper will be extended 22.00" from front face of cab.

Gravel Pan

A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and cab face. The gravel pan will be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.

LEFT SIDE HOSE TRAY

A hose tray will be placed in the left side of the extended bumper.

The tray will have a capacity of 125' of 1.75" double jacket cotton-polyester hose.

Black rubber grating will be provided at the bottom of the tray. Drain holes will be provided.

Left Side Hose Tray Restraint

There will be one (1) hose tray restraint strap(s) located over the left side mounted tray.

Each restraint will be a 2.00" wide black nylon strap with seat belt buckle fasteners provided. The strap(s) will be used to secure the hose in the tray.

TOW EYES

Two (2) stainless steel tow eyes will be installed under the bumper and attached to the front frame members. The inner and outer edges of the tow eyes will have a .25" radius.

The tow eyes will extend down to contact the road surface before the bottom edge of the bumper.

The tow eyes will be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow eyes will not be used for lifting of the apparatus.

PORTABLE WINCH STORAGE WITH HINGED CENTER SECTION

A tray for a portable winch, constructed of aluminum, will be placed in the center of the bumper extension.

The tray will be enclosed to protect the winch from weather. A raised aluminum treadplate cover will be made as high as necessary to enclose the winch. The lower section of winch compartment will be enclosed, to prevent road salt, snow, and ice from entering the winch compartment.

Drain holes will be provided.

The center section of the bumper will be hinged at the bottom to allow access to the winch. Two (2) pawl latches will hold the center section in the closed position.

A portable winch receiver will be installed in the back of the tray. The winch receiver will be constructed of heavy steel tubing and reinforced to the bumper extension framework for the receiving portion. The receiver will have a 2.00" inside dimension, with a maximum weight rating of 9,000 pounds.

The assembly will be designed to allow the winch to be stored and used from the tray.

CAB

The Enforcer cab will be designed specifically for the fire service and manufactured by the chassis builder.

The cab will be built by the apparatus manufacturer in a facility located on the manufacturer's premises.

For reasons of structural integrity and enhanced occupant protection, the cab will be a heavy duty design, constructed to the following minimal standards.

The cab will have 12 main vertical structural members located in the A-pillar (front cab corner posts), B-pillar (side center posts), C-pillar (rear corner posts), and rear wall areas. The A-pillar will be constructed of solid A356-T5 aluminum castings. The B-pillar and C-pillar will be constructed from 0.13" wall extrusions. The rear wall will be constructed of two (2) 2.00" x 2.00" outer aluminum extrusions and two (2) 2.00" x 1.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 4.625" x 3.864" x 0.090" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.25" thick corner casting at each of the front corners of the roof assembly.

The front of the cab will be constructed of a 0.13" firewall plate, covered with a 0.090" front skin (for a total thickness of 0.22"), and reinforced with a full width x 0.50" thick cross-cab support located just below the windshield and fully welded to the engine tunnel. The cross-cab support will run the full width of the cab and weld to each A-pillar, the 0.13" firewall plate, and the front skin.

The cab floors will be constructed of 0.125" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.375" of structural material at the front floor area. The front floor area will also be supported with two (2) triangular 0.30" wall extrusions that also provides the mounting point for the cab lift. This tubing will run from the floor wireway of the cab to the engine tunnel side plates, creating the structure to support the forces created when lifting the cab.

The cab will be 96.00" wide (outside door skin to outside door skin) to maintain maximum maneuverability.

The forward cab section will have an overall height (from the cab roof to the ground) of approximately 99.00". The crew cab section will have a 10.00" raised roof, with an overall cab height of approximately 109.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight rating, the smallest diameter tires for the suspension, no water weight, no loose equipment weight, and no personnel weight. Larger tires, wheels, and suspension will increase the overall height listed.

The floor to ceiling height inside the crew cab will be 64.50" in the center and outboard positions.

The crew cab floor will measure 46.00" from the rear wall to the back side of the rear facing seat risers.

The medium block engine tunnel, at the rearward highest point (knee level), will measure 61.50" to the rear wall. The big block engine tunnel will measure 51.50" to the rear wall.

The crew cab will be a totally enclosed design with the interior area completely open to improve visibility and verbal communication between the occupants.

The cab will be a full tilt cab style.

A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.

CAB ROOF DRIP RAIL

For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be painted to match the cab roof, and bonded to the sides of the cab. The drip rail will extend the full length of the cab roof.

INTERIOR CAB INSULATION

The cab will include 1.00" insulation in the ceiling, 1.50" insulation in the side walls, and 2.00" insulation in the rear wall to maximize acoustic absorption and thermal insulation.

FENDER LINERS

Full circular inner fender liners in the wheel wells will be provided.

PANORAMIC WINDSHIELD

A one (1)-piece safety glass windshield will be provided with over 2,775 square inches of clear viewing area. The windshield will be full width and will provide the occupants with a panoramic view. The windshield will consist of three (3) layers: outer light, middle safety laminate, and inner light. The outer light layer will provide superior chip resistance. The middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage. The inner light will provide yet another chip resistant layer. The cab windshield will be bonded to the aluminum windshield frame using a urethane adhesive. A custom frit pattern will be applied on the outside perimeter of the windshield for a finished automotive appearance.



WINDSHIELD WIPERS

Three (3) electric windshield wipers with washer will be provided that meet FMVSS and SAE requirements.

The washer reservoir will be able to be filled without raising the cab.





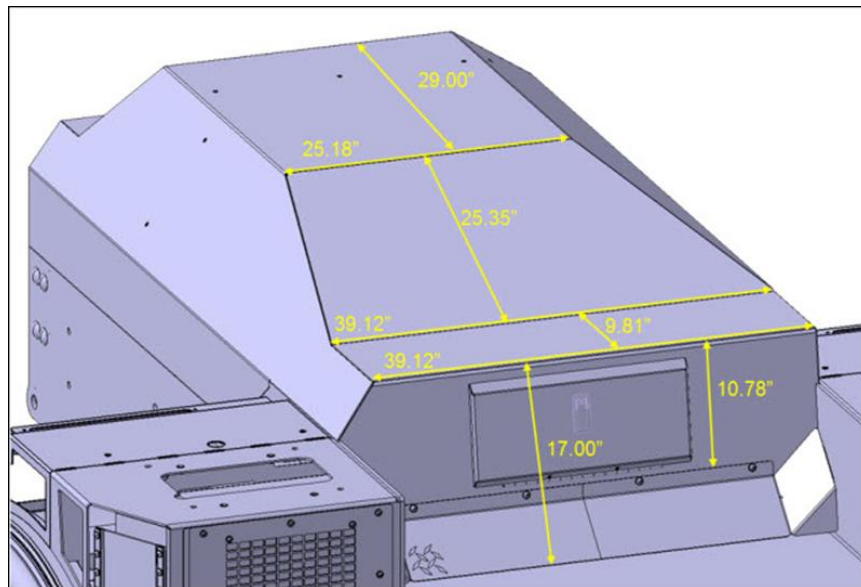
[Washer Reservoir Location]

ENGINE TUNNEL

Engine hood side walls will be constructed of 0.375" aluminum. The top will be constructed of 0.125" aluminum and will be tapered at the top to allow for more driver and passenger elbow room.

The engine hood will be insulated for protection from heat and sound. The noise insulation keeps the dBA level within the limits stated in the current NFPA 1901 standards.

The engine tunnel will be no higher than 17.00" off the crew cab floor.



INTERIOR CREW CAB REAR WALL ADJUSTABLE SEATING (PATENT PENDING)

The interior rear wall of the crew cab will have mounting holes every 2.75" to allow for adjustability of the forward facing crew cab seating along the rear wall. Seats will be adjustable with use of simple hand tools allowing departments flexibility of their seating arrangement should their department needs change.



CAB REAR WALL EXTERIOR COVERING

The exterior surface of the rear wall of the cab will be overlaid with bright aluminum treadplate except for areas that are not typically visible when the cab is lowered.

CAB LIFT

A hydraulic cab lift system will be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves.

Hydraulic pump will have a manual override for backup in the event of electrical failure.

Lift controls will be located on the right side pump panel or front area of the body in a convenient location.

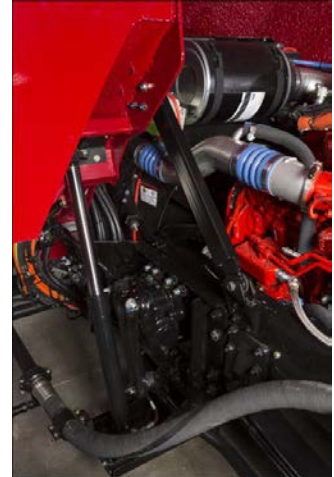
The cab will be capable of tilting 43 degrees to accommodate engine maintenance and removal.



The cab will be locked down by a 2-point normally closed spring loaded hook type latch that fully engages after the cab has been lowered. The system will be hydraulically actuated to release the normally closed locks when the cab lift control is in the raised position and cab lift system is under pressure. When the cab is completely lowered and system pressure has been relieved, the spring loaded latch mechanisms will return to the normally closed and locked position.

The hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the control is located in the tilt position.

For increased safety, a redundant mechanical stay arm will be provided that must be manually put in place on the left side between the chassis and cab frame when the cab is in the raised position. This device will be manually stowed to its original position before the cab can be lowered.



Cab Lift Interlock

The cab lift system will be interlocked to the parking brake. The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position. If the parking brake is released, the cab tilt mechanism will be disabled.

GRILLE

A bright finished aluminum mesh grille screen, inserted behind a bright finished grille surround, will be provided on the front center of the cab.

DOOR JAMB SCUFFPLATES

All cab door jambs will be furnished with a polished stainless steel scuffplate, mounted on the striker side of the jamb.

MIRRORS

A Retractable, Model 613423, dual vision, motorized, west coast style mirror, with chrome finish, will be mounted on each side of the front cab door with spring loaded retractable arms. The flat glass and convex glass will be heated and adjustable with remote control within reach of the driver.

DOORS

To enhance entry and egress to the cab, the forward cab door openings will be a minimum of 37.50" wide x 63.37" high. The crew cab doors will be located on the sides of the cab and will be constructed in the same manner as the forward cab doors. The crew cab door openings will be a minimum of 34.30" wide x 73.25" high.

The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.093". The exterior door skins will be constructed from 0.090" aluminum.

A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The finish of the door handle shall be chrome/black. The exterior handle will be designed specifically

for the fire service to prevent accidental activation, and will provide 4.00" wide x 2.00" deep hand clearance for ease of use with heavy gloved hands.



[Exterior Door Handle]

Each door will also be provided with an interior flush, open style paddle handle that will be readily operable from fore and aft positions, and be designed to prevent accidental activation. The interior handles will provide 4.00" wide x 1.25" deep hand clearance for ease of use with heavy gloved hands.

The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks exceeding FMVSS standards. The keys will be Model 751. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed.



[Interior Door Handle]

A full length, heavy duty, stainless steel, piano-type hinge with a 0.38" pin and 11 gauge leaf will be provided on all cab doors. There will be double automotive-type rubber seals around the perimeter of the door framing and door edges to ensure a weather-tight fit.

A chrome grab handle will be provided on the inside of each cab door for ease of entry.

A red webbed grab handle will be installed on the crew cab door stop strap. The grab handles will be securely mounted.

The bottom cab step at each cab door location will be located below the cab doors and will be exposed to the exterior of the cab.

Door Panels

The inner cab door panels will be constructed out of brushed stainless steel.

ELECTRIC OPERATED CAB DOOR WINDOWS

All four (4) cab doors will be equipped with electric operated windows with one (1) flush mounted automotive style switch on each door. The driver's door will have four (4) switches, one (1) to control each door window.

Each switch will allow intermittent or auto down operation for ease of use. Auto down operation will be actuated by holding the window down switch for approximately 1 second.

CAB STEPS

The forward cab and crew cab access steps will be a full size two (2) step design to provide largest possible stepping surfaces for safe ingress and egress. The bottom steps will be designed with a grip pattern punched into bright aluminum treadplate material to provide support, slip resistance, and drainage. The bottom steps will be a bolt-in design to minimize repair costs should they need to be replaced. The forward cab steps will be a minimum 25.00" wide, and the crew cab steps will be 21.65" wide with a 10.00" minimum depth. The inside cab steps will not exceed 16.50" in height.

The vertical surfaces of the step well will be aluminum treadplate.

CAB EXTERIOR HANDRAILS

A 1.25" diameter slip-resistant, knurled aluminum handrail will be provided adjacent to each cab and crew cab door opening to assist during cab ingress and egress.



STEP LIGHTS

There will be six (6) white LED step lights with chrome housing installed for cab and crew cab access steps.

- One (1) light for the left access steps.
- Two (2) lights for the left side crew cab access steps.
- Two (2) lights for the right side crew cab access steps.
- One (1) light for the right side access step.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The lights will be activated when the battery switch is on and the adjacent door is opened.

FENDER CROWNS

Stainless steel fender crowns will be installed at the cab wheel openings.

CREW CAB WINDOWS

One (1) fixed window with tinted glass will be provided on each side of the cab, to the rear of the front cab door. The windows will be sized to enhance light penetration into the cab interior. The windows will measure 18.70" wide x 23.75" high.



CAB DASH

The driver side dash, switch panel located to the right of the driver, and center console will be an easily removable high impact resistant polymer cover.

The instrument gauge cluster will be surrounded with a high impact ABS plastic contoured to the same shape of the instrument gauge cluster.

The officer side dash will be a flat top design with an upper beveled edge to provide easy maintenance and will be constructed out of aluminum and painted to match the cab interior.

CAB INTERIOR

The cab interior will be constructed of primarily metal (painted aluminum) to withstand the severe duty cycles of the fire service.

The engine tunnel will be padded and covered, on the top and sides, with dark silver gray 36 ounce leather grain vinyl resistant to oil, grease, and mildew.

For durability and ease of maintenance, the cab interior side walls will be painted aluminum. The rear wall will be painted aluminum.

The headliner will be installed in both forward and rear cab sections. Headliner material will be vinyl. A sound barrier will be part of its composition. Material will be installed on an aluminum sheet and securely fastened to interior cab ceiling.

The forward portion of the cab headliner will permit easy access for service of electrical wiring or other maintenance needs.

All wiring will be placed in metal raceways.

CAB INTERIOR UPHOLSTERY

The cab interior upholstery will be 36 oz dark silver gray vinyl.

CAB INTERIOR PAINT

The cab interior metal surfaces, excluding the rear heater panels, will be painted fire smoke gray, vinyl texture paint.

The rear heater panels will be painted black, vinyl textured paint.

CAB FLOOR

The cab and crew cab floor areas will be covered with Polydamp™ acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler.

The top surface of the material has a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a 0.25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.

DEFROST/AIR CONDITIONING SYSTEM

A ceiling mounted combination heater, defroster and air conditioning system will be installed in the cab above the engine tunnel area.

Cab Defroster

A 54,000 BTU heater-defroster unit with 690 SCFM of air flow will be provided inside the cab. The heater-defrost will be installed in the forward portion of the cab ceiling. Air outlets will be strategically located in the cab header extrusion per the following:

- One (1) adjustable will be directed towards the left side cab window

- One (1) adjustable will be directed towards the right side cab window
- Six (6) fixed outlets will be directed at the windshield

The defroster will be capable of clearing 98 percent of the windshield and side glass when tested under conditions where the cab has been cold soaked at 0 degrees Fahrenheit for 10 hours, and a 2 ounce per square inch layer of frost/ice has been able to build up on the exterior windshield. The defroster system will meet or exceed SAE J382 requirements.

Cab/Crew Auxiliary Heater

There will be one (1) 31,000 BTU auxiliary heater with 560 SCFM of air flow provided in each outboard rear facing seat risers with a dual scroll blower. An aluminum plenum incorporated into the cab structure used to transfer heat to the forward positions.

Air Conditioning

A condenser will be a 59,644 BTU output that meets and exceeds the performance specification will be mounted on the radiator. Mounting the condenser below the cab or body would reduce the performance of the system and will not be acceptable.

The air conditioning system will be capable of cooling the average cab temperature from 100 degrees Fahrenheit to 75 degrees Fahrenheit at 50 percent relative humidity within 30 minutes. The cooling performance test will be run only after the cab has been heat soaked at 100 degrees Fahrenheit for a minimum of 4 hours.

The evaporator unit will be installed in the rear portion of the cab ceiling over the engine tunnel. The evaporator will include one (1) high performance heating core, one (1) high performance cooling core with (1) plenum directed to the front and one (1) plenum directed to the rear of the cab. The rear plenum will have a formed plastic cover.

The evaporator unit will have a 52,000 BTU at 690 SCFM rating that meets and exceeds the performance specifications.

Adjustable air outlets will be strategically located on the forward plenum cover per the following:

- Four (4) will be directed towards the seating position on the left side of the cab
- Four (4) will be directed towards the seating position on the right side of the cab

Adjustable air outlets will be strategically located on the rear plenum cover per the following:

- Minimum of five (5) will be directed towards crew cab area

A high efficiency particulate air (HEPA) filter will be included for the system. Access to the filter cover will be secured with four (4) screws.

The air conditioner refrigerant will be R-134A and will be installed by a certified technician.

CLIMATE CONTROL

An automotive style controller will be provided to control the heat and air conditioning system within the cab. The controller will have three (3) functional knobs for fan speed, temperature, and air flow distribution (front to rear) control.



The system will control the temperature of the cab and crew cab automatically by pushing the center of the fan speed control knob. Rotate the center temperature control knob to set the cab and crew cab temperature.

The AC system will be manually activated by pushing the center of the temperature control knob. Pushing the center of the air flow distribution knob will engage the AC for max defrost, setting the fan speeds to 100 percent and directing all air flow to the overhead forward position.

The system controller will be located within panel position #12.

Gravity Drain Tubes

Two (2) condensate drain tubes will be provided for the air conditioning evaporator. The drip pan will have two (2) drain tubes plumbed separately to allow for the condensate to exit the drip pan. No pumps will be provided.

SUN VISORS

Two (2) smoked Lexan™ sun visors will be provided. The sun visors will be located above the windshield with one (1) mounted on each side of the cab.

There will be a black plastic thumb latch provided to help secure each sun visor in the stowed position.

GRAB HANDLES

A black rubber covered grab handle will be mounted on the door post of the driver and officer's side cab door to assist in entering the cab. The grab handles will be securely mounted to the post area between the door and windshield.



ENGINE COMPARTMENT LIGHT

An engine compartment light will be installed under the engine hood, of which the switch is an integral part. Light will have a .125" diameter hole in its lens to prevent moisture retention.

ACCESS TO ENGINE DIPSTICKS

For access to the engine oil and transmission fluid dipsticks, there will be a door on the engine tunnel, inside the crew cab. The door will be on the rear wall of the engine tunnel, on the vertical surface.

The engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling.

The door will have a rubber seal for thermal and acoustic insulation. One (1) flush latch will be provided on the access door.



CAB SAFETY SYSTEM

The cab will be provided with a safety system designed to protect occupants in the event of a side roll or frontal impact, and will include the following:

- A supplemental restraint system (SRS) sensor will be installed on a structural cab member behind the instrument panel. The SRS sensor will perform real time diagnostics of all critical subsystems and will record sensory inputs immediately before and during a side roll or frontal impact event.
- A slave SRS sensor will be installed in the cab to provide capacity for eight (8) crew cab seating positions.
- A fault-indicating light will be provided on the vehicle's instrument panel allowing the driver to monitor the operational status of the SRS system.
- A driver side front air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3-point seat belt.
- A passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3-point seat belt.

- Air curtains will be provided in the outboard bolster of outboard seat backs to provide a cushion between occupant and the cab wall.
- Suspension seats will be provided with devices to retract them to the lowest travel position during a side roll or frontal impact event.
- Seat belts will be provided with pre-tensioners to remove slack from the seat belt during a side roll or frontal impact event.

FRONTAL IMPACT PROTECTION

The SRS system will provide protection during a frontal or oblique impact event. The system will activate when the vehicle decelerates at a predetermined G force known to cause injury to the occupants. The cab and chassis will have been subjected, via third party test facility, to a crash impact during frontal and oblique impact testing. Testing included all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspensions components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing provided configuration specific information used to optimize the timing for firing the safety restraint system. The sensor will activate the pyrotechnic devices when the correct crash algorithm, wave form, is detected.

The SRS system will deploy the following components in the event of a frontal or oblique impact event:

- Driver side front air bag
- Passenger side knee bolster air bag
- Air curtains mounted in the outboard bolster of outboard seat backs
- Suspension seats will be retracted to the lowest travel position
- Seat belts will be pre-tensioned to firmly hold the occupant in place

SIDE ROLL PROTECTION

The SRS system will provide protection during a fast or slow 90 degree roll to the side, in which the vehicle comes to rest on its side. The system will analyze the vehicle's angle and rate of roll to determine the optimal activation of the advanced occupant restraints.

The SRS system will deploy the following components in the event of a side roll:

- Air curtains mounted in the outboard bolster of outboard seat backs
- Suspension seats will be retracted to the lowest travel position
- Seat belts will be pre-tensioned to firmly hold the occupant in place

SEATING CAPACITY

The seating capacity in the cab will be six (6).

DRIVER SEAT

A seat will be provided in the cab for the driver. The seat design will be a cam action type, with air suspension. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel). The manual horizontal control will be a towel-bar style located below the forward part of the seat cushion. To provide flexibility for multiple driver configurations, the seat will have an adjustable reclining back. The seat back will be a high back style with side bolster pads for maximum

support. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt.

OFFICER SEAT

A seat will be provided in the cab for the passenger. The seat will be a cam action type, with air suspension. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated, this system will pretension the seat belt and then retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt.

REAR FACING DRIVER SIDE OUTBOARD SEAT

There will be one (1) rear facing seat provided at the driver side outboard position in the crew cab. For optimal comfort, the seat will be provided with 15.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seat will be furnished with a 3-point, shoulder type seat belt.

REAR FACING PASSENGER SIDE OUTBOARD SEAT

There will be one (1) rear facing seat provided at the passenger side outboard position in the crew cab. For optimal comfort, the seat will be provided with 15.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seat will be furnished with a 3-point, shoulder type seat belt.

FORWARD FACING LEFT SIDE CABINET

A forward facing cabinet will be provided in the crew cab located at the left side outboard position.

The cabinet will be 22.00" wide x 50.00" high x 16.25" deep with one (1) Amdor rollup door with white finish, locking with #751 key. The frame to frame opening of the cabinet will be 19.50" wide x 44.75" high. The minimum clear door opening will be 16.75" wide x 38.87" high.

CLEAR DOOR OPENINGS (F-F = Frame to Frame)					
AMDOR		GORTITE		ROM	
HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
Subtract 2.00" from F-F	Subtract 5.88" from F-F	Subtract 2.75" from F-F	Subtract 4.75" from F-F	Subtract 2.56" from F-F	Subtract 4.50" from F-F

The cabinet will include two (2) infinitely adjustable shelves with a 1.25" flanged down lipped painted to match the cab interior.

The cabinet will include no louvers.

The cabinet will be constructed of smooth aluminum and painted to match the cab interior.

CABINET LIGHT

There will be one (1) white Amdor LED strip light installed on the right side of the interior cabinet door opening. The lighting will be controlled by an automatic door switch.

FORWARD FACING CENTER SEATS

There will be two (2) forward facing seats provided at the center position in the crew cab. For optimal comfort, the seats will be provided with 15.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat backs will be an SCBA style with 90 degree back. The SCBA cavity will be adjustable from front to rear in 1.00" increments to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seats will be furnished with a 3-point, shoulder type seat belt.

FORWARD FACING RIGHT SIDE CABINET

A forward facing cabinet will be provided in the crew cab located at the right side outboard position.

The cabinet will be 22.00" wide x 50.00" high x 16.25" deep with one (1) Amdor rollup door with white finish, locking with #751 key. The frame to frame opening of the cabinet will be 19.50" wide x 44.75" high. The minimum clear door opening of the cabinet will be 16.75" wide x 38.87" high.

CLEAR DOOR OPENINGS (F-F = Frame to Frame)					
AMDOR		GORTITE		ROM	
HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
Subtract 2.00" from F-F	Subtract 5.88" from F-F	Subtract 2.75" from F-F	Subtract 4.75" from F-F	Subtract 2.56" from F-F	Subtract 4.50" from F-F

The cabinet will include two (2) infinitely adjustable shelves with a 1.25" up-turned lip painted to match the cab interior.

The cabinet will include no louvers.

The cabinet will be constructed of smooth aluminum, and painted to match the cab interior.

Cabinet Light

There will be one (1) white Amdor LED strip light installed on the left side of the interior cabinet door opening. The lighting will be controlled by an automatic door switch.

SEAT UPHOLSTERY

All seat upholstery will be leather grain 36 oz red vinyl resistant to oil, grease and mildew. The cab will have six (6) seating positions.

AIR BOTTLE HOLDERS

All SCBA type seats in the cab will have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket will include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back. For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp will constrain the SCBA bottle in the seat and will exceed the NFPA standard of 9G.

There will be a quantity of five (5) SCBA brackets.

SEAT BELTS

All cab and tiller cab (if applicable) seating positions will have red seat belts. To provide quick, easy use for occupants wearing bunker gear, the female buckle and seat belt webbing length will meet or exceed the current edition of NFPA 1901 and CAN/ULC - S515 standards.

The 3-point shoulder type seat belts will include height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter. The 3-point shoulder type seat belts will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

The 3-point shoulder type belts will also include the ReadyReach D-loop assembly to the shoulder belt system. The ReadyReach feature adds an extender arm to the D-loop location placing the D-loop in a closer, easier to reach location.

Any flip up seats will include a 3-point shoulder type belts only.

To ensure safe operation, the seats will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled.

HELMET STORAGE

Helmet storage will be located in a body compartment.

CAB DOME LIGHTS

There will be four (4) dual LED dome lights with black bezels provided. Two (2) lights will be mounted above the inside shoulder of the driver and officer and two (2) lights will be installed and located, one (1) on each side of the crew cab.

The color of the LED's will be red and white.

The white LED's will be controlled by the door switches and the lens switch.

The color LED's will be controlled by the lens switch.

In order to ensure exceptional illumination, each white LED dome light will provide a minimum of 10.1 foot-candles (fc) covering an entire 20.00" x 20.00" square seating position when mounted 40.00" above the seat.

PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.

The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.

CAB INSTRUMENTATION

The cab instrument panel include gauges, an LCD display, telltale indicator lamps, control switches, alarms, and a diagnostic panel. The function of the instrument panel controls and switches will be identified by a label adjacent to each item. Actuation of the headlight switch will illuminate the labels in

low light conditions. Telltale indicator lamps will not be illuminated unless necessary. The cab instruments and controls will be conveniently located within the forward cab section, forward of the driver. The gauge assembly and switch panels are designed to be removable for ease of service and low cost of ownership.

Gauges

The gauge panel will include the following ten (10) black faced gauges with black bezels to monitor vehicle performance:

- Voltmeter gauge (volts):
 - Low volts (11.8 VDC)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - High volts (15.5 VDC)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - Very low volts (11.3 VDC)
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
 - Very high volts (16.0 VDC)
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Engine Tachometer (RPM)
- Speedometer MPH (Major Scale), KM/H (Minor Scale)
- Fuel level gauge (Empty - Full in fractions):
 - Low fuel (1/8 full)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - Very low fuel (1/32 full)
 - Red caution indicator on the information center with steady alarm
 - Amber caution light on gauge assembly
- Engine Oil pressure Gauge (PSI):
 - Low oil pressure to activate engine warning lights and alarms
 - Red caution indicator on the information center with steady alarm
 - Amber caution light on gauge assembly
- Front Air Pressure Gauges (PSI):
 - Low air pressure to activate warning lights and alarm
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Rear Air Pressure Gauges (PSI):
 - Low air pressure to activate warning lights and alarm
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Transmission Oil Temperature Gauge (Fahrenheit):

- High transmission oil temperature activates warning lights and alarm
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Engine Coolant Temperature Gauge (Fahrenheit):
 - High engine temperature activates an engine warning light and alarms
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Diesel Exhaust Fluid Level Gauge (Empty - Full in fractions):
 - Low fluid (1/8 full)
 - Amber indicator light in gauge dial

All gauges will perform prove out at initial power-up to ensure proper performance.

Indicator Lamps

To promote safety, the following telltale indicator lamps will be located on the instrument panel in clear view of the driver. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols.

The following amber telltale lamps will be present:

- Low coolant
- Trac cntl (traction control) (where applicable)
- Check engine
- Check trans (check transmission)
- Aux brake overheat (Auxiliary brake overheat)
- Air rest (air restriction)
- Caution (triangle symbol)
- Water in fuel
- DPF (engine diesel particulate filter regeneration)
- Trailer ABS (where applicable)
- Wait to start (where applicable)
- HET (engine high exhaust temperature) (where applicable)
- ABS (antilock brake system)
- MIL (engine emissions system malfunction indicator lamp) (where applicable)
- Side roll fault (where applicable)
- Front air bag fault (where applicable)

The following red telltale lamps will be present:

- Warning (stop sign symbol)
- Seat belt
- Parking brake
- Stop engine
- Rack down

The following green telltale lamps will be provided:

- Left turn
- Right turn
- Battery on

The following blue telltale lamp will be provided:

- High beam

Alarms

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Audible pulsing tone caution alarm: A pulsing audible tone alarm (chime/chirp) will be provided whenever a caution message is present without a warning message being present.

Alarm silence: Any active audible alarm will be able to be silenced by holding the ignition switch at the top position for three (3) to five (5) seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm condition no longer exists. The intermittent chirp will act as a reminder to the operator that a caution or warning condition still exists. Any new warning or caution condition will enable the steady or pulsing tones respectively.

Indicator Lamp and Alarm Prove-Out

A system will be provided which automatically tests telltale indicator lights and alarms located on the cab instrument panel. Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

Control Switches

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver. All switches will have backlit labels for low light applications.

Headlight/Parking light switch: A three (3)-position maintained rocker switch will be provided. The first switch position will deactivate all parking and headlights. The second switch position will activate the parking lights. The third switch will activate the headlights.

Panel back lighting intensity control switch: A three (3)-position momentary rocker switch will be provided. Pressing the top half of the switch, "Panel Up" increases the panel back lighting intensity and pressing the bottom half of the switch, "Panel Down" decreases the panel back lighting intensity. Pressing the half or bottom half of the switch several times will allow back lighting intensity to be gradually varied from minimum to maximum intensity level for ease of use.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will turn off and deactivate vehicle ignition. The second switch position will activate vehicle ignition and will perform prove-out on the telltale indicators and alarms for 3 to 5 seconds after the switch is turned on. A green indicator lamp is activated with vehicle ignition. The third momentary position will temporarily silence all active cab alarms. An alarm "chirp" may continue as long as alarm

condition exists. Switching ignition to off position will terminate the alarm silence feature and reset function of cab alarm system.

Engine start switch: A two (2)-position momentary rocker switch will be provided. The first switch position is the default switch position. The second switch position will activate the vehicle's engine. The switch actuator is designed to prevent accidental activation.

Hazard switch will be provided on the instrument panel or on the steering column.

Heater, defroster, and air conditioning control panel.

Turn signal arm: A self-canceling turn signal with high beam headlight controls will be provided.

Windshield wiper control shall have high, low and intermittent modes.

Parking brake control: An air actuated push/pull park brake control valve will be provided.

Chassis horn control: Activation of the chassis horn control will be provided through the center of the steering wheel.

High idle engagement switch: A momentary rocker switch with integral indicator lamp will be provided. The switch will activate and deactivate the high idle function. The "OK To Engage High Idle" indicator lamp must be active for the high idle function to engage. A green indicator lamp integral to the high idle engagement switch will indicate when the high idle function is engaged.

"OK To Engage High Idle" indicator lamp: A green indicator light will be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement.

Emergency switching will be controlled by multiple individual warning light switches for various groups or areas of emergency warning lights. An Emergency Master switch provided on the instrument panel that enables or disables all individual warning light switches is included.

An additional "Emergency Master" button will be provided on the lower left hand corner of the gauge panel to allow convenient control of the "Emergency Master" system from inside the driver's door when standing on the ground.

Custom Switch Panels

The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to four (4) switch panels in the lower instrument console and up to six (6) switch panels in the overhead visor console. All switches have backlit labels for low light conditions.



Diagnostic Panel

A diagnostic panel will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow ABS systems to provide blink codes should a problem exist.

The diagnostic panel will include the following:

- Engine diagnostic port
- Transmission diagnostic port
- ABS diagnostic port
- Roll sensor diagnostic port
- Command Zone USB diagnostic port
- ABS diagnostic switch (blink codes flashed on ABS telltale indicator)
- Diesel particulate filter regeneration switch (where applicable)
- Diesel particulate filter regeneration inhibit switch (where applicable)

Cab LCD Display

A digital four (4)-row by 20-character dot matrix display will be integral to the gauge panel. The display will be capable of showing simple graphical images as well as text. The display will be split into three (3) sections. Each section will have a dedicated function. The upper left section will display the outside ambient temperature.

The upper right section will display the following, along with other configuration specific information:

- Odometer
- Trip mileage
- PTO hours
- Fuel consumption
- Engine hours

The bottom section will display INFO, CAUTION, and WARNING messages. Text messages will automatically activate to describe the cause of an audible caution or warning alarm. The LCD will be capable of displaying multiple text messages should more than one caution or warning condition exist.

AIR RESTRICTION INDICATOR

A high air restriction warning indicator light LCD message with amber warning indicator and audible alarm will be provided.

"DO NOT MOVE APPARATUS" INDICATOR

A flashing red indicator light, located in the driving compartment, will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On."

The same circuit that activates the Do Not Move Apparatus indicator will activate a steady tone alarm when the parking brake is released.

DO NOT MOVE TRUCK MESSAGES

Messages will be displayed on the Command Zone™, color display located within sight of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake disengaged).

The following messages will be displayed (where applicable):

- Do Not Move Truck
- DS Cab Door Open (Driver Side Cab Door Open)
- PS Cab Door Open (Passenger's Side Cab Door Open)
- DS Crew Cab Door Open (Driver Side Crew Cab Door Open)
- PS Crew Cab Door Open (Passenger's Side Crew Cab Door Open)
- DS Body Door Open (Driver Side Body Door Open)
- PS Body Door Open (Passenger's Side Body Door Open)
- Rear Body Door Open
- DS Ladder Rack Down (Driver Side Ladder Rack Down)
- PS Ladder Rack Down (Passenger Side Ladder Rack Down)

- Deck Gun Not Stowed
- Lt Tower Not Stowed (Light Tower Not Stowed)
- Fold Tank Not Stowed (Fold-A-Tank Not Stowed)
- Aerial Not Stowed (Aerial Device Not Stowed)
- Stabilizer Not Stowed
- Steps Not Stowed
- Handrail Not Stowed

Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved will be displayed as a caution message after the parking brake is disengaged.

SWITCH PANELS

The emergency light switch panel will have a master switch for ease of use plus individual switches for selective control. Each switch panel will contain eight (8) membrane-type switches each rated for one million (1,000,000) cycles. Panels containing less than eight (8) switch assignments will include non-functioning black appliques. The built-in switch panels will be located in the lower console or overhead console of the cab.

Additional switch panel(s) will be located in the overhead position(s) above the windshield or in designated locations on the lower instrument panel layout.

The switches will be membrane-type and also act as an integral indicator light. For quick, visual indication the entire surface of the switch will be illuminated white whenever back lighting is activated and illuminated green whenever the switch is active. An active illuminated switch will flash when interlock requirements are not met or device is actively being load managed. For ease of use, a two (2)-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch will be placed in the center of the switch. The label will allow light to pass through the letters for ease of use in low light conditions.

WIPER CONTROL

Wiper control will consist of a two (2)-speed windshield wiper control with intermittent feature and windshield washer controls.

The wipers will be interlocked to the parking brake. The wipers will terminate operation when the parking brake is set.

SPARE CIRCUIT

There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power
- The negative wire will be connected to ground
- Wires will be protected to 20 amps at 12 volts DC
- Power and ground will terminate in EMS compartment(s)

- Termination will be with a 10-place bus bar with screws and removable cover
- Wires will be sized to 125% of the protection

This circuit(s) may be load managed when the parking brake is set.

INFORMATION CENTER

An information center employing a 7.00" diagonal touch screen color LCD display will be encased in an ABS plastic housing.

The information center will have the following specifications:

- Operate in temperatures from -40 to 185 degrees Fahrenheit
- An Optical Gel will be placed between the LCD and protective lens
- Five weather resistant user interface switches
- Grey with black accents
- Sunlight Readable
- Linux operating system
- Minimum of 1000nits rated display
- Display can be changed to an available foreign language
- A LCD display integral to the cab gauge panel will be included as outlined in the cab instrumentation area.
- Programmed to read US Customary

General Screen Design

Where possible, background colors will be used to provide "At a Glance" vehicle information. If information provided on a screen is within acceptable limits, a green background will be used.

If a caution or warning situation arises the following will occur:

- An amber background/text color will indicate a caution condition
- A red background/text color will indicate a warning condition
- The information center will utilize an "Alert Center" to display text messages for audible alarm tones. The text messages will be written to identify the item(s) causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) have been resolved. The background color for the "Alert Center" will change to indicate the severity of the "warning" message. If a warning and a caution condition occur simultaneously, the red background color will be shown for all alert center messages.
- A label for each button will exist. The label will indicate the function for each active button for each screen. Buttons that are not utilized on specific screens will have a button label with no text or symbol.

Home/Transit Screen

This screen will display the following:

- Vehicle Mitigation (if equipped)

- Water Level (if the water level system includes compatible communications to the information center)
- Foam Level (if the foam level system includes compatible communications to the information center)
- Seat Belt Monitoring Screen
- Tire Pressure Monitoring (if equipped)
- Digital Speedometer
- Active Alarms

On Scene Screen

This screen will display the following and will be auto activated with pump engaged (if equipped):

- Battery Voltage
- Fuel
- Oil Pressure
- Coolant Temperature
- RPM
- Water Level (if equipped)
- Foam Level (if equipped)
- Foam Concentration (if equipped)
- Water Flow Rate (if equipped)
- Water Used (if equipped)
- Active Alarms

Virtual Buttons

There will be four (4) virtual switch panel screens that match the overhead and lower lighting and HVAC switch panels.

Page Screen

The page screen will display the following and allow the user to progress into other screens for further functionality:

- Diagnostics
 - Faults
 - Listed by order of occurrence
 - Allows to sort by system
 - Interlock
 - Throttle Interlocks
 - Pump Interlocks (if equipped)
 - Aerial Interlocks (if equipped)
 - PTO Interlocks (if equipped)
 - Load Manager
 - A list of items to be load managed will be provided. The list will provide a description of the load.

- The lower the priority numbers the earlier the device will be shed should a low voltage condition occur.
 - The screen will indicate if a load has been shed (disabled) or not shed.
 - "At a glance" color features are utilized on this screen.
- Systems
 - Command Zone
 - Module type and ID number
 - Module Version
 - Input or output number
 - Circuit number connected to that input or output
 - Status of the input or output
 - Power and Constant Current module diagnostic information
 - Foam (if equipped)
 - Pressure Controller (if equipped)
 - Generator Frequency (if equipped)
- Live Data
 - General Truck Data
- Maintenance
 - Engine oil and filter
 - Transmission oil and filter
 - Pump oil (if equipped)
 - Foam (if equipped)
 - Aerial (if equipped)
- Setup
 - Clock Setup
 - Date & Time
 - 12 or 24 hour format
 - Set time and date
 - Backlight
 - Daytime
 - Night time
 - Sensitivity
 - Unit Selection
 - Home Screen
 - Virtual Button Setup
 - On Scene Screen Setup
 - Configure Video Mode
 - Set Video Contrast
 - Set Video Color
 - Set Video Tint
- Do Not Move
 - The screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will be indicated
 - Driver Side Cab Door

- Passenger's Side Cab Door
- Driver Side Crew Cab Door
- Passenger's Side Crew Cab Door
- Driver Side Body Doors
- Passenger's Side Body Doors
- Rear Body Door(s)
- Ladder Rack (if applicable)
- Deck Gun (if applicable)
- Light Tower (if applicable)
- Hatch Door (if applicable)
- Stabilizers (if applicable)
- Steps (if applicable)
- Notifications
 - View Active Alarms
 - Shows a list of all active alarms including date and time of the occurrence is shown with each alarm
 - Silence Alarms - All alarms are silenced
- Timer Screen
- HVAC (if equipped)
- Tire Information (if equipped)
- Ascendant Set Up Confirmation (if equipped)

Button functions and button labels may change with each screen.

COLLISION MITIGATION

There will be a HAAS Alert®, Model HA5 Responder-to-Vehicle (R2V) collision avoidance system provided on the apparatus. The HA5 cellular transponder module will be installed behind the cab windshield, as high and near to the center as practical, to allow clear visibility to the sky. The module dimensions are 5.40" long x 2.70" wide x 1.30" high, and operating temperature range is -40 degree C to 85 degree C.

The transponder will be connected to the vehicle's emergency master circuit and battery direct power and ground.

While responding with emergency lights on, the HA5 transponder sends alert messages via cellular network to motorists in the vicinity of the responding truck that are equipped with the WAZE app.

While on scene with emergency lights on, the HA5 transponder sends road hazard alerts to motorists in the vicinity of the truck that are equipped with the WAZE app.

The HA5 Responder-to-Vehicle (R2V) collision avoidance system will include the transponder and a 5 year cellular plan subscription.

Activation of the HAAS Alert system requires a representative of the customer to accept the End User License Agreement (EULA) via an on-line portal.

VEHICLE DATA RECORDER

There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.

The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:

- Vehicle Speed - MPH
- Acceleration - MPH/sec
- Deceleration - MPH/sec
- Engine Speed - RPM
- Engine Throttle Position - % of Full Throttle
- ABS Event - On/Off
- Seat Occupied Status - Yes/No by Position
- Seat Belt Buckled Status - Yes/No by Position
- Master Optical Warning Device Switch - On/Off
- Time - 24 Hour Time
- Date - Year/Month/Day

Seat Belt Monitoring System

A seat belt monitoring system (SBMS) will be provided on the Command Zone™ color display. The SBMS will be capable of monitoring up to 10 seating positions indicating the status of each seat position per the following:

- Seat Occupied & Buckled = Green LED indicator illuminated
- Seat Occupied & Unbuckled = Red LED indicator with audible alarm
- No Occupant & Buckled = Red LED indicator with audible alarm
- No Occupant & Unbuckled = No indicator and no alarm

The seat belt monitoring screen will become active on the Command Zone color display when:

- The home screen is active:
 - and there is any occupant seated but not buckled or any belt buckled with an occupant.
 - and there are no other Do Not Move Apparatus conditions present. As soon as all Do Not Move Apparatus conditions are cleared, the SBMS will be activated.

The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.

INTERCOM SYSTEM

A David Clark, Model U3800 intercom, with single radio interface at the driver and officer positions will be provided. Four (4) crew cab positions one (1) station at each outside position and a dual station to be located between the center seats will have intercom only.

The following components will be supplied with this system:

- One (1) U3815 Radio interface module (Driver)
- One (1) U3811 Radio interface module (Officer)
- One (1) U3805 Radio Cord Junction Module
- One (1) U3800 Intercom unit (2 Crew)
- One (1) C3820 Power cable
- One (1) U3802 Remote headset station (1 Outboard Crew)
- One (1) U3801 Remote headset station (1 Outboard Crew)
- All necessary station cables and connectors

RADIO / INTERCOM INTERFACE INCLUDED

All radio interfaced stations will have universal radio interfaces installed. The interface wiring will be routed within the cab to TBD .

UNDER THE HELMET HEADSET

There will be five (5) under the helmet, headset(s) provided Officer and crew cab seating positions..

Each David Clark, Model H3442, headset will feature:

- 5' Coiled cord
- Noise cancelling electric microphone
- Flexible microphone boom rotates 200 degrees for left or right dress
- Microphone on/off button
- Comfort Gel Earseals
- 23 dB noise reduction



UNDER THE HELMET HEADSET

There will be one (1) under the helmet headset(s) with one (1) slotted ear cup provided Drivers position.

Each David Clark, Model H3441, headset will feature:

- 5' Coiled cord
- Noise cancelling electric microphone
- Flexible microphone boom rotates 200 degrees for left or right dress
- Microphone on/off button
- Comfort Gel Earseals
- 23 dB noise reduction



HEADSET HANGERS

There will be six (6) headset hanger(s) installed driver's seat, officer's seat, driver's side inboard forward facing seat, driver's side outboard rear facing seat, passenger's side inboard forward facing seat and passenger's side outboard rear facing seat. The hanger(s) will meet NFPA 1901, Section 14.1.11, requirement for equipment mounting.

RADIO ANTENNA MOUNT

There will be one (1) standard 1.125", 18 thread antenna-mounting base(s) installed on the left side on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the instrument panel area. A weatherproof cap will be installed on the mount.

RADIO ANTENNA MOUNT

There will be one (1) standard 1.125", 18 thread antenna-mounting base(s) installed Rear of the lightbar on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the radio box. A weatherproof cap will be installed on the mount.



VEHICLE CAMERA SYSTEM

There will be a color vehicle camera system provided with the following:

- One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse

The camera images will be displayed on the driver's vehicle information center display. Audio from the microphone on the active camera will be via an amplified speaker with volume control located behind the driver seat.

The following components will be included:

- One (1) Safety Vision, Model 620 camera
- One (1) Amplified speaker (if applicable)
- All necessary cables

RECESS REAR CAMERA

A rear camera recess will be provided in the center at the rear .

ELECTRICAL POWER CONTROL SYSTEM

The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible.

Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership.

Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be Type-I automatic reset (continuously resetting). When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.

Solid-State Control System

A solid-state electronics based control system will be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network will consist of electronic modules located near their point of use to reduce harness lengths and improve reliability. The control system will comply with SAE J1939-11 recommended practices.

The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system will utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.

For increased reliability and simplified use the control system modules will include the following attributes:

- Green LED indicator light for module power
- Red LED indicator light for network communication stability status
- Control system self test at activation and continually throughout vehicle operation
- No moving parts due to transistor logic
- Software logic control for NFPA mandated safety interlocks and indicators
- Integrated electrical system load management without additional components
- Integrated electrical load sequencing system without additional components
- Customized control software to the vehicle's configuration
- Factory and field re programmable to accommodate changes to the vehicle's operating parameters
- Complete operating and troubleshooting manuals
- USB connection to the main control module for advanced troubleshooting

To assure long life and operation in a broad range of environmental conditions, the solid-state control system modules will meet the following specifications:

- Module circuit board will meet SAE J771 specifications
- Operating temperature from -40C to +70C
- Storage temperature from -40C to +70C
- Vibration to 50g

- IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and one (1) meter)
- Operating voltage from eight (8) volts to 16 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

Circuit Protection and Control Diagram

Copies of all job-specific, computer network input and output (I/O) connections will be provided with each chassis. The sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.

On-Board Electrical System Diagnostics

Advanced on-board diagnostic messages will be provided to support rapid troubleshooting of the electrical power and control system. The diagnostic messages will be displayed on the information center located at the driver's position.

The on-board information center will include the following diagnostic information:

- Text description of active warning or caution alarms
- Simplified warning indicators
- Amber caution indication with intermittent alarm
- Red warning indication with steady tone alarm

Prognostics

A software based vehicle tool will be provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone, color display and/or wireless enabled device to proactively alert of upcoming service intervals.

Prognostics will include:

- Engine oil and filter
- Transmission oil and filter
- Pump oil (if equipped)
- Foam oil (if equipped)
- Aerial oil and filter (if equipped)

Advanced Diagnostics

An advanced, Windows-based, diagnostic software program will be provided for this control system. The software will provide troubleshooting tools to service technicians equipped with a Windows-based computer or wireless enabled device.

The service and maintenance software will be easy to understand and use and have the ability to view system input/output (I/O) information.

Tech Module With WiFi

An in cab module will provide WiFi wireless interface and data logging capability. The WiFi interface will comply with IEEE 802.11 b/g/n capabilities while communicating at 2.4 Gigahertz. The module will provide an external antenna connection allowing a line of site communication range of up to 300 feet with a roof mounted antenna.

The module will transmit a password protected web page to a WiFi enabled device (i.e. most smart phones, tablets or laptops) allowing two levels of user interaction. The firefighter level will allow vehicle monitoring of the vehicle and firefighting systems on the apparatus. The technician level will allow diagnostic access to inputs and outputs installed on the Command Zone, control and information system.

The data logging capability will record faults from the engine, transmission, ABS and Command Zone, control and information systems as they occur. No other data will be recorded at the time the fault occurs. The data logger will provide up to 2 Gigabytes of data storage.

A USB connection will be provided on the Tech Module. It will provide a means to download data logger information and update software in the device.

Indicator Light and Alarm Prove-Out System

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

Voltage Monitor System

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels.

The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

Power and Ground Studs

Spare circuits will be provided in the primary distribution center for two-way radio equipment.

The spare circuits will consist of the following:

- One (1) 12-volt DC, 30 amp battery direct spare
- One (1) 12-volt DC ground and un-fused switched battery stud located in or adjacent to the power distribution center

Enhanced Software

The solid-state control system will include the following software enhancements:

All perimeter lights and scene lights (where applicable) will be deactivated when the parking brake is released.

Cab and crew cab dome lights will remain on for 10 seconds for improved visibility after the doors close. The dome lights will dim after 10 seconds or immediately if the vehicle is put into gear.

Cab and crew cab perimeter lights will remain on for 10 seconds for improved visibility after the doors close. The dome lights will dim after 10 seconds or immediately if the vehicle is put into gear.

EMI/RFI Protection

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10Khz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10Khz-1GHz to 100 Volts/Meter requirements.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

1. All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
2. Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
3. Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.
4. Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).

5. All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.
6. All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal portion of the terminal.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

BATTERY SYSTEM

There will be six (6) 12 volt Exide®, Model 31S950X3W, batteries that include the following features will be provided:

- 950 CCA, cold cranking amps
- 190 amp reserve capacity
- High cycle
- Group 31
- Rating of 5700 CCA at 0 degrees Fahrenheit
- 1140 minutes of reserve capacity
- Threaded stainless steel studs

Each battery case will be a black polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45 degree tilt capacity.

The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.

BATTERY SYSTEM

There will be a single starting system with an ignition switch and starter button provided and located on the cab instrument panel.

MASTER BATTERY SWITCH

There will be a master battery switch provided within the cab within easy reach of the driver to activate the battery system.

An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.

BATTERY COMPARTMENTS

Batteries will be placed on non-corrosive mats and stored in well ventilated compartments located under the cab.

Heavy-duty, 2/0 gauge, color coded battery cables will be provided. Battery terminal connections will be coated with anti-corrosion compound.

Battery solenoid terminal connections will be encapsulated with semi-permanent rubberized compound.

JUMPER STUDS

One (1) set of battery jumper studs with plastic color-coded covers will be included on the battery compartments.

BATTERY CHARGER

There will be an IOTA™, Model DSL 75, battery charger with IQ4, controller provided.

The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.

There will be a Kussmaul™, Model #091-94-12, remote indicator included.

Battery charger will be located in the cab behind the driver's seat.

The battery charger indicator will be located on the driver's seat riser.

SHORELINE

There will be one (1) 20 amp 120 volt AC straight blade inlet(s) NEMA 5-20 with gray cover(s) provided to operate the dedicated 120 volt AC circuits on the apparatus.

The shoreline will be connected to Battery charger, 120V air compressor and shoreline receptacles..

A mating connector body will also be supplied with the loose equipment.

There will be a label installed near the inlet(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

The shoreline receptacle will be located in the driver side lower step well of cab.

ELECTRIC POWER FOR WINCH

Electric power provisions will be furnished for the portable winch from the chassis battery system.

The receiver plug will be located front, side and rear receivers.

A total quantity of four (4) receptacles will be provided.

ALTERNATOR

A Delco Remy®, Model 40SI, alternator will be provided. It will have a rated output current of 320 amps, as measured by SAE method J56. The alternator will feature an integral regulator and rectifier system that has been tested and qualified to an ambient temperature of 257 degrees Fahrenheit (125 degrees Celsius). The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.

OVERRIDE SWITCH

A switch will be provided to override the parking brake interlock for the windshield wiper controls. The switch will allow the windshield wipers to operate with the parking brake set.

The switch will be located Drivers panel.

ELECTRONIC LOAD MANAGER

An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.

For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.

The system will include the following features:

- System voltage monitoring.
- A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off.
- Sixteen available electronic load shedding levels.
- Priority levels can be set for individual outputs.
- High Idle to activate before any electric loads are shed and deactivate with the service brake.
 - If enabled:
 - "Load Man Hi-Idle On" will display on the information center.
 - Hi-Idle will not activate until 30 seconds after engine start up.
- Individual switch "on" indicator to flash when the particular load has been shed.
- The information center indicates system voltage.

The information center, where applicable, includes a "Load Manager" screen indicating the following:

- Load managed items list, with priority levels and item condition.
- Individual load managed item condition:
 - ON = not shed
 - SHED = shed

SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a

gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator.

For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.

Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Sequencing of the following items will also occur, in conjunction with the ignition switch, at half-second intervals:

- Cab Heater and Air Conditioning
- Crew Cab Heater (if applicable)
- Crew Cab Air Conditioning (if applicable)
- Exhaust Fans (if applicable)
- Third Evaporator (if applicable)

HEADLIGHTS

There will be four (4) JW Speaker®, Model 8800, 4" x 6" rectangular LED lights mounted in the front quad style, chrome housing on each side of the cab grille:

- the outside light on each side will contain a part number 055***1 low beam module
- the inside light on each side will contain a part number 055***1 high beam module
- the headlights to include chrome bezels

The low beam lights will be activated when the headlight switch is on.

The high beam and low beam lights will be activated when the headlight switch and the high beam switch is activated.

DIRECTIONAL LIGHTS

There will be two (2) Whelen 600 series, LED combination directional/marker lights provided. The lights will be located on the outside cab corners, next to the headlights.

The color of the lenses will be the same color as the LED's.

INTERMEDIATE LIGHT

There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.

CAB CLEARANCE/MARKER/ID LIGHTS

There will be five (5) amber LED lights provided to indicate the presence and overall width of the vehicle in the following locations:

- Three (3) amber LED identification lights will be installed in the center of the cab above the windshield.
- Two (2) amber LED clearance lights will be installed, one (1) on each outboard side of the cab above the windshield.

FRONT CAB SIDE CLEARANCE/MARKER LIGHTS

There will be two (2) Truck-Lite®, Model 19036Y, amber LED lights installed to the outside of the chrome wrap around bezel, one (1) on each side of the cab.

The lights will activate as additional directional lights with the corresponding directional circuit.

REAR CLEARANCE/MARKER/ID LIGHTING

There will be three (3) Truck-Lite®, Model 26250R, LED lights used as identification lights located at the rear of the apparatus per the following:

- As close as practical to the vertical centerline
- Centers spaced not less than 6.00" or more than 12.00" apart
- Red in color
- All at the same height

There will be two (2) Truck-Lite, Model 26250R, LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:

- To indicate the overall width of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the rear
- All at the same height

There will be two (2) Truck-Lite, Model 26250R, LED lights installed on the side of the apparatus as marker lights as close to the rear as practical per the following:

- To indicate the overall length of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the side
- All at the same height

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

Per FMVSS 108 and CMVSS 108 requirements.

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen®, Model M6BTT, red LED stop/tail lights
- Two (2) Whelen, Model M6T, amber LED arrow turn lights

The lights will be provided with color lenses.

The lights will be mounted in a polished combination housing.

There will be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the body.

A white LED light will illuminate the license plate. A stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

LIGHTING BEZEL

There will be two (2) Whelen, Model M6FCV4P, four (4) place chromed ABS housings with Pierce logos provided for the rear M6 series stop/tail, directional, back up, scene lights or warning lights.

BACK-UP ALARM

A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.

MARKER LIGHTS

There will be one (1) pair of amber and red, Britax, Model L427.203.L12, LED marker lights with rubber arm, located lower rear body corners. The amber lens will face the front and the red lens will face the rear of the truck and be the most rearward marker light.

These lights will be activated with the running lights of the vehicle.

CAB PERIMETER SCENE LIGHTS

There will be four (4) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" white LED strip lights provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

PUMP HOUSE PERIMETER LIGHTS

There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" LED weatherproof strip lights with brackets provided under the pump panel running boards, one (1) each side.

If the combination of options in the vehicle does not permit clearance for a 20.00" light, a 12.00" version of the Amdor light will be installed.

The lights will be controlled by the same means as the body perimeter lights.

BODY PERIMETER SCENE LIGHTS

There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens, 20.00" long, white LED's, 12 volt DC lights provided at the rear step area of the body, one (1) each side shining to the rear.

The perimeter scene lights will be activated when the parking brake is applied and either directional light is activated, activating all side facing perimeter lights.

STEP LIGHTS

There will be four (4) white LED, step lights provided. One (1) step light will be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

These step lights will be actuated when the ignition switch is on and the parking brake is set.

All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.

12 VOLT LIGHTING

There will be one (1) Whelen, Model PCPSM1*, 12 volt surface mounted LED combination spot/flood light(s) located PS Cab above the crew cab windows. The lights will be mounted with chrome flange(s).

The light(s) selected above will be controlled by the following:

- a switch at the driver's side switch panel
- a switch at the passenger's side switch panel
- a switch at the pump operator's panel
- no additional switch location

These light(s) may be load managed when the parking brake is set.

12 VOLT LIGHTING

There will be one (1) Fire Research Spectra, Model SPA530-Q20*, 12 volt DC LED scene light(s) provided on push up side mount pole(s), located PS back of cab.

The painted parts of this light assembly to be white with a white bezel.

The light(s) will be controlled in the following way:

- a switch at the pump operator's panel
- no additional switch location
- no additional switch location
- no additional switch location

These light(s) may be load managed when the parking brake is applied.

These lights will be connected to the Do Not Move Truck Indicator circuit.

12 VOLT LIGHTING

There will be one (1) Fire Research Spectra, Model SPA530-Q20*, 12 volt DC LED scene light(s) provided on push up side mount pole(s), located DS Back of cab .

The painted parts of this light assembly to be white with a white bezel.

The light(s) will be controlled in the following way:

- a switch at the pump operator's panel
- no additional switch location
- no additional switch location
- no additional switch location

These light(s) may be load managed when the parking brake is applied.

These lights will be connected to the Do Not Move Truck Indicator circuit.

12 VOLT LIGHTING

There will be one (1) Whelen, Model PCPSM1*, 12 volt surface mounted LED combination spot/flood light(s) located DS above the crew cab window.. The lights will be mounted with chrome flange(s).

The light(s) selected above will be controlled by the following:

- a switch at the driver's side switch panel
- a switch at the pump operator's panel
- a switch at the passenger's side switch panel
- no additional switch location

These light(s) may be load managed when the parking brake is set.

12 VOLT LIGHTING

There will be one (1) Whelen® Model P*H2*, 17,750 lumens 12 volt DC light(s) with a combination of flood and spot optics provided on the front visor, centered.

The housing(s) painted parts of this light assembly to be white.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch at the passenger's side switch panel.

These light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) HiViz Model FT-MB-18-TR-*-* , 6,652.8 effective lumens 2.87" high x 25.20" long x 2.45" deep 12 volt DC light(s) with white LEDs and a combination of flood and spot optics provided on the apparatus located, PS body catwalk.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by the same control that has been selected for the passenger's side scene light(s).

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) HiViz Model FT-MB-18-TR-*-* , 6,652.8 effective lumens 2.87" high x 25.20" long x 2.45" deep 12 volt DC light(s) with white LEDs and a combination of flood and spot optics provided on the apparatus located, DS body catwalk.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by the same control that has been selected for the driver's side scene light(s).

The light(s) may be load managed when the parking brake is applied.

HOUSING TO MOUNT RECESSED LIGHT ONTO A HORIZONTAL SURFACE

There will be one (1) housings fabricated with painted aluminum installed on the apparatus DS Hatch Compartment for the 12 volt DC recessed lights.

HOSE BED LIGHTS

There will be white 12 volt DC LED light strips with stainless steel protective cover, provided to light the hose bed area. Hose Bed lights will meet the photometric levels listed in NFPA 1901 for Hose Bed lighting requirements.

- Light strip(s) will be installed along the upper edge of the left side of the hose bed.
- Light strip(s) will be installed along the upper edge of the right side of the hose bed.

The lights will be activated by a cup switch at the rear of the apparatus no more than 72.00" from the ground.

REAR SCENE LIGHT(S)

There will be two (2) Whelen®, Model M9LZC, LED scene light(s) with chrome trim bezel(s) installed at the rear of the apparatus, one (1) high on the driver's side rear body bulkhead and one (1) high on the passenger's side rear body bulkhead.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch in a stainless steel cup located at the rear of the apparatus no more than 72.00" from the ground.

The light(s) may be load managed when the parking brake is applied.

WALKING SURFACE LIGHTS

There will be white 12 volt DC LED light strips with stainless steel protective cover, provided to light the cargo area.

- One (1) light strip will be installed the entire length of the driver's side of the cargo area.
- One (1) light strip will be installed the entire length of the passenger's side of the cargo area.

The light will be activated when the body step lights are on.

FRONT WHITE WARNING LIGHT CONTROL

There will be switch(es) installed in the cab on the switch panel that will allow the operator to activate/deactivate all the front white warning lights whenever the emergency master switch is activated and the parking brake is released. The headlight flash option is included in this white warning light control if applicable. Each time the emergency master switch is activated, and the parking brake is released, the white warning light control switch and the white warning lights will default to on.

WATER TANK

Booster tank will have a capacity of 750 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Incorporated.

Tank joints and seams will be nitrogen welded inside and out.

Tank will be baffled in accordance with NFPA Bulletin 1901 requirements.

Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.

Longitudinal partitions will be constructed of .38" polypropylene plastic and will extend from the bottom of the tank through the top cover to allow for positive welding.

Transverse partitions will extend from 4.00" off the bottom of the tank to the underside of the top cover.

All partitions will interlock and will be welded to the tank bottom and sides.

Tank top will be constructed of .50" polypropylene. It will be recessed .38" and will be welded to the tank sides and the longitudinal partitions.

Tank top will be sufficiently supported to keep it rigid during fast filling conditions.

Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels will be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.

A sump that will be sized dependent on the tank to pump plumbing will be provided at the bottom of the water tank.

Sump will include a drain plug and the tank outlet.

Tank will be installed in a fabricated cradle assembly constructed of structural steel.

Sufficient crossmembers will be provided to properly support bottom of tank. Crossmembers will be constructed of steel bar channel or rectangular tubing.

Tank will "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on.

Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.

Mounting system will be approved by the tank manufacturer.

Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.

Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.

An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.

MOUNTING PROVISIONS

Mounting pad provisions will be provided on the top of the poly water tank to mount a foam system Husky 3.

SLEEVE, PLUMBING, THROUGH TANK

One (1) sleeve will be provided in the water tank for a 3.00" pipe to the rear.

HOSE BED

The hose bed will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.

Upper and rear edges of side panels will have a double break for rigidity.

The upper inside area of the beavertails will be covered with brushed stainless steel to prevent damage to painted surface when hose is removed.

Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.

The hose bed interior will be painted to match the lower body color..

Hose bed will accommodate L-R: 100' of 1.75" over 200' of 2.5" 1000' of 4" , 800' of 3"/ 200' of 2.5".

HOSE BED DIVIDER

Three (3) adjustable hosebed dividers will be furnished for separating hose.

Each divider will be constructed of a .125" brushed aluminum sheet fitted and fastened into a slotted, 1.50" diameter radiused extrusion along the top, bottom, and rear edge.

Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.

Divider will be held in place by tightening bolts, at each end.

Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.

PULL BAR AND STRAP

A quantity of one (1) pull bar(s) with a 1.00" wide red pull strap will be provided Rear hose bed restraint. A pull bar will be provided to connect The seat belt buckles at the top of the hosebed. allowing one strap to release multiple latches.

HOSE BED HOSE RESTRAINT

The hose in the hose bed will be restrained by a pair of black nylon Velcro® straps at the top of the hose bed. At the rear of the hose bed, 2.00" black nylon webbing with a 1.50" x 4.00" box pattern will attach at the top rear outside corners with seat belt buckle fasteners. The webbing will have straps connected with seat belt buckle fasteners located at the rear body sheet below the hose bed.

RUNNING BOARDS

Running boards will be fabricated of .125" bright aluminum treadplate.

Each running board will be supported by a welded 2.00" square tubing and channel assembly, which will be bolted to the pump compartment substructure.

Running boards will be 12.75" deep and spaced .50" away from the pump panel.

A splash guard will be provided above the running board treadplate.

TAILBOARD

The tailboard will also be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly.

The tailboard area will be 16.00" deep and full width of the body. The outboard sides of the tailboard will be angled at 45 degrees beginning at the point where the body meets the tailboard at the outboard edge angling rearward to the rear edge of the tailboard.

The exterior side will be flanged down and in for increased rigidity of tailboard structure.

REAR WALL, SMOOTH ALUMINUM/BODY MATERIAL

The rear facing surfaces of the center rear wall will be smooth aluminum.

The bulkheads, the surface to the rear of the side body compartments, will be smooth and the same material as the body.

The rear wall will be flush.

TOW BARS

Two (2) tow bars will be installed under the tailboard.

Tow bars will be fabricated of 1.00" CRS bar rolled into a 3.00" radius.

Tow bar assemblies will be constructed of .38" structural angle. When force is applied to the bar, it will be transmitted to the frame rail.

Tow bar assemblies will be designed and positioned to allow up to a 30 degree upward angled pull of 17,000 lb, or a 20,000 lb straight horizontal pull in line with the centerline of the vehicle.

Tow bar design will have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.

HITCH RECEIVER

A hitch receiver will be installed at the rear and the sides of the apparatus. The side receivers will be located to the rear of the wheels, under the rear platform.

The hitch receivers will be constructed of heavy steel tubing and reinforced to the truck framework, for the receiving portion. This will be a Class III/IV trailer hitch. A class IV rating will be obtained only when a weight distributing hitch is used.

Slide-in portion will be held in place by one (1) safety pin with clip.

COMPARTMENTATION

Body and compartments will be fabricated of .125", 5052-H32 aluminum.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided for prevention of rust pockets and ease of maintenance.

Side compartment flooring will be of the sweep out design with the floor higher than the compartment door lip.

The side compartment door opening will be framed by flanging the edges in 1.75" and bending out again .75" to form an angle.

Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum treadplate or polished stainless steel.

The top of the compartment will be covered with bright aluminum treadplate rolled over the edges on the front, rear and outward side. These covers will have the corners welded.

Side compartment covers will be separate from the compartment tops.

Front facing compartment walls will be covered with bright aluminum treadplate.

All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load will be provided.

The backbone of the support system will be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.

The support system will include .375" thick steel vertical angle supports bolted to the chassis frame rails with .625" diameter bolts.

Attached to the bottom of the steel vertical angles will be horizontal angles, with gussets welded to the vertical members, which extend to the outside edge of the body.

A steel frame will be mounted on the top of these supports to create a floating substructure which will result in a 500 lb equipment support rating per lower compartment.

The floating substructure will be separated from the horizontal members with neoprene elastomer isolators. These isolators will reduce the natural flex stress of the chassis from being transmitted to the body.

Isolators will have a broad load range, proven viability in vehicular applications, be of a fail safe design and allow for all necessary movement in three (3) transitional and rotational modes.

The neoprene isolators will be installed in a modified V three (3)-point mounting pattern to reduce the natural flex of the chassis being transmitted to the body.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

Louvers will be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they will be formed into the metal and not added to the compartment as a separate plate.

TESTING OF BODY DESIGN

Body structural analysis has been fully tested. Proven engineering and test techniques such as finite element analysis, stress coating and strain gauging have been performed with special attention given to fatigue, life and structural integrity of the cab, body and substructure.

Body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

- Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.
- Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.
- Driving the vehicle at 35 mph on a washboard road.
- Driving the vehicle at 55 mph on a smooth road.
- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

Evidence of actual testing techniques will be made available upon request.

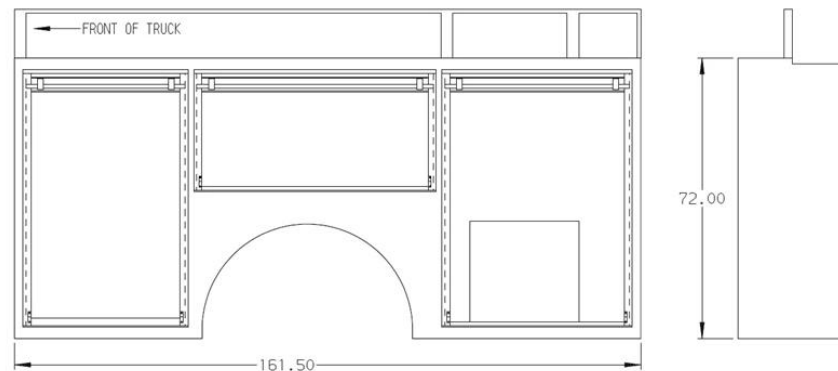
LEFT SIDE COMPARTMENTATION

The left side compartmentation will consist of three rollup door compartments.

A full height, rollup door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 44.00" wide x 66.63" high x 25.88" deep. The clear door opening will be a minimum of 38.25" wide x 56.88" high.

A rollup door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 31.38" high x 25.88" deep. The clear door opening will be a minimum of 58.25" wide x 23.13" high.

A full height, rollup door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.75" wide x 67.63" high x 25.88" deep. The clear door opening will be a minimum of 44.75" wide x 57.88" high.



	CLEAR DOOR OPENINGS					
	AMDOR		GORTITE		ROM	
COMPARTMENT	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
Ahead of axle	39.00	56.88	38.25	58.00	38.44	58.25
Over axle	59.00	23.13	58.25	24.25	58.44	24.50
Behind axle	45.50	57.88	44.75	59.00	44.94	59.25

The interior height of the compartments will be measured from the compartment floor to the ceiling. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartments will be measured from the back wall to the inside of the door frame.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

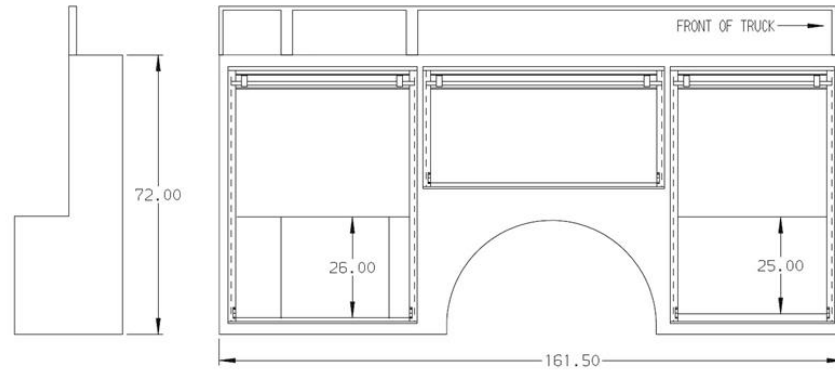
RIGHT SIDE COMPARTMENTATION

The right side compartmentation will consist of three (3) rollup door compartments.

A full height, rollup door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 44.00" wide x 66.63" high x 25.88" deep in the lower 25.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 38.25" wide x 56.88" high.

A rollup door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 32.88" high x 12.00" deep. The clear door opening will be a minimum of 58.25" wide x 23.13" high.

A full height, rollup door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.75" wide x 67.63" high x 25.88" deep in the lower 26.00" of height and 12.00" deep in the remaining upper section of the compartment. The clear door opening will be a minimum of 44.75" wide x 57.88" high.



COMPARTMENT	CLEAR DOOR OPENINGS					
	AMDOR		GORTITE		ROM	
	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
Ahead of axle	39.00	56.88	38.25	58.00	38.44	58.25
Over axle	59.00	23.13	58.25	24.25	58.44	24.50
Behind axle	45.50	57.88	44.75	59.00	44.94	59.25

The interior height of the compartments will be measured from the compartment floor to the ceiling. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartments will be measured from the back wall to the inside of the door frame.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one (1) hand.

SIDE COMPARTMENT ROLLUP DOOR(S)

There will be six (6) compartment doors installed on the side compartments, double faced, aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by AMDOR™ brand rollup doors.

Door(s) will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools. The slats will be mounted in reusable slat shoes with positive snap-lock securement.

Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingress.

The doors will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials.

Bottom panel flange of rollup door will be equipped with two (2) cut-outs to allow for easier access with gloved hands.

A polished stainless steel lift bar to be provided for each roll-up door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals.

All injection molded rollup door wear components will be constructed of Type 6 nylon.

Each rollup door will have a 3.00 inch diameter balancer/tensioner drum to assist in lifting the door.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

REAR COMPARTMENTATION

A roll-up door compartment above the rear tailboard will be provided.

The interior dimensions of this compartment will be 40.00" wide x 40.63" high x 25.88" deep. The interior height of the compartments will be measured from the compartment floor to the ceiling. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartments will be measured from the back wall to the inside of the door frame.

A louvered, removable access panel will be furnished on the back wall of the compartment.

The rear compartment will be open into the rear side compartments.

The clear door opening of this compartment will be a minimum of 33.25" wide x 30.88" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

ROLLUP REAR COMPARTMENT DOOR

The rear compartment will have a rollup door.

The door will be double faced, aluminum construction, satin aluminum and manufactured by AMDOR™ brand rollup doors.

The door will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be

connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools. The slats will be mounted in reusable slat shoes with positive snap-lock securement.

Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingress.

The door will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials.

Bottom panel flange of rollup door will be equipped with two (2) cut-outs to allow for easier access with gloved hands.

A polished stainless steel lift bar to be provided for each roll-up door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals.

All injection molded rollup door wear components will be constructed of Type 6 Nylon.

The door will have a 3.00 inch diameter balancer/tensioner drum to assist in lifting the door.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

COMPARTMENT LIGHTING

There will be seven (7) compartments with Amdor, Model AY-9220, white 12 volt DC LED compartment light strips. The lights will be mounted with mechanical fasteners.

There will be two (2) strip lights installed vertically in each compartment opening per the latest NFPA requirements.

The lights will be activated when the battery switch is on and the respective compartment door is opened.

COMPARTMENT LIGHTING

Metal clamps will be used to retain the strip lighting in all body compartments.

HATCH COMPARTMENT

One (1) hatch compartment will be provided above the left side compartments.

Each hatch compartment will extend the full length of the side body compartmentation x 27.75" wide. The height of each hatch compartment will match the side sheet height.

Sides of the compartment will be constructed of the same material as the body and painted job color. A chrome and black vinyl molding will be provided to cover the seam between the top of the body panel and the bottom of the hatch compartment. The vertical outboard seam at the center of the compartment will be smooth weld finished and painted. The top of the compartment will be constructed of bright aluminum treadplate.

Two (2) lift-up, bright aluminum treadplate doors will be provided on the top of the compartment. Doors will have lipped edges with a rubber seal for weather resistance. Each door will have a D-handle latch. Doors will be hinged on the outboard side and will utilize a gas strut (or rubber covered chain on narrow width doors)

Compartment will drain to an area below the hose bed.

Ribbed rubber matting will be provided on the compartment floor to stop wet equipment from sitting in water pools.

COMPARTMENT LIGHTING

There will be an Amdor, Model AY-9220-42, 42.00" 12 volt DC strip light with white LEDs mounted on the interior, hinged side of each door. The lights will be mounted with mechanical fasteners.

The lights will be activated when the battery switch is on and the door is opened.

MOUNTING TRACKS

There will be seven (7) sets of tracks for mounting shelf(s) in LS1, LS2, LS3, RS1, RS2, RS3 and B1. These tracks will be installed vertically to support the adjustable shelf(s), and will be full height of the compartment. The tracks will be painted to match the compartment interior.

ADJUSTABLE SHELVES

There will be 11 shelves with a capacity of 500 lb provided.

The shelf construction will consist of .188" aluminum with a brushed finish with 2.00" sides.

Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track.

The shelves will be held in place by .12" thick stamped plated brackets and bolts.

The location(s) will be determined at a later date, in LS1 at the depth transition point, in RS2 centered between the floor and the ceiling and in RS3 centered between the floor and the ceiling.

SLIDE-OUT FLOOR MOUNTED TRAY

There will be four (4) floor mounted slide-out tray(s) provided.

Each tray will have 2.00" high sides and a minimum capacity rating of 500 lb in the extended position.

Each tray will be constructed of aluminum painted spatter gray

There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.

To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.

The location(s) will be RS1 to the left of the partition, RS3, LS1 and B1.

SWING OUT TOOLBOARD

A swing out aluminum toolboard will be provided.

It will be a minimum of .188" thick with .281" diameter holes in a pegboard pattern with 1.00" centers between holes.

A 1.00" x 1.00" aluminum tube frame will be welded to the edge of the pegboard.

The board will be mounted on a pivoting device at the back of the compartment on the top and bottom to allow easy movement in and out of the compartment. The maximum tool load will be 400 pounds.

The board will have positive lock in the stowed and extended position.

The board will be mounted on adjustable tracks from front to back within the compartment.

There will be Two (2) toolboard(s) provided. The toolboard(s) will be with a brushed finish and installed LS2 and RS2.

TOOL BOARD

An aluminum tool board will be provided.

It will be a minimum of .188" thick with .281" diameter diameter holes in a pegboard pattern with 1.00" centers between holes.

A 1.00" x 1.00" aluminum tube frame will be welded to the edge of the board.

The board will be installed on adjustable tracks on a slide out tray. The tracks will allow side to side adjustment. The board will be as high as space permits and full length of the tray. The tray is not included in this option.

There will be One (1) toolboard(s) provided. The toolboard(s) will be with a brushed finish and installed Mounted to the tray in RS1 rear of the vertical divider..

VERTICAL COMPARTMENT PARTITION

One (1) partition will be provided.

The partition construction will consist of body material with a brushed finish. Each partition will be the full vertical height of the compartment.

The location(s) will be in RS1, 30.00" from the forward door frame.

TOOL BOX

A tool box will be furnished.

The outside size will be 20.00" long x 10.00" wide x 10.00" deep.

The tool box will be black in color.

Construction will be of .50" polypropylene plastic with joints and seams nitrogen welded. A cut out carrying handle will be provided on each end.

There will be four (4) provided. It will be located Ship loose.

TOOL BOX

A tool box will be furnished.

The outside size will be 20.00" long x 8.00" wide x 10.00" deep.

The tool box will be black in color.

Construction will be of .50" polypropylene plastic with joints and seams nitrogen welded. A cut out carrying handle will be provided on each end.

There will be six (6) provided. It will be located Ship Loose.

RETENTION NETTING

Retention netting will be provided to retain compartment equipment from laying against the compartment door. The net(s) will be located Compartment RS1 between the vertical divider and the front bulkhead (full height)..

Each compartment door opening will be provided with a heavy black nylon webbing made of 1.00" nylon strap with a 2.00" box pattern. The nylon webbing will be fastened to one (1) side of the compartment in a fixed manner. The remaining sides will be secured with 1.00" side release fastener(s).

A total of one (1) will be provided.

COMPARTMENT FLOOR SCUFFPLATE

Aluminum treadplate will be provided on the floor of one (1) compartment(s) located in Compartment RS1 forward of the vertical divider. compartment(s).

The edges of the treadplate will be completely caulked before installation to prevent corrosion. This overlay is to be angled so that cribbing stored in this compartment will not work out to the door. Floor to be angled back from the door frame to the rear of the compartment.

PEGBOARD

There will be 3/16" thick aluminum pegboard with a brushed finish will be installed on the back wall of two (2) compartments. It will be mounted using two (2) horizontal tracks. Retainers will be used to mount the pegboard to the tracks. The pegboard shall be installed on the back wall. The holes will be .281" diameter, punched 1.00" on center. Pegboard will be provided in the following compartments: LS2 and RS2.

RUB RAIL

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail.

Trim will be 2.12" high with 1.38" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Polished stainless steel fender crowns will be provided around the rear wheel openings with a dielectric barrier will be provided between the fender crown and the fender sheet metal to prevent corrosion. These fender crowns must be wide enough to prevent splashing onto the body from the specified tires.

The fender crowns will be held in place with stainless steel screws that thread directly into a composite nut and not directly into the parent body sheet metal to eliminate dissimilar metals contact and greatly reduce the chance for corrosion. Rubber welting will be provided between the body and crown.

BODY FENDER LINER

A painted to match the lower body color fender liner will be provided. The liners will be removable to aid in the maintenance of rear suspension components.

HARD SUCTION HOSE

NFPA 1901, 2016 edition, section 5.8.2 requires a minimum of 20 ft of suction hose or 15 ft of supply hose.

Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose.

There will be Two (2) lengths of 10' long x 6.00" diameter hose provided and equipped with long handle couplings provided on the ends.

HOSE TROUGH

A quantity of two (2) hard suction hose troughs will be compartment top mounted on an angle bracket, located on the right side.

Troughs will be constructed of aluminum painted job color.

A quantity of two (2) chrome plated, quarter turn, spring loaded clamps will be provided on the troughs to contain the hard suction hose.

HANDRAILS

The handrails will be 1.25" diameter knurled aluminum to provide a positive gripping surface.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

Handrails will be provided to meet NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.

HANDRAILS

One (1) vertical handrail will be located on each rear beavertail.

HANDRAIL

One (1) full width horizontal handrail will be provided below the hose bed at the rear of the apparatus.

AIR BOTTLE STORAGE (DOUBLE)

A quantity of three (3) air bottle compartments, 15.25" wide x 7.75" tall x 26.00" deep, will be provided on the left side forward of the rear wheels, on the right side forward of the rear wheels and on the right side rearward of the rear wheels. A polished stainless steel door with a chrome plated flush lift & turn latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment, "W" shaped insert formed of composite materials will be provided.

EXTINGUISHER STORAGE BIN

A storage bin will be provided for storage of two (2) hand held fire extinguishers. This storage bin will be installed Mounted to the bottom of the permanent shelf in compartment D1 to the front bulkhead wall (1 X 1 - side by side). Each storage bin will be 8.75" square x 23.00" deep. The storage bin will be formed out of aluminum and the flooring lined with Dura-surf.

EXTENSION LADDER

There will be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.

ROOF LADDER

There will be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.

LADDER STORAGE

The ladders will be stored between the water tank and the right side compartments.

The ladders will extend into the pump compartment just to the rear of the water pump discharges.

The ladder storage area will be enclosed as practical by means of sheet metal to protect the ladders from road dirt. The ladders that extend into the pump house will also be enclosed. A black rubber boot will be provided to enclose the ladders in the gap between the pump house and the body.

Each ladder will be stored vertically in a separate stainless steel storage trough. Each stainless steel trough will be lined with Dura-Surf nylon slides.

An aluminum enclosure will be provided at the rear of the body to properly contain the ladders. This enclosure will extend to the rear of the side body compartments.

The enclosure will also include a vertically hinged smooth aluminum door with a D-handle latch to access the ladders. The door will be hinged on the left side.

FOLDING LADDER

One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be installed.

FOLDING LADDER STORAGE

There will be storage designated right side for folding ladders stored between the side sheet in a stainless steel trough in the ladder storage compartment.

DURA-SURF LADDER SLIDES

Black Dura-Surf friction reducing material will be added to the stainless steel slides, on the bottom horizontal surfaces, of the ladder storage rack.

BACKBOARD STORAGE

A transverse area over the pump and rearward of the cargo area will hold one (1) storage trough.

A blister will be supplied at each side to enclose the backboards due to their length.

The backboards will be accessible from either side of the vehicle through the aluminum treadplate door(s) with a pair of flush lift and turn latches. The door(s) will be hinged along the rearward edge.

The size of the backboard(s) to be stored will be 72.00" long x 16.00" wide x 2.00" high.

PIKE POLE STORAGE

Aluminum tubing will be used for the storage of two (2) pike poles and will be located in ladder storage compartment. If the head of a pike pole can come in contact with a painted surface, a stainless steel scuffplate will be provided.

FOLDING STEPS FRONT OF BODY

Folding steps will be provided full height on the left side body compartments to provide access to the cargo bed. Steps will be spaced evenly on the sales drawing. Actual quantity may vary due to pump panel interferences but will meet the NFPA required maximum stepping height.

The Trident steps will be bright finished, non-skid with a black tread coating on the stepping surface.

The step will incorporate an LED light to illuminate the stepping surface.

The steps can be used as a hand hold with two openings wide enough for a gloved hand.

REAR FOLDING STEPS

Bright finished, non-skid folding steps with a black tread coating on the stepping surface will be provided at the rear. Each step will incorporate an LED light to illuminate the stepping surface. The steps can be used as a hand hold with two openings wide enough for a gloved hand.

Three (3) additional folding steps will be located PS front body bulkhead. The step(s) will be bright finished, non-skid with a luminescent tread coating, that is rechargeable from any light source and can hold a charge for up to 24 hours, on the stepping surface. Each step will incorporate an LED light to illuminate the stepping surface. The step(s) can be used as a hand hold with two openings wide enough for a gloved hand.

PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. The pump compartment will be constructed of the same material as the body compartmentation.

The pump compartment substructure will be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a single assembly.

PUMP MOUNTING

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.

LEFT SIDE PUMP CONTROL PANEL

All pump controls and gauges will be located at the left (driver's) side of the apparatus and properly identified.

Layout of the pump control panel will be ergonomically efficient and systematically organized.

The pump operator's control panel will be removable in two (2) main sections for ease of maintenance:

The upper section will contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels will be removable from the face of the pump panel for ease of maintenance. Below the sub panels will be located all valve controls and line pressure gauges.

The lower section of the panel will contain all inlets, outlets, and drains.

All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding.

IDENTIFICATION TAGS

The identification tag for each valve control will be recessed in the face of the tee handle.

All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge.

All line pressure gauges will be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting will be removable from the face of the pump panel for ease of maintenance. The casting will be color coded to correspond with the discharge identification tag.

All remaining identification tags will be mounted on the pump panel in chrome plated bezels.

The pump panel on the right (passenger's) side will be removable with lift and turn type fasteners.

Trim rings will be installed around all inlets and outlets.

PUMP

Pump will be a Waterous CSU, 1500 gpm single (1) stage midship mounted centrifugal type.

Pump will be the class "A" type.

Pump will deliver the percentage of rated discharge at pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.

- 70% of rated capacity at 200 psi net pump pressure.

- 50% of rated capacity at 250 psi net pump pressure.

Pump body will be close-grained gray iron, bronze fitted, and horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings).

Pump will be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.

Pump case halves will be bolted together on a single horizontal face to minimize chance of leakage and facilitate ease of reassembly. No end flanges will be used.

Discharge manifold of the pump will be cast as an integral part of the pump body assembly and will provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency.

The three (3) 3.50" openings will be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold.

Impeller shaft will be stainless steel, accurately ground to size. It will be supported at each end by sealed, anti-friction ball bearings for rigid precise support. Impeller will have flame plated hubs assuring maximum pump life and efficiency despite any presence of abrasive matter in the water supply.

Bearings will be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings will be used.

Pump will be equipped with a self-adjusting, maintenance-free, mechanical shaft seal.

The mechanical seal will consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring will press against a highly polished stainless steel stationary ring that is sealed within the pump body.

In addition, a throttling ring will be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance will not deteriorate, nor will the pump lose prime, while drafting if the seal fails during pump operation.

Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.

PUMP TRANSMISSION

The pump transmission will be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump will be through a high strength Morse HY-VO silent drive chain. By the use of a chain rather than gears, 50% of the sprocket will be accepting or transmitting torque, compared to two (2) or three (3) teeth doing all the work.

Drive shafts will be 2.35" diameter hardened and ground alloy steel and supported by ball bearings. The case will be designed to eliminate the need for water cooling.

PUMPING MODE

An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system will be designed to allow stationary pumping only.

AIR PUMP SHIFT

Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the left side pump panel.

Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump".

The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements.

The pump shift control in the cab will be illuminated to meet NFPA requirements.

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE

A Task Force Tips A18 series relief valve will be installed on the suction side of the pump preset at 150 psig .

The relief valve will have a working range of 90 psi to 300 psi.

The pressure relief valve control will be located behind an access door at the right side pump panel.

The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag.

PIERCE PRESSURE CONTROLLER

A Pierce electronic pressure controller will be provided.

A pressure transducer will be installed in the discharge side of the water pump. The transducer continuously monitors pump pressure sending a signal to the electronic pressure controller.

The pressure controller can be used in two (2) modes of operation, RPM mode and pressure modes. The controller will be programmed to turn on/default to Pressure Setting mode.

In the RPM mode, the controller can be activated after vehicle parking brake has been set. When in this mode, the controller will maintain the set engine speed, regardless of engine load (within engine operation capabilities).

In the pressure mode, the controller can be activated after vehicle parking brake has been set. When in this mode, the controller will automatically maintain the discharge pressure set by the operator (within the discharge capabilities of the pump and water supply) regardless of flow.

A 2.00" diameter throttle control knob with no mechanical stops, a serrated grip, and a red idle push button in the center will be a integrated/part of the pressure controller. The throttle control knob will be programmed for Clockwise rotation to increase engine speed.

Individual LED indicators for ok to pump, throttle ready, pressure mode and rpm mode will be located on the pressure controller for easy viewing.

A pump cavitation protection feature will also provided which will return the engine to idle should the pump cavitate. Cavitation is sensed by the combination of pump pressure below 30 psi and engine speed above 2000 rpm for more than five (5) seconds.

Other safety features include recognition of low water and no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure controller LCD screen will be 4.20" in size with a minimum brightness of 750 nits. The LCD screen and LED intensity will be automatically adjust for day and nighttime operation. The LCD screen intensity can also be manually adjusted if needed.

The following information will be provided/displayed on the LCD screen -

- Engine RPM
- Check engine and stop engine warning indicators
- Engine oil pressure
- Engine coolant temperature
- Water pump temperature
- Fuel Level
- Water tank level
- Battery voltage
- Operating mode (RPM or pressure)
- Pressure or RPM setting

On screen messaging show diagnostic and warning messages as they occur. It will show apparatus information, stored data, and program options when selected by the operator. It will monitor inputs outputs and support audible and visual warning alarms for the following conditions -

- High battery voltage
- Low battery voltage/engine off
- Low battery voltage/engine running
- High water pump temperature
- Low fuel
- Low engine oil pressure
- High engine coolant temperature
- Water tank out of water (visual alarm only)
- No engine response (visual alarm only)

The pressure controller will store the accumulated operating hours for the pump and engine. These items are to be displayed within the pressure controller menu.

The pressure controller will include a USB port on the back of the controller for easy software upgrades if needed.

PRIMING PUMP

The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of NFPA 1901.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction.

One (1) priming control will open the priming valve and start the pump primer. The control will have a three position switch for automatic, off or test. In the sentry mode (automatic) the primer will sense

when the pump losses discharge pressure and start the pump primer. The primer will automatically stop once the pump has pressure.

PUMP MANUALS

There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.

PLUMBING, STAINLESS STEEL AND HOSE

All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.

Plumbing manifold bodies will be ductile cast iron or stainless steel.

All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame.

All water carrying gauge lines will be of flexible polypropylene tubing.

All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.

FOAM SYSTEM PLUMBING

All piping that is in contact with the foam concentrate or foam/water solution will be stainless steel. The fittings will be stainless steel or brass. Cast iron pump manifolds will be allowed.

MAIN PUMP INLETS

A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

INLET BUTTERFLY VALVE

There will be One (1) butterfly valve provided on the right side main pump inlet(s).

The 6.00" Jamesbury inlet valve will be recessed behind the pump panel with a stainless steel trim ring around the opening.

A built-in, adjustable pressure relief valve and a 3/4" bleeder valve will be provided on the inlet side of the valve.

There will be Akron 9333 electric valve controller(s) provided on the pump operators panel. The electric control(s) must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit(s) must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller(s) will provide position

indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option.

The electric actuator will be furnished with a manual override accessible at the pump panel.

A maintain switch will be provided behind the stainless steel access door near the manual override. The switch will cut off power to the valve to allow for manual override valve actuation.

MAIN PUMP INLET CAP

The main pump inlets will have National Standard Threads with a long handle chrome cap.

The cap will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.



VALVES

All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Valves will have a **ten (10) year** warranty.

The location of the valve for the one (1) inlet will be recessed behind the pump panel.

INLET CONTROL

The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.

LEFT SIDE INLET

There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.

The auxiliary inlet will be provided with a strainer, chrome swivel and plug.

ANODE, INLET

A pair of replaceable sacrificial .75" magnesium anodes will be provided in the water pump to protect the pump from corrosion. One (1) will be placed in the inlet side of the pump and the other in the discharge side of the pump.

FRONT INLET

A 6.00" inlet front inlet that terminates on top of the right side bumper extension will be provided.

The plumbing will consist of 5.00" black iron pipe and a 5.00" Bray butterfly valve. Only radius elbows will be used in the piping, no mitered joints.

Drains will be furnished in all the low points of piping and have .75" valves with swing handle.

There will be two (2) bleeder valves, one (1) located near the threaded connection and one (1) bleeder valve near the front inlet valve control.

Die cast zinc screens will be provided at the front inlet connection.

FRONT INLET CONTROL

The front inlet will be gated with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve or an indicator will be provided to show when the valve is closed.

There will be an electric valve controller provided. The control will be momentary to allow the valve to be gated for ease of operation. Indicator lights will be provided to show if the valve is open or closed.

FRONT INLET INTAKE RELIEF VALVE

An Akron Brass Style 53 intake pressure relief valve will be provided on the inlet side of the valve preset at 125 psig .

The pressure relief valve will be adjustable from 50 to 250 psi.

The outlet will be 2.50" National Standard hose thread and terminate below the frame rails and will have a "do not cap" warning tag near the discharge outlet.

FRONT INLET ELBOW

The front inlet will have a 6.00" inlet elbow with swivel, terminating with Male National Standard Hose Thread.

The swivel will be Chrome

A quarter-turn style of bleeder bleeder will be provided on the front inlet elbow.

FRONT INLET CAP

The front inlet will have National Standard hose threads with a long handle cap.

The cap will incorporate a thread design to automatically relieve stored pressure in the line when disconnected.

The cap will be fabricated from brass material.

LARGE DIAMETER REAR INLET

A 6.00" inlet with screen will be provided using 4.00" welded, black iron piping and a 4.00" butterfly valve.

The screen will provide cathodic protection against corrosion in the piping.

The piping will contain only large radiused elbows, no mitered joints.

The inlet will terminate below the ladder storage compartment.

A bleeder valve will be located at the threaded connection.

REAR INLET CONTROL

The rear inlet will be gated with an electric operated control at the pump operator's panel. The control will be momentary to allow the valve to be gated for ease of operation. Indicator lights will be provided to show if the valve is open or closed.

REAR INLET ELBOW & CAP

The rear 6.00" inlet will be furnished with a 6.00" (F) National Standard hose thread x 4.00" Storz elbow adapter with a Storz cap.

REAR INLET INTAKE RELIEF VALVE

An Task Force Tips (TFT) model A1860 intake pressure relief valve will be provided on the inlet side of the valve preset at 125 psig .

The pressure relief valve will be adjustable from 90 to 300 psi.

The outlet will be 2.50" National Standard hose thread and terminate below the frame rails and will have a "do not cap" warning tag near the discharge outlet.

INLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with stainless steel piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

DISCHARGE OUTLET CONTROLS

The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve.

If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

LEFT SIDE DISCHARGE OUTLETS

There will be Two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

LEFT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the left side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

RIGHT SIDE DISCHARGE OUTLETS

There will be One (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

RIGHT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the right side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

LARGE DIAMETER DISCHARGE OUTLET

There will be a 4.00" discharge outlet with a 4.00" Akron valve installed on the right side of the apparatus, terminating with a 4.00" (M) National Standard hose thread adapter. This discharge outlet will be actuated with a handwheel control at the pump operator's control panel.

An indicator will be provided to show when the valve is in the closed position.

LARGE DIAMETER OUTLET ELBOWS

The 4.00" outlet will be furnished with a 4.00" (F) National Standard hose thread x 4.00" (M) National Standard 30 degree chrome elbow adapter with a long handle cap.

FRONT DISCHARGE OUTLET

There will be one (1) 2.50" discharge outlet piped to the front of the apparatus and located on the top of the left side of the front bumper.

Plumbing will consist of 2.50" piping and flexible hose with a 2.50" full flow valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the plumbing where appropriate. The piping will terminate with a 2.50" NST with 90 degree stainless steel swivel.

There will be automatic drains provided at all low points of the piping.

REAR DISCHARGE OUTLET

There will be One (1) discharge outlet piped to the rear of the hose bed, right side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing will consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel.

REAR OUTLET ELBOWS

The 2.50" discharge outlets located at the rear of the apparatus will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

FRONT OF HOSE BED DISCHARGE OUTLET

There will be Two (2) discharge outlets discharge(s) piped to the front of the hose bed and located Beds 1 & 4. Plumbing will consist of 2.50" piping with a 2.50" full-flow ball valve controlled at the pump operator's panel. The discharge(s) will terminate with a 2.50" (M) National Standard hose thread adapter.

DISCHARGE CAPS/ INLET PLUGS

Chrome plated, rocker lug, caps with chain will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets.

Chrome plated, rocker lug, plugs with chain will be furnished for all auxiliary inlets 1.00" thru 3.00" in size.

The caps and plugs will incorporate a thread design to automatically relieve stored pressure in the line when disconnected.

OUTLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

ADAPTERS

There will be three (3) adapters with 2.50" FNST x 1.50" MNST threads installed on Front bumper and the two hose bed discharges..

DELUGE RISER

A 3.00" deluge riser will be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping will be rigidly braced and installed securely so no movement develops when the line is charged. The riser will be gated and controlled at the pump operator's panel.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

TELESCOPIC PIPING

The deluge riser piping will include an 18.00" Task Force Model XG18 Extend-A-Gun extension.

This extension will be telescopic to allow the deluge gun to be raised 18.00" increasing the range of operation.

A position sensor will be provided on the telescopic piping that will activate the "do not move vehicle" light inside the cab when the monitor is in the raised position.

MONITOR

A customer/dealer supplied and installed make and model TBD monitor will be properly installed on the deluge riser.

The deluge riser will have male National Pipe Threads for mounting the monitor.

CROSSLAY HOSE BEDS

Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying 200' of 1.75" double jacketed hose and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve.

Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus.

The crosslay controls will be at the pump operator's panel.

The center crosslay dividers will be fabricated of 0.25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish.

Vertical scuffplates constructed of stainless steel will be provided at the front and rear ends of the bed on each side of vehicle.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

CROSSLAY HOSE RESTRAINT

A quantity of two (2) 2.00" black nylon, webbing design restraint(s) will be provided at each of the ends of crosslay(s) to secure the hose during travel. The webbing assembly is to be permanent attached at the front of the crosslays with footman loops and the top will attach with seat belt buckles. The lower rearward portion of the webbing will be secured with bungee cord fastener. The female ends of the seat buckles will be permanently attached at the corners of the crosslay opening. A bar will be

attached to the female ends of the seat belt buckles to allow a single pull release. A single orange nylon strap will be attached to the bar for releasing the buckles on the webbing.

CROSSLAY 8.00" LOWER THAN STANDARD

The crosslays will be lowered 8.00" from standard.

There will be two (2) additional polished stainless steel roller and guide assembly mounted Top flange of pump cargo area each side (used to assist with cord reel deployment on opposite side of truck).

HUSKY 3 FOAM PROPORTIONER

A Pierce Husky® 3 foam proportioning system will be provided. The Husky 3 is an on demand, automatic proportioning, single point, direct injection system suitable for all types of Class A and B foam concentrates, including the high viscosity (6000 cps), alcohol resistant Class B foams. Operation will be based on direct measurement of water flow, and remain consistent within the specified flows and pressures. The system will automatically proportion foam solution at rates from .1 percent to 3 percent regardless of variations in water pressure and flow, up to the maximum rated capacity of the foam concentrate pump.

The design of the system will allow operation from draft, hydrant, or relay operation.

System Capacity

The system will have the ability to deliver the following minimum foam solution flow rates at accuracies that meet or exceed NFPA requirements at a pump rating of 150 psi.

100 gpm @ 3 percent

300 gpm @ 1 percent

600 gpm @ 0.5 percent

Class A foam setting in .1 percent increments from .1 percent to 1 percent. Typical settings of 1 percent, .5 percent and .3 percent (maximum capacity will be limited to the plumbing and water pump capacity).

Control System

The system will be equipped with a digital electronic control display located on the pump operators panel. Push button controls will be integrated into the panel to turn the system on/off, control the foam percentage, and to set the operation modes.

The percent of injection will have a preset. This preset can be changed at the fire department as desired. The percent of injection will be able to be easily changed at the scene to adjust to changing demands.

Three (3) .50 tall LEDs will display the foam percentage in numeric characters. Three (3) indicator LEDs will also be included, one (1) green, one (1) red, and one (1) yellow. The LEDs will indicate various system operation or error states.

The indications will be:

- Solid Green - System On
- Solid Red - Valve Position Error
- Solid Yellow - Priming System
- Flashing Green - Injecting Foam
- Flashing Red - Low Tank Level
- Flashing Yellow - Refilling Tank

The control display will house a microprocessor, which receives input from the systems water flow meter while also monitoring the position of the foam concentrate pump. The microprocessor will compare the values of the water flow versus the position/rate of the foam pump, to ensure the proportion rate is accurate. One (1) check valve will be installed in the plumbing to prevent foam from contaminating the water pump.

Hydraulic Drive System

The foam concentrate pump will be powered by an electric over hydraulic drive system. The hydraulic system and motor will be integrated into one (1) unit.

Foam Concentrate Pump

The foam concentrate pump will be of positive displacement, self-priming; linear actuated design, driven by the hydraulic system. The pump will be constructed of brass body; chrome plated stainless steel shaft, with a stainless steel piston. In order to increase longevity of the pump, no aluminum will be present in its construction.

A relief system will be provided which is designed to protect the drive system components and prevent over pressuring the foam concentrate pump

The foam concentrate pump will have minimum capacity for 3 gpm with all types of foam concentrates with a viscosity at or below 6000 cps including protein, fluoroprotein, AFFF, FFFP, or AR-AFFF. The system will deliver only the amount of foam concentrate flow required, without recirculating foam back to the storage tank. Recirculating foam concentrate back to the storage tank can cause agitation and premature foaming of the concentrate, which can result in system failure. The foam concentrate pump will be self-priming and have the ability to draw foam concentrate from external supplies such as drums or pails.

External Foam Concentrate Connection

An external foam pick-up will be provided to enable use of a foam agent that is not stored on the vehicle. The external foam pick-up will be designed to allow continued operation after the on-board foam tank is empty, or the use of foam different than the foam in the foam tank.

Panel Mounted External Pick-Up Connection / Valve

A bronze three (3)-way valve will be provided. The unit will be mounted to the pump panel. The valve unit will function as the foam system tank to pump valve and external suction valve. The external foam pick-up will be one (1) 0.75" male connection GHT (garden hose thread) with a cap.

Pick-Up Hose

A 0.75" flexible hose with an end for insertion into foam containers will be provided. The hose will be supplied with a 0.75" female swivel GHT (garden hose thread) swivel connector. The hose will be shipped loose.

Discharges

The foam system will be plumbed to the left side of front bumper, left rear outlet, front crosslay and rear crosslay.

System Electrical Load

The maximum current draw of the electric motor and system will be no more than 55 amperes at 12 VDC.

SINGLE FOAM TANK REFILL

The foam system's proportioning pump will be used to fill the foam tank. This will allow use of the auxiliary foam pick-up to pump the foam from pails or a drum on the ground into the foam tank. A foam shut-off switch will be installed in the fill dome of the tank to shut the system down when the tank is full. The fill operation will be controlled by a mode in the foam system controller. While the proportioner pump is filling the tank, the controller will display a flashing yellow LED to indicate that the tank is filling. When the tank is full, as determined by the float switch in the tank dome, the pump will stop and the controller will shut the yellow LED off. If it attempted to use tank fill and the refill valve and suction valve are in the wrong position(s), then a red LED will illuminate to indicate the improper valve position(s). When the valves are positioned properly, then filling will commence.

HUSKY 3 FOAM SYSTEM POWER UNIT LOCATION

The Husky 3 foam system power unit typically gets installed in the cargo area over the pump. The new location of this power unit will be Forward of HB cross sheet next to fill domes..

FOAM TANK

The foam tank will be an integral portion of the polypropylene water tank. The cell will have a capacity of 30 gallons of foam with the intended use of Class A foam. The brand of foam stored in this tank will be National Knockdown. The foam cell will not reduce the capacity of the water tank. The foam cell will have a screen in the fill dome and a breather in the lid.

FOAM TANK DRAIN

The foam tank drain will be a 0.75" swing handle drain valve with 1.00" fittings located inside the pump/plumbing compartment.

The following drawing(s) will be provided for approval by the customer. The drawing(s) will be made for up One (01) Truck apparatus and/or similar Pierce job number.

PUMP OPERATOR'S PANEL DRAWING

A detailed drawing to scale of the pump operator's panel will be provided for the customer to review. The drawing will include all of the gauges, controls, switching, etc., located on the pump operator's panel. The customer will be allowed to make changes and/or mark-ups to this approval drawing. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved pump operator's panel drawing will become part of the contract documents.

Due to the way drain(s), bleeder(s), operational/maintenance tag(s) and NFPA required warning tag(s) are placed on pump panel(s), these items will NOT be shown on any pump panel approval drawing(s). These item(s) will be placed on pump panel(s) at the fire apparatus manufacturer discretion.

COLOR CODED TAGS

A detailed drawing/chart of the colors used on all of the inlet(s) and outlet(s) will be provided for the customer to review. The customer will be allowed to make changes and/or mark-ups to this approval drawing/chart. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved drawing/chart of the colors will become part of the contract documents.

SPECIAL TEXT/VERBIAGE TAGS

A detailed drawing/chart of the text/verbiage used on all of the inlet(s) and outlet(s) will be provided for the customer to review. The customer will be allowed to make changes and/or mark-ups to this approval drawing/chart. The fire apparatus manufacturer will make revisions (If needed) to the drawing per the customer changes and/or mark-ups as long as the changes are physically possible within a specific product line.

The finalized and signed customer approved drawing/chart of the text/verbiage will become part of the contract documents.

PUMP PANEL CONFIGURATION

The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.

PUMP AND GAUGE PANEL

The pump and gauge panels will be constructed of stainless steel with a brushed finish. A polished aluminum trim molding will be provided on both sides of the pump panel.

PUMP ACCESS

Right Side Panel

The right side upper pump panel will be removable.

Panel Fastener

The removable panels will be secured with black swell latch .

The left side pump panels will be attached with screws.

The right side lower pump panel (drain bank) will be attached with screws.

PUMP COMPARTMENT LIGHT

There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12 volt DC LED light(s) with Whelen, Model 3FLANGEC, flange(s) installed in the pump compartment.

There will be a switch accessible through a door on the pump panel included with this installation.

Engine monitoring graduated LED indicators will be incorporated with the pressure controller.

Also provided at the pump panel will be the following:

- Master Pump Drain Control

THROTTLE READY GREEN INDICATOR LIGHT

There will be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.

OK TO PUMP INDICATOR LIGHT

There will be a green indicator light installed on the pump operators panel that is activated when the pump is in Ok To Pump mode.

AIR HORN BUTTON

An air horn control button will be provided at the pump operator's control panel. This button will be red in color and properly labeled "Evacuation".

VACUUM AND PRESSURE GAUGES

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©.

The gauges will be a minimum of 4.50" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.

Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They will be marked with a label.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1© interlube filled.

They will be 2.50" in diameter and have white faces with black lettering.

Gauges will have a pressure range of 0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

WATER LEVEL GAUGE

An electric water level gauge will be incorporated in the pressure controller that registers water level by means of 9 LEDs. They will be at 1/8 level increments with a tank empty LED. The LEDs will be a bright type that is readable in sunlight, and have a full 180-degree of clear viewing.

To further alert the pump operator, the gauge will have a warning flash when the tank volume is less than 25%, and will have "Down Chasing LEDs when the tank is almost empty.

The level measurement will be ascertained by sensing the head pressure of the fluid in the tank or cell.

There will be a light driver module with this installation to power additional water level gauge(s) included on the apparatus.

WATER LEVEL GAUGE

There will be three (3) additional water level indicator(s), Whelen®, Model PSTANK2, LED module with chrome trim, installed one (1) on the cab behind the left cab door, one (1) on the cab behind the right cab door and one (1) on the rear body, left side.

This light module(s) will include four (4) colored levels, and function similar to the water level indicator located at the operators panel:

- First green module indicates a full water level
- Second blue module indicates a water level above 3/4 full
- Third amber module indicates a water level above 1/2 full
- Last red module indicates a water level above 1/4 full and empty
 - Above 1/4 this light will be steady burning
 - At empty this light will be flashing

The flash rate will be determined by the main water level tank sensor.

This module will be activated when the parking brake is applied.

FOAM LEVEL GAUGE

An electronic foam level gauge will be provided on the operator's panel that registers foam level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The foam level indicators will be as follows:

- 100 percent = Green
- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the foam tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from foam and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The display will be able to be calibrated in the field and will measure head pressure to accurately show the tank level.

STEP/LIGHT SHIELD

There will be an aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the pump operators panel.

There will be 12 volt DC white LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights shall be activated when the parking brake is set. Additional lights will be included every 18.00" depending on the size of the pump house. One (1) pump panel light will come on when the pump is in ok to pump mode.

- There will be a light activated above the pump panel light switch when the parking brake is set. This is to afford the operator some illumination when first approaching the control panel.

There will be one (1) white LED, step light provided above this step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15.00" x 15.00" square placed 10.00" below the light and a minimum of 1.5 fc covering an entire 30.00" x 30.00" square at the same 10.00" distance below the light.

ADDITIONAL STEP/LIGHT SHIELD

There will be an additional aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the driver's side pump panel.

- There will be 12 volt DC white LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by the pump panel light switch. Additional lights will be included every 18.00" depending on the size of the pump house.

There will be one (1) white LED, step light provided above the step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. The step light will be activated by the pump panel light switch.

AIR HORN SYSTEM

Two (2) Grover, Stutter Tone, air horns will be recessed in the front bumper. The horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed in-line to prevent loss of air in the air brake system.

Air Horn Location

The air horns will be located on the right side of the bumper, outside of the frame rail.

AIR HORN CONTROL

The air horn(s) will be activated by the following:

- Right side foot switch
- Left side foot switch

ELECTRONIC SIREN

There will be a Whelen, Model: 295SLSA1, electronic siren with noise canceling microphone provided.

This siren to be active when the master battery switch is on.

NFPA 1901, 2016 edition, Section 13.9.1.1 requires the siren manufacturer to certify the siren as meeting the requirements of SAE J1849, *Emergency Vehicle Sirens*.

Per the fire department specification, the siren and siren speaker come from separate manufacturers and a certification is therefore invalid. The apparatus will be non compliant to NFPA 1901 standards at time of contract execution.

Electronic siren head will be recessed in the overhead console above the engine tunnel on the driver side.

Siren will be actuated by a foot switch on the officer's side and by the horn button in the steering wheel. The driver will have the option to control the siren or the chassis horns from the horn button by means of a selector switch.

SPEAKER

There will be one (1) Federal Signal DynaMax®, Model ES100, 100 watt speaker provided. The speaker will use a Federal Signal, Model ESFMT-EF, recess mount with stainless steel grille. The speaker will be connected to the siren amplifier.

The speaker will be recessed in the left side of the front bumper, towards the outside.

AUXILIARY MECHANICAL SIREN

There will be a Federal Signal Model Q2B mechanical siren furnished and installed in the front of the apparatus.

The Q2B will be chrome finish.

The siren will have a 2-gauge cable connected to a power solenoid that is connected by a 2-gauge cable ran battery direct to the primary chassis batteries and will be labeled Q2B+ at the battery. The power solenoid will only be enabled when the emergency master switch is on.

The siren will have a 2-gauge ground wire connected to the chassis battery stud. The cable will be labeled Q2B- at the battery.

When the chassis battery switch is on, and the emergency master switch is on, the Q2B siren will be activated by the following:

The mechanical siren will be mounted on the bumper deck plate. It will be mounted on the right side. A reinforcement plate will be furnished to support the siren.

MECHANICAL SIREN CONTROL

The mechanical siren will be activated by the following:

- Left side foot switch.
- Right side foot switch.

A momentary red switch will be included in the left side overhead switch panel to activate the siren brake.

A momentary red switch will be included in the right side overhead switch panel to activate the siren brake.

FRONT ZONE UPPER WARNING LIGHTS

There will be one (1) 81.00" Whelen Freedom IV LED lightbar mounted on the cab roof.

The lightbar will include the following:

- One (1) red flashing LED module in the driver's side end position.
- One (1) red flashing LED module in the driver's side front corner position.
- One (1) red flashing LED module in the driver's side first front position.
- One (1) red flashing LED module in the driver's side second front position.
- One (1) red flashing LED module in the driver's side third front position.
- One (1) white flashing LED module in the driver's side fourth front position.
- Open in the driver's side fifth front position.
- Open in the driver's side sixth front position.
- Open in the driver's side seventh front position.
- Open in the passenger's side seventh position.
- Open in the passenger's side sixth front position.
- Open in the passenger's side fifth front position.
- One (1) white flashing LED module in the passenger's side fourth front position.
- One (1) red flashing LED module in the passenger's side third front position.
- One (1) red flashing LED module in the passenger's side second front position.
- One (1) red flashing LED module in the passenger's side first front position.
- One (1) red flashing LED module in the passenger's side front corner position.
- One (1) red flashing LED module in the passenger's side end position.

There will be clear lenses included on the lightbar.

There will be a switch installed in the cab on the switch panel to control the lightbar.

The two (2) white LED flashing modules will be disabled when the parking brake is applied.

The six (6) red flashing LED modules in the front positions may be load managed when the parking brake is applied.

SIDE WARNING LIGHTS

There will be two (2) 21.50" Whelen Freedom IV LED lightbars mounted on the roof, one (1) on each side, over the cab doors.

Each lightbar will include the following:

- One (1) red flashing LED module in the outside end position.
- One (1) red flashing LED module in the outside front corner position.
- One (1) red flashing LED module in the outside front position.
- One (1) red flashing LED module in the inside front position.
- One (1) red flashing LED module in the inside front corner position.

There will be clear lenses included on the lightbar.

There will be a switch in the cab on the switch panel to control the lightbars.

These lights may be load managed when the parking brake is applied.

FRONT ZONE LOWER LIGHTS

There will be two (2) pair of Whelen, Model M6**, LED lights installed on the cab face above the headlights, in a common bezel matching the one for the headlamps. The housing to be polished and the trim shall be chrome.

The driver's side front outside warning light to be red

- The driver's side front inside warning light to be white
- The passenger's side front inside warning light to be white
- The passenger's side front outside warning light to be red
- The color of the lenses will be the same color as the LED's

There will be a switch located in the cab on the switch panel to control the lights.

ROTO RAY LIGHT

There will be one (1) Roto Ray, Model 4000W rotating warning light provided on the front of the cab mounted through the top section of the front grille.

This warning light will include the following:

- Two (2) PAR46 lights with red LEDs and clear lenses
- One (1) PAR46 light with white LEDs and a clear lens

There will be a switch in the cab on the switch panel to control this light.

The rotation motor and the warning lights will be deactivated when the parking brake is applied.

SIDE ZONE LOWER LIGHTING

There will be six (6) Whelen®, Model M6**, 4.31" high x 6.75" long x 1.37" deep flashing LED warning lights with chrome trim installed per the following:

- Two (2) lights located, one (1) each side on the bumper extension. The driver's side, side front light to include red warning LEDs and the passenger's side, side front light to include red warning LEDs.
- Two (2) lights located, one (1) each side of cab rearward of crew cab doors. The driver's side, side middle light to include red warning LEDs and the passenger's side, side middle light to include red warning LEDs.
- Two (2) lights located, one (1) each side above rear wheels. The driver's side, side rear light to include red warning LEDs and the passenger's side, side rear light to include red warning LEDs.
- The warning light lens colors to be the same as the LEDs.

There will be a switch in the cab on the switch panel to control the lights.

SIDE WARNING LIGHTS

There will be two (2) Whelen®, Model M9**, 6.50" high x 10.37" wide x 1.37" deep flashing LED warning light(s) with chrome trim provided, One each side forward body..

The light(s) to include red LEDs. The warning light lens colors to be the same as the LEDs.

These lights will be activated with the rear upper warning switch.

White LEDs will be deactivated when the parking brake is applied.

Amber, blue, green or red LEDs may be load managed when the parking brake is applied.

WARNING LIGHTS (SIDE)

There will be four (4) Whelen LIN3 Super LED lights, Model RS*02ZCR, provided and located in the body rub rails One in each side body rubrail.

The color of each light will be red LED with clear lens.

Each light will be provided with a chrome plated ABS flange.

The light(s) will be activated with the side warning switch.

REAR ZONE LOWER LIGHTING

Two (2) Whelen, Model M6* LED flashing warning lights with chrome bezels will be located at the rear of the apparatus.

The driver's side rear light to be red.

The passenger's side rear light to be red.

Both lights will include a lens that is the same color as the LED's.

There will be a switch located in the cab on the switch panel to control the lights.

WARNING LIGHTS (REAR AND SIDE UPPER ZONES)

There will be four (4), Whelen®, Model M9**C, 6.50" high x 10.37" wide x 1.37" deep flashing LED warning lights with chrome trim provided at the rear of the apparatus per the following:

- The side upper rear light on the left side to include red flashing LEDs.
- The rear upper light on the left side to include red flashing LEDs.
- The rear upper light on the right side to include red flashing LEDs.
- The side upper rear light on the right side to include red flashing LEDs.
- The warning light lens colors to be the same as the LEDs

There will be a switch in the cab on the switch panel to control the lights.

REAR LIGHT MOUNTING

The rear warning lights will be mounted on the rear side sheet flange and rear bulkhead of the body as high as possible with all wiring totally enclosed.

TRAFFIC DIRECTING LIGHT

There will be one (1) Whelen®, Model TAL65, 36.00" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus.

The Whelen, Model TACTL5, control head will be included with this installation.

The controller will be energized when the battery switch is on.

The auxiliary flash not activated.

This traffic directing light will be recessed with a stainless steel trim plate at the rear of the apparatus as high as practical.

The traffic directing light controller will be located within the switch panel on the engine tunnel. The controller will be within easy reach of the driver.

ELECTRICAL SYSTEM GENERAL DESIGN FOR ALTERNATING CURRENT

The following guidelines will apply to the 120/240 VAC system installation:

General

Any fixed line voltage power source producing alternating current (ac) line voltage will produce electric power at 60 cycles plus or minus 3 cycles.

Except where superseded by the requirements of NFPA 1901, all components, equipment and installation procedures will conform to NFPA 70, National Electrical Code (herein referred to as the NEC).

Line voltage electrical system equipment and materials included on the apparatus will be listed and installed in accordance with the manufacturer's instructions. All products will be used only in the manner for which they have been listed.

Grounding

Grounding will be in accordance with Section 250-6 "Portable and Vehicle Mounted Generators" of the NEC. Ungrounded systems will not be used. Only stranded or braided copper conductors will be used for grounding and bonding.

An equipment grounding means will be provided in accordance with Section 250-91 (Grounding Conductor Material) of the NEC.

The grounded current carrying conductor (neutral) will be insulated from the equipment grounding conductors and from the equipment enclosures and other grounded parts. The neutral conductor will be colored white or gray in accordance with Section 200-6 (Means of Identifying Grounding Conductors) of the NEC.

In addition to the bonding required for the low voltage return current, each body and driving or crew compartment enclosure will be bonded to the vehicle frame by a copper conductor. This conductor will have a minimum amperage rating of 115 percent of the nameplate current rating of the power source specification label as defined in Section 310-15 (amp capacities) of the NEC. A single conductor properly sized to meet the low voltage and line voltage requirements will be permitted to be used.

All power source system mechanical and electrical components will be sized to support the continuous duty nameplate rating of the power source.

Operation

Instructions that provide the operator with the essential power source operating instructions, including the power-up and power-down sequence, will be permanently attached to the apparatus at any point where such operations can take place.

Provisions will be made for quickly and easily placing the power source into operation. The control will be marked to indicate when it is correctly positioned for power source operation. Any control device used in the drive train will be equipped with a means to prevent the unintentional movement of the control device from its set position.

A power source specification label will be permanently attached to the apparatus near the operator's control station. The label will provide the operator with the following information:

- Rated voltage(s) and type (ac or dc)
- Phase
- Rated frequency
- Rated amperage
- Continuous rated watts
- Power source engine speed

Direct drive (PTO) and portable generator installations will comply with Article 445 (Generators) of the NEC.

Overcurrent protection

The conductors used in the power supply assembly between the output terminals of the power source and the main over current protection device will not exceed 144.00" (3658 mm) in length.

For fixed power supplies, all conductors in the power supply assembly will be type THHW, THW, or use stranded conductors enclosed in nonmetallic liquid tight flexible conduit rated for a minimum of 194 degree Fahrenheit (90 degrees Celsius).

For portable power supplies, conductors located between the power source and the line side of the main overcurrent protection device will be type SO or type SEO with suffix WA flexible cord rated for 600-volts at 194 degrees Fahrenheit (90 degrees Celsius).

Wiring Methods

Fixed wiring systems will be limited to the following:

- Metallic or nonmetallic liquid tight flexible conduit rated at not less than 194 degrees Fahrenheit (90 degrees Celsius)
- or
- Type SO or Type SEO cord with a WA suffix, rated at 600 volts at not less than 194 degrees Fahrenheit (90 degrees Celsius)

Electrical cord or conduit will not be attached to chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components, or low voltage wiring. In addition the wiring will be run as follows.

- Separated by a minimum of 12.00" (305 mm), or properly shielded, from exhaust piping
- Separated from fuel lines by a minimum of 6.00" (152 mm) distance

Electrical cord or conduit will be supported within 6.00" (152 mm) of any junction box and at a minimum of every 24.00" (610 mm) of continuous run. Supports will be made of nonmetallic materials or corrosion protected metal. All supports will be of a design that does not cut or abrade the conduit or cable and will be mechanically fastened to the vehicle.

Wiring Identification

All line voltage conductors located in the main panel board will be individually and permanently identified. The identification will reference the wiring schematic or indicate the final termination point. When prewiring for future power sources or devices, the unterminated ends will be labeled showing function and wire size.

Wet Locations

All wet location receptacle outlets and inlet devices, including those on hardwired remote power distribution boxes, will be of the grounding type provided with a wet location cover and installed in accordance with Section 210-7 "Receptacles and Cord Connections" of the NEC.

All receptacles located in a wet location will be not less than 24.00" (610 mm) from the ground. Receptacles on off-road vehicles will be a minimum of 30.00" (762 mm) from the ground.

The face of any wet location receptacle will be installed in a plane from vertical to not more than 45 degrees off vertical. No receptacle will be installed in a face up position.

Dry Locations

All receptacles located in a dry location will be of the grounding type. Receptacles will be not less than 30.00" (762 mm) above the interior floor height.

All receptacles will be marked with the type of line voltage (120-volts or 240-volts) and the current rating in amps. If the receptacles are direct current, or other than single phase, they will be so marked.

Listing

All receptacles and electrical inlet devices will be listed to UL 498, Standard for Safety Attachment Plugs and Receptacles, or other appropriate performance standards. Receptacles used for direct current voltages will be rated for the appropriate service.

Electrical System Testing

The wiring and associated equipment will be tested by the apparatus manufacturer or the installer of the line voltage system.

The wiring and permanently connected devices and equipment will be subjected to a dielectric voltage withstand test of 900-volts for one (1) minute. The test will be conducted between live parts and the neutral conductor, and between live parts and the vehicle frame with any switches in the circuit(s) closed. This test will be conducted after all body work has been completed.

Electrical polarity verification will be made of all permanently wired equipment and receptacles to determine that connections have been properly made.

Operational Test per Current NFPA 1901 Standard

The apparatus manufacturer will perform the following operation test and ensure that the power source and any devices that are attached to the line voltage electrical system are properly connected and in working order. The test will be witnessed and the results certified by an independent third-party certification organization.

The prime mover will be started from a cold start condition and the line voltage electrical system loaded to 100 percent of the nameplate rating.

The power source will be operated at 100 percent of its nameplate voltage for a minimum of two (2) hours unless the system meets category certification as defined in the current NFPA 1901 standard.

Where the line voltage power is derived from the vehicle's low voltage system, the minimum continuous electrical load as defined in the current NFPA 1901 standard will be applied to the low voltage electrical system during the operational test.

GENERATOR

There will be one (1) Harrison 3.6 kW hydraulic generator provided.

This generator will be 31.00" long x 15.00" wide x 14.13" high and weigh 168 lbs.

This generator will have a 3,600 watt continuous duty rating @ 120 volts AC.

The generator will be driven by a transmission power take off unit, through a hydraulic pump and motor.

The generator will include an electrical control inside the cab. The hydraulic engagement supply will be operational only after the chassis parking brake is applied.

The generator hydraulic circuit will include a soft start valve to protect the generator components during PTO engagement.

There will be an AC volt meter furnished next to the circuit breaker panel to monitor the generator.

GENERATOR LOCATION

The generator will be mounted in the in the area over the pump on the right side. The flooring in this area will be either reinforced or constructed in such a manner that it will handle the additional weight of the generator.

GENERATOR START

There will be a switch provided on the cab instrument panel to engage the generator.

GENERATOR REMOTE START

There will be one (1) remote start switch provided in the cab switch panel and on the pump panel to engage the hydraulic generator PTO and field. A light at each switch location will be provided to indicate that the generator is running.

CIRCUIT BREAKER PANEL

The circuit breaker panel will be located high on the left wall of compartment LS3.

GENERATOR SPLASH GUARD

A stainless steel splash guard will be installed over the electrical controls for the generator. The guard will protect this area from large amounts of water dumping from the deluge gun.

ELECTRIC CORD REEL

Furnished with the 120 volt AC electrical system will be a Hannay, Series 1600, cord reel. The reel will be provided with a 12-volt electric rewind switch, that is guarded to prevent accidental operation and labeled for its intended use. The switch will be protected with a fuse and installed at a height not to exceed 72.00" above the operators standing position.

The exterior finish of the reel(s) will be painted #269 gray from the reel manufacturer.

A captive roller assembly to be provided to aid in the payout and loading of the reel. A ball stop will be provided to prevent the cord from being wound on the reel.

A label will be provided in a readily visible location adjacent to the reel. The label will indicate current rating, current type, phase, voltage and total cable length.

A total of one (1) cord reel will be provided one (1) above the pump area on the right side.

The cord reel will be configured with three (3) conductors.

CORD

Provided for electric distribution will be one (1) length installed on the reel of 200 feet of black 10/3 electrical cord. No connector will be installed on the end of the cord.

REEL ENCLOSURE

An aluminum treadplate enclosure will be installed over the reel. The enclosure will be provided with a stainless steel hinge that will allow the cover to be opened.

A captive roller assembly will be provided through the side sheet to assist with the pay out of the cord. A ball stop will be provided on the cord to stop the cord at the roller assembly

A total of one (1) will be installed Reel installed in the PS cargo area above the pump.

SECOND ELECTRIC CORD REEL REWIND SWITCH

There will be one (1) redundant switch(es) to control the electric cord reel rewind located DS Pump Panel.

POWER OUTLET STRIP

There will be two (2) receptacle strip(s) with six (6) 15 amp 120 volt AC straight blade receptacles provided IN the bottom of the PS and DS FF EMS Compartments.

The strip(s) selected will be powered from the shoreline inlet through a receptacle located adjacent to the strip(s).

There will be a label installed near the strip(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

POWER OUTLET STRIP

There will be two (2) receptacle strip(s) with six (6) 15 amp 120 volt AC straight blade receptacles provided Mount high on back wall of RS2 and TBD.

The strip(s) selected will be powered from the shoreline inlet through a receptacle located adjacent to the strip(s).

There will be a label installed near the strip(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

HYDRAULIC REEL MOUNTING PROVISION

Mounting provisions will be provided for future installation of a hydraulic reel. The mounting provisions will consist of mounting brackets, appropriate wiring for the electric rewind motor, and a switch to

control the rewind motor. The switch will be installed at the location of the reel at a height not to exceed 72.00" above the operator's standing position. The switch will be guarded to prevent accidental operation.

The make and model of the hydraulic reel will be Amkus.

Mounting provisions will be provided for future installation of two (2) reels located Compartment B1.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT

The following loose equipment as outlined in NFPA 1901, 2016 edition, section 5.9.3 and 5.9.4 will be provided by the fire department.

- 800 ft (60 m) of 2.50" (65 mm) or larger fire hose.
- 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose.
- One (1) handline nozzle, 200 gpm (750 L/min) minimum.
- Two (2) handline nozzles, 95 gpm (360 L/min) minimum.
- One (1) smoothbore or combination nozzle with 2.50" shutoff that flows a minimum of 250 gpm.
- One (1) SCBA complying with NFPA 1981 for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer.
- One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s).
- One (1) first aid kit.
- Four (4) combination spanner wrenches.
- Two (2) hydrant wrenches.
- One (1) double female 2.50" (65 mm) adapter with National Hose threads.
- One (1) double male 2.50" (65 mm) adapter with National Hose threads.
- One (1) rubber mallet, for use on suction hose connections.
- Two (2) salvage covers each a minimum size of 12 ft x 14 ft (3.7 m x 4.3 m).
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, *Standard for High Visibility Public Safety Vests*, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front.
- Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (102 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band.
- Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.
- One (1) automatic external defibrillator (AED).

- Four (4) ladder belts meeting the requirements of NFPA 1983, *Standard on Fire Service Life Safety Rope and System Components* (if equipped with an aerial device).
- If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, will be carried mounted in brackets fastened to the apparatus.
- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side will be carried. Any intake connection larger than 3.00" (75 mm) will include a pressure relief device that meets the requirements of 16.6.6.
- If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake will be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.
- If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters will be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.8.2.1 requires a minimum of 20' of suction hose or 15' of supply hose will be carried.

Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose.

STRAINER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.8.2.1.1 requires a suction strainer when suction hose is provided.

The strainer is not on the apparatus as manufactured. The fire department will provide the suction strainer.

DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PAINT

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.
2. Chemical Cleaning and Pretreatment - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion.
3. Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective basecoat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a Critical aesthetic finish. The Surfacer Primer is a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.
4. Finish Sanding - The Surfacer Primer will be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.
5. Sealer Primer - The Sealer Primer is applied prior to the Basecoat in all areas that have not been previously primed with the Surfacer Primer. The Sealer Primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when topcoated.
6. Basecoat Paint - Two coats of a high performance, two component high solids polyurethane basecoat will be applied. The Basecoat will be applied to a thickness that will achieve the proper color match. The Basecoat will be used in conjunction with a urethane clear coat to provide protection from the environment.
7. Clear Coat - Two (2) coats of Clear Coat will be applied over the Basecoat color. The Clear Coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style and roll-up doors will be Clear Coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacturer.

After the cab and body are painted, the color will be verified to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color

standard entered into the computer. Color specifications will be used to determine the color match. A Delta E reading will be used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and painted separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

The paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) are to meet or exceed Cadillac/General Motors GMW15777 global paint requirements. Orange peel levels are to meet or exceed the #6 A.C.T. standard in critical areas. These requirements must be met in order for the exterior paint finish to be considered acceptable. The manufacture's written paint standards will be available upon request.

PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current state regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.
- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations will have a 99.99% efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient
- Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.
- Paint wastes are disposed of in an environmentally safe manner.
- Empty metal paint containers will be recycled to recover the metal.
- Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with his state EPA rules and regulations.

CAB TWO-TONE PAINT

The cab will be painted two-tone with the upper section painted #101 black and the lower section painted #90 red. There will be a standard two-tone cab paint break provided.

There will be a deep cab shield provided.

BODY PAINT

The body will be painted to match the lower section of the cab.

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly will be finished with primer and gloss black paint before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc.

Components that are included with the chassis frame assembly that will be painted are:

- Frame rails
- Frame liners
- Cross members
- Axles
- Suspensions
- Steering gear
- Battery boxes
- Bumper extension weldment
- Frame extensions
- Body mounting angles
- Rear Body support substructure (front and rear)
- Pump house substructure
- Air tanks
- Steel fuel tank
- Castings
- Individual piece parts used in chassis and body assembly

FILM TECHNICAL PROPERTIES		
PROPERTY	TEST METHOD	PERFORMANCE
Color	~	Black
Film Thickness	~	0.5 - 1.5 Mills
Gloss - 60 Degree	ASTM D523	65 - 85
Pencil Hardness	ASTM D3363	2H Minimum
Direct Impact	ASTM D2794	100 in. - lbs. Minimum
Reverse Impact	ASTM D2794	60 in. - lbs. Minimum
Crosshatch Adhesion	ASTM D3359	4B - 5B
Humidity	ASTM D1735	1000 Hours Minimum
Water Immersion	ASTM D870	250 Hours Minimum
Gravelometer	GM9508P	6 Minimum
Throwpower	GM9535P	12 - 15 in.
Cold rolled steel lab panels, Zinc Phosphate pretreatment, 0.6 mils average film thickness, cured 20 minutes @ 350°F.		
PROPERTY	SUBSTRATE PRETREATMENT	SALT SPRAY* 1000 HOURS
Corrosion Resistance	CRS / Zinc Phos / Non-Chrome	1 - 2 mm
*Salt Spray - ASTM B117, cold rolled steel lab panels cured 20 minutes @ 350°F. [Average Total Scribe Creep]		

Components treated with epoxy E-coat protection prior to paint:

- Two (2) C-channel frame rails
- Two (2) frame liners

The E-coat process will meet the technical properties shown.

PAINT, REAR WHEELS

All wheel surfaces, inside and outside of inboard steel wheels only, will be provided with powder coat paint #101 black.

AXLE HUB PAINT

All axle hubs will be painted to match lower job color.

COMPARTMENT INTERIOR PAINT

The interior of all compartments will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

REFLECTIVE STRIPES

Five (5) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" black stripe at the top, then a .50" gold stripe, then a 4.00" black stripe, then a .50" gold stripe, then a 1.00" black stripe at the bottom.

The reflective band provided on the cab face will be at the headlight level.

REAR CHEVRON STRIPING

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear compartment door, will be covered.

The colors will be red and fluorescent yellow green diamond grade.

Each stripe will be 6.00" in width.

This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.

JOG(S) IN REFLECTIVE BAND

The reflective band located on each side of the apparatus body will contain one (1) jog(s) and will be angled at approximately a 45 degrees when installed.

REFLECTIVE STRIPE OUTLINE

A black vinyl outline will be provided for each chevron stripe at the rear of the truck.

REFLECTIVE, CAB DOORS

6.00" high reflective black reverse cut lettering.

This sign will meet the NFPA 1901 requirement.

CAB STRIPE

There will be a genuine gold leaf stripe provided on both sides of the cab in place of the chrome molding and on the cab face with shield.

CAB STRIPE

There will be a genuine gold leaf stripe on each side of the cab over the fender.

LETTERING

The lettering will be totally encapsulated between two (2) layers of clear vinyl.

LETTERING

Forty-one (41) to sixty (60) genuine gold leaf lettering, 3.00" high, with outline and shade will be provided.

BODY STRIPE

There will be a genuine gold leaf stripe provided on each side of the body, over the fender.

LETTERING

There will be reflective lettering, 8.00" high, with outline and shade provided. There will be three (3) letters provided.

LETTERING

There will be genuine gold leaf lettering, 8.00" high, with outline and shade provided. There will be 18 letters provided.

LETTERING

There will be genuine gold leaf lettering, 5.00" high, with outline and shade provided. There will be four (4) letters provided.

LETTERING

There will be reflective lettering, 5.00" high, with outline provided. There will be two (2) letters provided.

LETTERING

There will be reflective lettering, 3.00" high, with outline and shade provided. There will be six (6) letters provided.

LETTERING

There will be genuine gold leaf lettering, 3.00" high, with outline and shade provided. There will be five (5) letters provided.

PAINTED PLATE FOR LETTERING

There will be one (1) smooth aluminum panel,(s) painted job color provided for the department's graphics/lettering. The smooth aluminum painted panel(s) will be sized to fit the lettering. The panel(s) will be mounted to the hard suction hose trough(s) on the Passenger side hard suction hose trough side.

EMBLEMS

There will be a pair of American flag emblems, installed upper crew cab door windows . The emblem will be waving and made out of Gerber Vision material.

MALTESE CROSS INSTALLATION

There will be one (1) pair of maltese crosses, comprised of genuine gold leaf material, provided and installed behind crew cab doors (up high) - Fluvanna seal .

FIRE APPARATUS PARTS MANUAL

There will be one (1) custom parts manual(s) in USB flash drive format for the complete fire apparatus provided.

The manual(s) will contain the following:

- Job number
- Part numbers with full descriptions
- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly

- Parts section sorted in alphabetical order
- Instructions on how to locate parts

Each manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

Service Parts Internet Site

The service parts information included in these manuals are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

CHASSIS SERVICE MANUALS

There will be one (1) chassis service manuals on USB flash drives containing parts and service information on major components provided with the completed unit.

The manual will contain the following sections:

- Job number
- Table of contents
- Troubleshooting
- Front Axle/Suspension
- Brakes
- Engine
- Tires
- Wheels
- Cab
- Electrical, DC
- Air Systems
- Plumbing
- Appendix

The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

CHASSIS OPERATION MANUAL

The chassis operation manual will be provided on one (1) USB flash drive.

ONE (1) YEAR MATERIAL AND WORKMANSHIP

A Pierce basic apparatus limited warranty certificate, WA0008, is included with this proposal.

ENGINE WARRANTY

A Cummins **five (5) year** limited engine warranty will be provided. A limited warranty certificate, WA0181, is included with this proposal.

STEERING GEAR WARRANTY

A Sheppard **three (3) year** limited steering gear warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

FIFTY (50) YEAR STRUCTURAL INTEGRITY

The Pierce custom chassis frame limited warranty certificate, WA0013, is included with this proposal.

FRONT AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

The Pierce TAK-4 suspension limited warranty certificate, WA0050, is included with this proposal.

REAR AXLE WARRANTY

A Eaton **five (5)-year/100,000 mile** parts and labor warranty will be provided.

ABS BRAKE SYSTEM THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

A Meritor Wabco™ ABS brake system limited warranty certificate, WA0232, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce custom cab limited warranty certificate, WA0012, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce cab limited pro-rated paint warranty certificate, WA0055, is included with this proposal.

FIVE (5) YEAR MATERIAL AND WORKMANSHIP

The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.

COMPARTMENT LIGHT WARRANTY

The compartment lights will not offer an extended warranty.

TRANSMISSION WARRANTY

The transmission will have a **five (5) year/unlimited mileage** warranty covering 100 percent parts and labor. The warranty will be provided by Allison Transmission.

Note: The transmission cooler is not covered under any extended warranty you may be getting on your Allison Transmission. Please review your Allison Transmission warranty for coverage limitations.

TRANSMISSION COOLER WARRANTY

The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler). In addition, a collateral damage warranty will also be in effect for the first three (3) years of the warranty coverage and will not exceed \$10,000 per occurrence. A copy of the warranty certificate will be submitted with the bid package.

WATER TANK WARRANTY

A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY

An AMDOR roll-up door limited warranty will be provided. The roll-up door will be warranted against manufacturing defects for a period of **ten (10) years**. A **five (5) year** limited warranty will be provided on painted roll up doors.

The limited warranty certificate, WA0185, is included with this proposal.

PUMP WARRANTY

The Waterous pump will be provided with a Seven (7) year material and workmanship limited warranty.

A copy of the warranty certificate will be submitted with the bid package (no exception).

TEN (10) YEAR PUMP PLUMBING WARRANTY

The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

FOAM SYSTEM WARRANTY

The Husky 3 foam system limited warranty certificate, WA0231, is included with this proposal.

TWO (2) YEAR GENERATOR MATERIAL AND WORKMANSHIP WARRANTY

A Harrison Hydra-Gen generator two (2) year limited warranty will be provided.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

THREE (3) YEAR MATERIAL AND WORKMANSHIP

The Pierce Goldstar gold leaf lamination limited warranty limited warranty certificate, WA0018, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

ENGINE INSTALLATION CERTIFICATION

The fire apparatus manufacturer will provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification will be provided at the time of delivery.

POWER STEERING CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the power steering system as installed meets the requirements of the component supplier. The certification will be provided at the time of bid.

CAB INTEGRITY CERTIFICATION

The fire apparatus manufacturer will provide a cab crash test certification with this proposal. The certification will state that a specimen representing the substantial structural configuration of the cab has been tested and certified by an independent third party test facility. Testing events will be documented with photographs, real-time and high-speed video, vehicle accelerometers, cart accelerometers, and a laser speed trap. The fire apparatus manufacturer will provide a state licensed

professional engineer to witness and certify all testing events. Testing will meet or exceed the requirements below:

- European Occupant Protection Standard ECE Regulation No.29.
- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.
- SAE J2420 COE Frontal Strength Evaluation - Dynamic Loading Heavy Trucks.

Roof Crush

The cab will be subjected to a roof crush force of 22,500 lb. This value meets the ECE 29 criteria, and is equivalent to the front axle rating up to a maximum of ten (10) metric tons.

Side Impact

The same cab will be subjected to dynamic preload where a 13,275-lb moving barrier is slammed into the side of the cab at 5.50 mph, striking with an impact of 13,000 ft-lb of force. This test is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a rollover incident.

Frontal Impact

The same cab will withstand a frontal impact of 32,600 ft-lb of force using a moving barrier in accordance with SAE J2420.

Additional Frontal Impact

The same cab will withstand a frontal impact of 65,200 ft-lb of force using a moving barrier. (Twice the force required by SAE J2420)

The same cab will withstand all tests without any measurable intrusion into the survival space of the occupant area.

CAB DOOR DURABILITY CERTIFICATION

Robust cab doors help protect occupants. Cab doors will survive a 200,000 cycle door slam test where the slamming force exceeds 20 G's of deceleration. The bidder will certify that the sample doors similar to those provided on the apparatus have been tested and have met these criteria without structural damage, latch malfunction, or significant component wear.

WINDSHIELD WIPER DURABILITY CERTIFICATION

Visibility during inclement weather is essential to safe apparatus performance. Windshield wipers will survive a 3 million cycle durability test in accordance with section 6.2 of SAE J198 *Windshield Wiper Systems - Trucks, Buses and Multipurpose Vehicles*. The bidder will certify that the wiper system design has been tested and that the wiper system has met these criteria.

ELECTRIC WINDOW DURABILITY CERTIFICATION

Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the apparatus have been tested and have met these criteria without malfunction or significant component wear.

SEAT BELT ANCHOR STRENGTH

Seat belt attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat belt anchor design will withstand 3000 lb of pull on both the lap and shoulder belt in accordance with FMVSS 571.210 Seat Belt Assembly Anchorages. The bidder will certify that each anchor design was pull tested to the required force and met the appropriate criteria.

SEAT MOUNTING STRENGTH

Seat attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat mounting design will be tested to withstand 20 G's of force in accordance with FMVSS 571.207 Seating Systems. The bidder will certify, at time of delivery, that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.

PERFORMANCE CERTIFICATIONS**Cab Air Conditioning**

Good cab air conditioning temperature and air flow performance keeps occupants comfortable, reduces humidity, and provides a climate for recuperation while at the scene. The cab air conditioning system will cool the cab from a heat-soaked condition at 100 degrees Fahrenheit to an average of 78 degrees Fahrenheit in 30 minutes. The bidder will certify that a substantially similar cab has been tested and has met these criteria.

Cab Defroster

Visibility during inclement weather is essential to safe apparatus performance. The defroster system will clear the required windshield zones in accordance with SAE J381 Windshield Defrosting Systems Test Procedure And Performance Requirements - Trucks, Buses, And Multipurpose Vehicles. The bidder will certify that the defrost system design has been tested in a cold chamber and passes the SAE J381 criteria.

Cab Auxiliary Heater

Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. An auxiliary cab heater will warm the cab 77 degrees Fahrenheit from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify, at time of delivery, that a substantially similar cab has been tested and has met these criteria.

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus will provide the following:

- Documentation of the electrical system performance tests.
- A written load analysis, which will include the following:
 - The nameplate rating of the alternator.
 - The alternator rating under the conditions specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).

- The minimum continuous load of each component that is specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

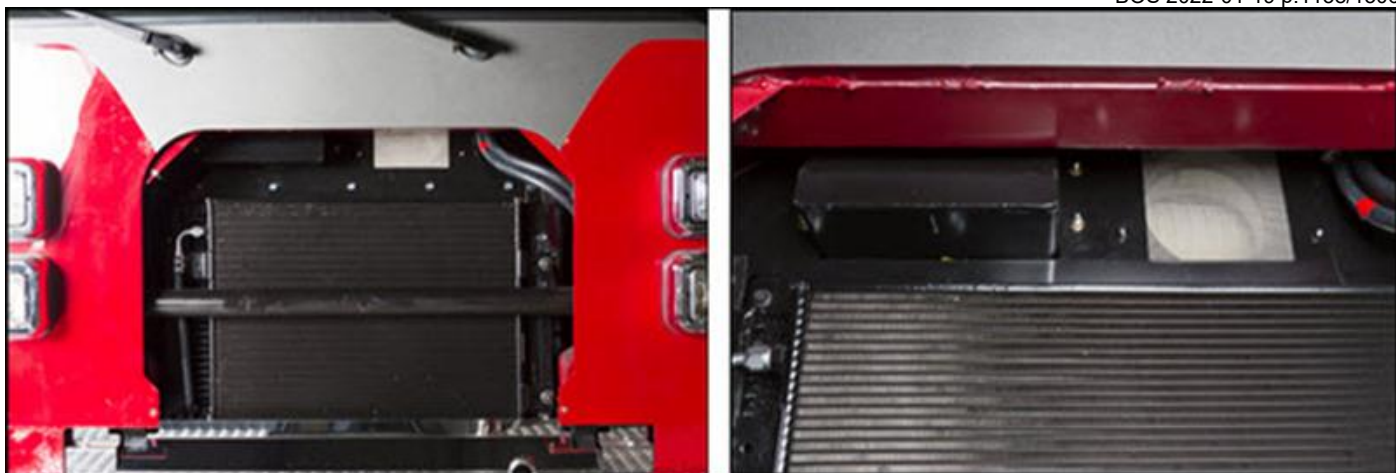
All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).

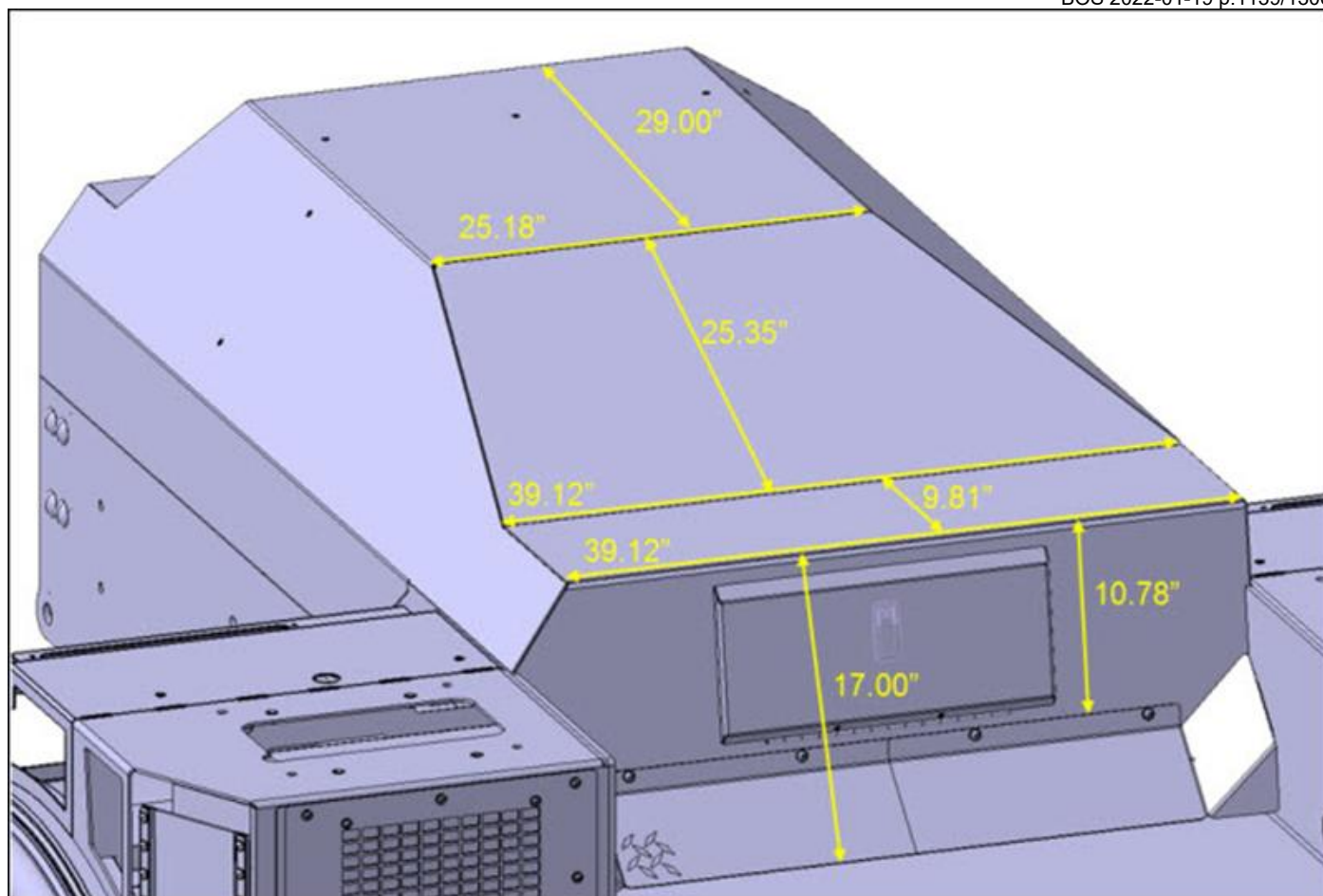




















Fire and Rescue Apparatus

One (1) Year Material and Workmanship

Basic Apparatus

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	Twelve (12) months.
Conditions and Exclusions:	No specific exclusions apply
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

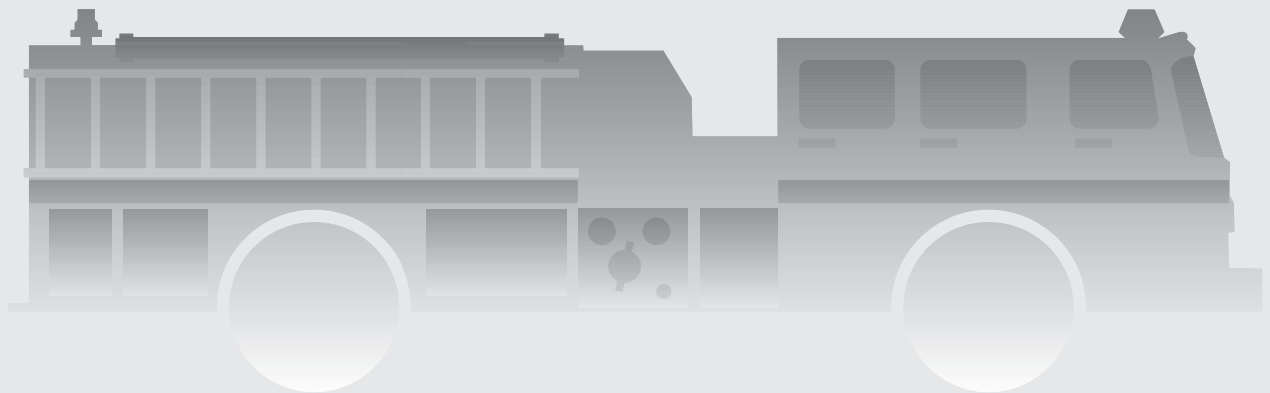
Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Cummins Warranty

Worldwide

Fire Apparatus/Crash Trucks



Coverage

Products Warranted

This Warranty applies to new diesel Engines sold by Cummins and delivered to the first user on or after April 1, 2007, that are used in fire apparatus truck and crash truck* applications Worldwide.

Base Engine Warranty

The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and ends five years or 100,000 miles (160,935 kilometers), whichever occurs first, after the date of delivery of the Engine to the first user.

Engine aftertreatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under Base Engine Warranty.

Additional Coverage is outlined in the Emission Warranty section.

These Warranties are made to all Owners in the chain of distribution and Coverage continues to all subsequent Owners until the end of the periods of Coverage.

Cummins Responsibilities

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure.

Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure.

Cummins will pay reasonable costs for towing a vehicle disabled by a Warrantable Failure to the nearest authorized repair location. In lieu of the towing expense, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging when the repair is performed at the site of the failure.

Owner Responsibilities

Owner is responsible for the operation and maintenance of the Engine as specified in Cummins Operation and Maintenance Manuals. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure, Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items provided during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

Owner is responsible for a \$100 (U.S. Dollars) deductible per each service visit under this plan in the 3rd, 4th and 5th years of Base Engine Warranty. The deductible will not be charged during the first 2 years of the Base Engine Warranty.

Limitations

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel



exhaust fluid.

This Warranty does not apply to accessories supplied by Cummins which bear the name of another company. Such non-warranted accessories include, but are not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, vacuum pumps, power steering pumps, fan drives and air compressors. Cummins branded alternators and starters are covered for the first two years from the date of delivery of the Engine to the first user, or the expiration of the Base Engine Warranty, whichever occurs first.

Failures resulting in excessive oil consumption are not covered beyond the duration of the Coverage or 100,000 miles (160,935 kilometers) or 7,000 hours from the date of delivery of the Engine to the first user, whichever of the three occurs first. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are not covered beyond the first year from the date of delivery of the Engine to the first user or the duration of the Warranty, whichever occurs first.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

Cummins Inc. reserves the right to interrogate Electronic Control Module (ECM) data for purposes of failure analysis.

CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY AND THE EMISSION WARRANTY SET FORTH HEREINAFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Emission Warranty

Products Warranted

This Emission Warranty applies to new Engines marketed by Cummins that are used in the United States** in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the first user on or after September 1, 1992.

Coverage

Cummins warrants to the first user and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or 100,000 miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the first user or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

Limitations

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs or other losses resulting from a Warrantable Failure.

**CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL
OR CONSEQUENTIAL DAMAGES.**

* Airport operated crash trucks and fire department
operated trucks employed to respond to fires,
hazardous material releases, rescue and other
emergency-type situations.

** United States includes American Samoa, the
Commonwealth of Northern Mariana Islands, Guam,
Puerto Rico and the U.S. Virgin Islands.



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Columbus, IN 47202-3005
U.S.A.

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TRW COMMERCIAL STEERING SYSTEMS
800 HEATH STREET
LAFAYETTE, INDIANA 47904



PRODUCT WARRANTY

- I. WARRANTY:** The Commercial Steering Systems group of TRW, Inc., hereinafter referred to as "CSS", warrants that each new product supplied by CSS to its customer, when properly installed, used and maintained, shall be free from defect in material and workmanship for the period specified below:
- (A) CSS Product installed in **New On-highway Motor Vehicle:**
- Within twelve (12) months after date of delivery of such vehicle to the original retail purchaser, or before such vehicle has been driven one hundred thousand (100,000) miles, whichever event shall first occur.
- (B) CSS Product installed in **New Agricultural, Turf, Industrial, or Construction Vehicles and Related Equipment**
- Within twelve (12) months after date of delivery of such vehicle/equipment to the original retail purchaser or before such vehicle/equipment has been operated for two thousand (2000) hours or fifty thousand (50,000) miles, whichever occurs first.
- (C) CSS Product installed in **New End Product, Not Specifically Mentioned in Classifications (A) or (B) Above and All Other Off-Highway/Severe Applications:**
- Within six (6) months after date of delivery of the original equipment manufacturer's end product to the original retail purchaser.
- II. REMEDY:** Customer's sole remedy under the foregoing warranty is limited to correction by means of repair, replacement or issuance of credit, at the option of CSS, of any product which is:
- (A) Returned to CSS within the specified warranty time period, with prior notice to, and the written consent of, CSS, with transportation and handling charges prepaid, together with a statement describing the alleged defect, the part number, model number and application, and mileage or hours of use of such product; and
- (B) Upon examination, determined by CSS not to conform to the warranty.
- III.** Any product which is repaired or replaced under this warranty will be returned to customer prepaid. Disposition of any product determined not to be covered by this warranty will be at the customer's expense.
- IV.** CSS will not be liable for any repairs, replacements, or adjustments to any product or any cost of labor performed by or at the request of customer without the express prior written consent of CSS.
- V. EXCEPTIONS:** The provision of this warranty shall not apply to any CSS product which is used for a purpose for which it is not designed, or which shall have been repaired or altered in any way, or which has been subject to misuse, negligence or accident, neglect of normal maintenance services, so as, in the judgement of CSS to adversely affect its performance and reliability. In no case will the CSS warranty exceed the standard published warranty of its customer in terms of time and/or distance. In all events, the CSS warranty will expire thirty (30) months after the date of manufacture as stamped on the Product. In the case of hydraulic equipment, operation with unapproved fluid or temperatures voids this warranty.
- VI. EXCLUSION OF ALL OTHER REMEDIES AND LIMITATION OF LIABILITY:** Customer's sole and exclusive remedy under the foregoing warranty shall be for the repair, replacement or issuance of credit with respect to a defective product, as set forth and described above. Other provisions hereof notwithstanding, CSS shall not be liable to Customer, or any successor in interest, beneficiary or assignee of Customer, based upon any claim against CSS, whether in contract, warranty, negligence, strict liability, indemnity or otherwise, for any special, consequential, incidental or other damages relating in any way to the design, manufacture, sale, installation or other use of any product purchased from CSS.
- VII. EXCLUSION OF ALL OTHER WARRANTIES: THE FOREGOING WARRANTY IS THE EXCLUSIVE WARRANTY BY CSS AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES AND REPRESENTATIONS, WHETHER ORAL, WRITTEN, EXPRESSED, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**



Fire and Rescue Apparatus

Lifetime Fifty (50) Year Structural Integrity

Custom Chassis Frame

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Custom chassis frame rail manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Fifty (50) Years (Expected Life of Apparatus)
Conditions and Exclusions:	This warranty does not apply to damage caused by corrosion.
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Dana Holding Corporation
Commercial Vehicle Products Group
Graco Lake Corporate Center
1 Village Center Drive
Van Buren Township, Michigan 48111
www.dana.com

FOR IMMEDIATE RELEASE

5 YEAR WARRANTY FOR YOUR FIRE/RESCUE VEHICLE

Dana Holding Corporation's Commercial Vehicle Systems Group is pleased to announce a change in our standard warranty for fire/rescue vehicles. Starting in 2011, all steer and drive axle applications for fire or rescue vehicles will carry a minimum 5 year / 100,000 mile warranty. Additional 1 and 2 year extended warranty packages are available. (Applicable fees apply) That's a total of 7 years of warranty coverage. Our experience in extended warranty coverage's dates back to the mid 80's. Since then, we have pioneered many new programs designed to deliver warranties, which meet the demands of an ever-changing industry. From our first versions of the on/off-highway coverage's, to our more recent vocational warranties, customization and customer satisfaction, have always been our goals.

For further information and requirements, please go to www.roadranger.com.

24K STEER BEAM NOW AVAILABLE

Dana Holding Corporation is continually working with chassis manufactures to determine needs and how best to offer a solution. The amount of equipment has increased over the years and not all firehouses can accommodate a tandem axle vehicle. We have listened to your requests for a slightly higher front GAWR for single axle vehicles. Dana can now offer a front steer beam with a 5 1/4" drop at 24K GAWR. This will allow chassis manufactures to meet the limited length requirements while still carrying the same amount of equipment.

Please contact your Dana representative for further information

For additional information please contact:

Alan Manzoni
Account Manager – Specialty Markets
Dana Holding Corporation
One Village Center Dr.
Van Buren Twp., MI 48111-5711
Phone: (734) 629-1141
alan.manzoni@dana.com



The Roadranger System



Roadranger
MORE TIME ON THE ROAD



Dana Holding Corporation
Commercial Vehicle Products Group
Grace Lake Corporate Center
1 Village Center Drive
Van Buren Township, Michigan 48111
www.dana.com

BOS 2022-01-19 p.1151/1306

New for 2011!

Dana Holding Corporation is pleased to announce a change in our standard warranty for fire/rescue vehicles. All steer and drive axles will now come with a 5 year / 100,000 mile warranty. For further information, please go to www.roadranger.com.

Dana Holding Corporation is working with chassis manufactures to supply a 24K front steer beam with a 5 ¼' drop. We have listened to your requests for a slightly higher GAWR for single axle aerials. Not all fire stations can accommodate a long wheel base application. This allows manufactures to meet the limited length requirements for smaller fire houses. Please submit your requests through our website. Please indicate on the application your need for 24K GAWR.

Finally, our drive axles will accommodate simultaneous auxiliary braking. Dana axles are built tough and were design with Telma retarders in mind. Submit your application for single or tandem designation.

Dana Holding Corporation will work with you to provide the best drive train solution with the best warranty in the fire/rescue industry. For additional information please contact:

Alan Manzoni
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Dana Holding Corporation
One Village Center Dr.
Van Buren Twp., MI 48111-5711

Phone: (734)629-1141

Cell: (269)312-3220

Alan.manzoni@dana.com



Fire and Rescue Apparatus

Three (3) Year Material and Workmanship Meritor Wabco ABS Brake System Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Meritor Wabco ABS brake system shall be covered by Meritor Wabco as indicated in the attached Meritor Wabco warranty coverage description
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor Wabco warranty description shall apply.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

WARRANTY

MODEL YEAR 2021 VEHICLES



Warranty coverage is essential to protecting your investment. But understanding the full details of your coverage can be challenging. This straightforward approach allows you, our valued customer, to better understand how your specific vehicle applications will be covered in your region. Our component warranty coverage is provided according to vocation/usage categories listed below.

- Linehaul covers high mileage operation (over 60,000 miles/year) on well-maintained major highways of concrete or asphalt construction.
- General Service covers moderate mileage operations (less than 60,000 miles/year) on well-maintained public roads (less than 10 percent off-road) typically with less than three (3) stops per mile.
- Heavy Service (Vocational) covers vehicles with more than 10 percent off-road OR moderate to frequent starts/stops typically with more than three (3) stops per mile.
- Off-Highway Service covers lower mileage operations. Vehicles are not typically licensed for highway use.

How to Read Warranty Coverage (Example)

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor
3	300	P

- The standard aftermarket warranty for WABCO products - including WABCO Original parts, WABCO Reman Solutions, ProVia quality aftermarket parts and WABCO retrofit solutions - is one year, parts only from in-service date when purchased from ZF distributor networks or its affiliates and/or subsidiaries.

WABCO

WARRANTY - MODEL YEAR 2021 VEHICLES

LINEHAUL/GENERAL SERVICE WARRANTY INFORMATION

LINEHAUL/GENERAL SERVICE VEHICLES

- Aerial Ladder Truck
- Aerial Platform
- Ambulance
- Auto Hauler
- Beverage Truck
- Bulk Hauler
- Chip Hauler (Truck)
- Cross Country Coach
- Doubles
- Flatbed
- Front Engine Commercial Chassis
- Front Engine Integral Coach
- General Freight
- Grain Hauler
- Intercity Coach
- Intermodal Chassis
- Livestock Hauler
- Meat Packer
- Moving Van
- Municipal Truck
- Pipe Hauler
- Platform Auto Hauler
- Pumper
- Rear Engine Integral Coach
- Recreational Vehicles
- Refrigerated Freight
- School Bus
- Stake Truck
- Tanker
- Tanker Truck
- Triples
- Tour Bus
- Wrecker

LINEHAUL TYPICALLY IS

- High mileage operation (over 60,000 miles/year)
- Well maintained major highways of concrete or asphalt construction

GENERAL SERVICE TYPICALLY IS

- Moderate mileage operations (less than 60,000 miles/year)
- Well maintained public roads (less than 10% off-road)
- Less than three (3) stops per mile

WABCO Components ¹	
Air Management	
Air Brake Valves	1/100/P&L
Trailer Lift Axle Control Valve	
Trailer Control Line Filter ³	
Air Compressors (ALL) ²	2/200/P&L
Air Dryers (ALL)	3/300/P&L
Aerodynamics	
OptiFlow® TrailerSkirt	2/UnU/P
OptiFlow® Trailer Tail and AutoTail	2/UnI/P
Braking Systems	
ABS (Anti-Lock Braking System) Air	3/300/P&L
ABS (Anti-Lock Braking System) Hydraulic	
Electronic Braking System (EBS)	
Electronic Stability Control (ESC)	
Roll Stability Control (RSS)	
Trailer Roll Stability Support (RSS)	
Trailer ABS (Anti-Lock Braking System) ³	
Driveline Suspension Control	
Clutch Controls	2/200/P&L
Leveling Valves	1/100/P&L
OptiRide® Automated Manual Transmission (AMT)	
OptiRide® Electronically Controlled Air Suspension (ECAS)	3/300/P&L

WABCO Components ¹ (cont.)	
Safety	
OnGuardACTIVE®	3/300/P&L
OnLane®	
OnLaneALERT®	
OnSide®	
Trailer SafeStart™	
Trailer TailGUARD™	
Telematics	
TrailerCAST™ Telematics Device	3/300/P&L
Wheel End Solutions	
EasyFit™ Slack Adjuster	6/600/P
MAXXUS™ Truck Air Disc Brake	5/500/P&L
IVTM - Wheel Module	6/P
IVTM - All Other Products	2/P
Pan 17 and 19 Air Disc Brake	2/UnI/P and 1/UnI/L
Pan 22 Air Disc Brake	5/500/P and 1/L
TRISTOP™ D Actuator w/ IBV or IRB	6/600/P
TRISTOP™ D Actuator	3/300/P
UNISTOP™ Actuator	2/200/P
Trailer MAXX22T™ Air Disc Brake	5/500/P and 1/L

¹ ZF and WABCO branded components. ² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by ZF. Please contact your respective dealer/distributor of those engines for warranty and servicing. ³ An extended warranty of 4/400/P will apply when a WABCO Trailer Control Line Filter is used in combination with a WABCO Trailer ABS valve.

HEAVY SERVICE (VOCATIONAL) WARRANTY INFORMATION

HEAVY SERVICE VEHICLES

- Airport Rescue Fire (ARF)
- Airport Shuttle
- Asphalt Truck
- Block Truck
- Bottom Dump Trailer
- Combination
- Cementing Vehicle
- City Bus
- Commercial Pick-Up
- Concrete Pumper
- Construction Material Hauler
- Crash Fire Rescue (CFR)
- Mixer
- Demolition
- Drill Rig
- Dump
- Emergency Service
- Equipment Hauling
- Flatbed Trailer Hauler
- Flatbed Truck
- Fracturing Truck
- Front Loader
- Geophysical Exploration
- Hopper Trailer Combinations
- Landscaping Truck
- Liquid Waste Hauler
- Log Hauling
- Lowboy
- Michigan Special Gravel Trains
- Michigan Special Log Hauler
- Michigan Special Steel Hauler
- Michigan Special Waste Vehicle
- Municipal Dump
- Newspaper Delivery
- Package Delivery
- Pick-up and Delivery
- Rapid Intervention Vehicle (RIV)
- Rear Loader
- Recycling Truck
- Residential Pick-Up/Waste
- Rigging Truck
- Roll-Off
- Scrap Truck
- Semi-End Dump
- Sewer/Septic Vacuum
- Shuttle Bus
- Side Loader
- Snowplow/Snowblower
- Steel Hauling
- Tanker
- Tank Truck
- Tractors with Pole Trailers
- Tractor/Trailer with Jeeps
- Transfer Dump
- Transfer Vehicle
- Transit Bus
- Trolley
- Utility Truck
- Winch Truck

HEAVY SERVICE TYPICALLY IS

- On/Off road vocations (10% or more off-road) OR
- Moderate to frequent starts/stops typically more than three (3) stops per mile



WABCO Components ¹	
Air Management	
Air Brake Valves	1/100/P&L
Air Compressors (ALL) ²	
Air Dryers (ALL)	
Trailer Control Line Filter ³	
Braking Systems	
ABS (Anti-Lock Braking System) Air	3/300/P&L
ABS (Anti-Lock Braking System) Hydraulic	2/200/P&L
Electronic Braking System (EBS)	3/300/P&L
Electronic Stability Control (ESC)	
Trailer ABS Valve ³	
Roll Stability Control (RSS)	
Trailer Roll Stability Support (RSS)	
Driveline Suspension Control	
OptiRide® Electronically Controlled Air Suspension (ECAS)	2/200/P&L
Leveling Valves	1/100/P&L
Clutch Controls	2/200/P&L
Safety	
OnGuardACTIVE®	3/300/P&L
OnLane®	
OnLaneALERT®	
OnSide®	
Trailer SafeStart™	
Trailer TailGUARD™	
Telematics	
TrailerCAST™ Telematics Device	3/300/P&L
Wheel End Solutions	
EasyFit™ Slack Adjuster	2/200/P
MAXXUS™ Air Disc Brake	1/Unl/P&L
IVTM - Wheel Module	6/P
IVTM - All Other Products	2/P
Pan 22, 19 and 17 Air Disc Brake	1/Unl/P&L
Trailer MAXX22T™	1/Unl/P&L
TRISTOP™ D Actuator w/ IBV	3/Unl/P
TRISTOP™ D Actuator	2/200/P
UNISTOP™ Actuator	1/100/P

¹ ZF and WABCO branded components. ² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by ZF. Please contact your respective dealer/distributor of those engines for warranty and servicing. ³ An extended warranty of 4/400/P will apply when a WABCO Trailer Control Line Filter is used in combination with a WABCO Trailer ABS valve.

WARRANTY - MODEL YEAR 2021 VEHICLES

INDUSTRIAL/OFF-HIGHWAY SERVICE WARRANTY INFORMATION

INDUSTRIAL AND OFF-HIGHWAY SERVICE TYPICALLY IS

- Low mileage operation³
- Vehicles are not typically licensed for highway use

Market	Common Application Types
Agriculture	Fertilizer Spreader, Tractor, Heavy Duty Ag Trailers, Harvester, Sprayer, Skid Loader, Silage Bagger, Slurry Wagons, Grain Cart
Airport Support	Pushback Tractor, Towing Tugs, Aircraft Tow Tractor, Refueling Trucks, Food Service Trucks, Baggage Tractors, De-Icing Equipment, Runway Clearing Equipment
Construction	All-Terrain Crane, Rough Terrain Crane, Excavator, Compactor, Wheel Loader, Road Roller, Motor Grader, Articulated Dump Truck, Rubber Tire Road Roller, Backhoe Loaders, Haul Trucks, Scraper Rough Terrain Forklifts, Trenchers, Drills
Forestry	Logging Forwarder, Kidder, Loaders, Yard Forklifts, Harvesters Fellers
Material Handling	Port Tractor, Rail Yard Spotter, Stevedoring Tractor, Trailer Spotter, Yard Jockey, Scissor Lift, Straddle Carrier, Manlift, Forklift, Boom Lift Telehandlers, Aerial Work Platforms
Mining	Specialized Mining, Excavator, Haul Truck, Underground Loader, Service Trucks, Wheel Loaders, Scrapers, Load Haul Dumps, Personnel Transports, Bolters, Scalpers
Municipal	Street Sweeper, Utility Tractor, Utility Trucks, Tree Trimmers, Dump Trucks, Tow Trucks, Flat Bed Trucks, Winch Applications
Oil & Gas	Fracturing Trailer, Injector Heads, Top Drives, Jack/Lift Boats, Wireline Trucks, Load-On / Load-Off
Rail	Railcar Mover, Track Layers, Grinders, Platform Crane, Locomotive Railcars, Ballast Equipment, Winch Applications



WABCO Components ¹	
Air Management	
Air Brake Valves	2/Unl/P
Air Compressors (ALL)2	
Air Dryers (ALL)	
Brake Actuation	
Air/Hydraulic Actuators	2/Unl/P
Master Cylinders	
Remote Actuators	
Slave and Wheel Cylinders	
Two Fluid Actuators	
Brake Locks	
Brake Locks (ALL)	2/Unl/P
Electric Brake Locks	
Lever Locks	
Braking Systems	
ABS (Anti-Lock Braking System) Air	1/100/P&L
ABS (Anti-Lock Braking System) Hydraulic	
Driveline Suspension Control	
Clutch Controls	1/100/P&L
Leveling Valves	
Electrohydraulics & Controls	
Electronic Pedals	2/Unl/P
Electrohydraulic Brake Valves (EBV)	
Pressure Switches	
Hydraulic Braking Solutions	
Accumulator Charging Valves	2/Unl/P
Hydraulic Throttle Controls and Switches	
Modulating Brake Valves	
Wheel End Solutions	
EasyFit™ Slack Adjuster	2/200/P
Caliper Disc Brakes	2/Unl/P
MAXXUS™ Air Disc Brake	1/Unl/P&L
Multiple Disc Brakes	2/Unl/P
IVTM - Wheel Module	6/P
IVTM - All Other Products	2/P
Pan 22, 19 and 17 Air Disc Brake	1/Unl/P&L
TRISTOP™ D Actuator w/ IBV	3/Unl/P
TRISTOP™ D Actuator	2/200/P
UNISTOP™ Actuator	1/100/P

¹ ZF and WABCO branded components. ² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by ZF. Please contact your respective dealer/distributor of those engines for warranty and servicing. ³ Equivalent hours of service limit: 2,000 hours for all components.

TERMS AND CONDITIONS

COVERAGE EXCLUSIONS

PRODUCT DESCRIPTION

ALL PRODUCTS

This Warranty shall not apply to the following, but not limited to: (1) damage to the product or its component parts caused by incorrect use, installation, maintenance or repair, including without limitation (a) improper fit of mating components or brackets, damaged threads, cut, broken, chafed, pinched or otherwise damaged wiring (sensors, harnesses and connectors), (b) sensors damaged during removal when seized in block, or associated with sensor adjustments/ alignments, and (c) damage resulting from the use or installation of non-genuine WABCO components or materials; (2) damage to the product, its component parts, or diminished product or component part performance due to incorrect operation, deviation from approved conditions or misapplication; (3) any unauthorized disassembly of the product or its component parts including without limitation (a) obliterated, defaced or missing WABCO or WABCO name plate, serial numbers or label identifying the device as a ZF product or WABCO component, (b) changes to sealed adjusting screws, and (c) opening or attempted repair of non-serviceable components; (4) malfunction of the component due to internal contamination of the vehicle system including without limitation (a) water and other contamination damage that is due to the use of a non-genuine air dryer cartridge or (b) valve failures due to contamination in air system, (5) complaints associated with noise, (6) damage resulting from corrosion (including oxidation of electrical devices and connections).

AIR DRYERS

Mounting brackets (see vehicle OEM). Desiccant cartridge housing only.

AIR SYSTEM COMPONENTS

Normal wear items; Gladhand seals, dash valve knobs, valve actuation handles, treadles, pedals.

ABS, ELECTRONIC STABILITY CONTROL (ESC), ROLL STABILITY CONTROL (RSC), OPTIRIDE®, ONGUARD® AND ONLANE®, COLLECTIVELY “ELECTRONICS”

Failure of electronic components due to overvoltage condition, improper grounding, electrostatic discharge (ESD), improper shielding, electromagnetic interference (EMI), or other wiring or installation issues. Malfunctions and failure codes caused by other electronic subsystem failures (data bus, engine, transmission, dashboard, etc.)

HYDRAULIC COMPONENTS

For certain components, brake fluid DOT3 or DOT4 is used as the operating medium. Use of any other fluid will void all warranties associated with that component. For hydraulic braking applications the brake fluid is considered a maintenance item. Maintenance intervals are listed in TB-1367.

COVERAGE LIMITATIONS

PRODUCT DESCRIPTION

ALL PRODUCTS

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program.

Products purchased on an incomplete vehicle (glider) are limited to one year, 1/Unl/P.

For vehicles that operate full- or part-time outside of the United States and Canada, a 1-Year/Unlimited Miles parts only (1/Unl/P) will apply.

TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE

Proper diagnostics of WABCO Electronics may require the latest version of TOOLBOX PLUS™. Additional labor due to use of an outdated version of TOOLBOX™ software and/or the time to purchase or install the latest version of TOOLBOX PLUS™ are not covered under product warranty.

WARRANTY - MODEL YEAR 2021 VEHICLES

TERMS AND CONDITIONS

(1) What is Covered by this Commercial Warranty?

ZF CV Systems North America LLC and its North American subsidiaries and affiliates (ZF) warrant to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment will be free from defects in material and workmanship. This warranty coverage begins from the original in-service date to the limits provided and runs concurrently with any warranties provided by OEMs and/or any distribution agreements and/or any service contracts that cover the components listed in this publication, if any. If the components listed in this publication are covered by an OEM warranty and/or service contract, then the OEM's warranty and/or service contract shall supersede ZF's warranty and Owner shall comply with all OEM's warranty and/or service contract requirements for claims under such OEM's warranty and/or service contract until those agreements expire. Once those agreements expire and provided the ZF warranty has not expired under the terms stated above, the ZF warranty will be in effect until its expiration date.

Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed previously in this publication. Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Additional diagnostic time due to use of an outdated version of TOOLBOX™, time to purchase or install latest version of TOOLBOX™ are the responsibility of the authorized ZF distributor networks and are not covered under product warranty. Components installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

(2) Designation of Vocational Use Required. To obtain warranty coverage, each Owner must notify ZF through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the WABCO components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with ZF directly. Failure to notify ZF of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/Unl/P) from the initial in-service date. A second Owner and each subsequent Owner must also notify ZF as to the intended vocational use of the vehicle. This notification can be sent directly to ZF or through

the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use. Coverage under ZF's warranty requires that the application of products be properly approved pursuant to OEM and ZF, approvals.

- (3) What is the Cost of this Warranty? There is no charge to the Owner for this warranty.
- (4) What is not Covered by this Warranty? In addition to the items listed on "Coverage Exclusions," this warranty does not cover normal wear and tear, or service items; nor does it cover a component that fails, malfunctions or is damaged as a result of (a) improper handling, storage, installation, adjustment, repair or modification including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by ZF, (b) accident, fire or other casualty, natural disaster, road debris, negligence, misuse, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the brake system capacity), or (c) improper or insufficient maintenance (including deviation from maintenance intervals, approved lubricants, or lube levels). This warranty does not cover any component or part that is not sold by ZF.
- (5) To obtain service. If the owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either ZF or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM dealer or ZF distributor networks' servicer. The dealer or ZF authorized servicer will inspect the vehicle and contact ZF for an evaluation of the claim. When authorized by ZF, the dealer or ZF authorized servicer will repair or replace during the term of this warranty any defective WABCO component covered by this warranty.
- (6) Disclaimer of Warranty and Limitation of remedies. TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE LIMITED WARRANTY SET FORTH HEREIN IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR WARRANTY FOR HIDDEN OR LATENT DEFECTS, AND IN NO EVENT WILL ZF OR ANY OF ITS AFFILIATES BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, PROGRESSIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND.

- (7) Legal action. Any legal action or claim arising from or related to this Warranty, in contract or otherwise, must be commenced within one year from the accrual of that cause of action, or be barred forever. Any dispute arising in connection with this agreement shall be governed by and construed according to the laws of the State of Michigan and be brought, heard and determined exclusively in either the Circuit Court for the County of Oakland, State of Michigan or the United States District Court for the Eastern District of Michigan. The parties stipulate that the referenced venues are convenient.
- (8) Remedy. The exclusive remedy under this warranty shall be the repair or replacement of the defective component at ZF's option. ZF reserves the right to require that all applicable covered components are available and/or returned to ZF for review and evaluation. THE MAXIMUM LIABILITY, IF ANY, OF ZF FOR ALL DAMAGES, INCLUDING WITHOUT LIMITATION CONTRACT DAMAGES, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORT, IS LIMITED TO AN AMOUNT NOT TO EXCEED THE PURCHASE PRICE OF THE PRODUCT and where indicated in the product and application warranty information above, the inclusion of labor is limited to the standard repair time. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE LIMITATION OF DAMAGES PROVISION SET FORTH IN THIS PARAGRAPH SURVIVES BETWEEN THE ORIGINAL END USER AND ZF EVEN IF THE EXCLUSIVE REMEDY SET FORTH ABOVE IS DEEMED TO FAIL OF ITS ESSENTIAL PURPOSE. ZF may change the design or make improvements to its Products without incurring any warranty obligation for previously manufactured Product .
- (9) Entire Agreement. This is the entire agreement between ZF and the Owner about warranty and no, ZF employee, or dealer is authorized to make any additional warranty on behalf of ZF unless in writing and signed by an authorized representative of ZF.





**For further product details contact your distributor or the
WABCO Customer Care Center at 855-228-3203.**

About ZF Friedrichshafen AG

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. ZF allows vehicles to see, think and act. In the four technology domains Vehicle Motion Control, Integrated Safety, Automated Driving, and Electric Mobility, ZF offers comprehensive solutions for established vehicle manufacturers and newly emerging transport and mobility service providers. ZF electrifies different kinds of vehicles. With its products, the company contributes to reducing emissions and protecting the climate.

ZF, which acquired WABCO Holdings Inc. on May 29, 2020, now has 160,000 employees worldwide with approximately 260 locations in 41 countries. In 2019, the two then-independent companies achieved sales of €36.5 billion (ZF) and \$3.4 billion (WABCO). For more information, visit: www.wabco-na.com



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity Custom Cab

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Pierce Custom Cab shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the cab tubular support and mounting structures and other structural components of the cab of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion

Cab

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the cab painted by Pierce shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	<p>This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:</p> <p>Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25%</p> <p>Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25%</p> <p>Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10%</p> <p>Corrosion Perforation 0-120 months 100%</p> <p>This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty.</p> <p>Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship

Pierce 12V LED Strip Light

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	This limited warranty covers repairs to correct any defect related to materials or workmanship of the Pierce 12V LED strip lights installed on the apparatus occurring during the warranty period.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty does not apply to related wire harnesses, cables, and connectors, which are covered by the Pierce one (1) year basic apparatus limited warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

NEW PRODUCT WARRANTY


**PARTICIPATING OEM SALES
DISTRIBUTOR SALES**
**LIMITED WARRANTY ON NEW ALLISON AUTOMATIC TRANSMISSIONS
USED IN EMERGENCY VEHICLE APPLICATIONS**

Allison Transmission will provide for repairs or replacement, at its option, during the warranty period of each new Allison transmission listed below that is installed in an Emergency Vehicle in accordance with the following terms, conditions, and limitations.

WHAT IS COVERED

- **WARRANTY APPLIES** — This warranty is for new Allison transmission models listed below installed in an Emergency Vehicle and is provided to the original and any subsequent owner(s) of the vehicle during the warranty period.
- **REPAIRS COVERED** — The warranty covers repairs or replacement, at Allison Transmission's option, to correct any transmission malfunction resulting from defects in material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Allison Transmission determines most appropriate under the circumstances.
- **TOWING** — Towing is covered to the nearest Allison Transmission Distributor or authorized Dealer only when necessary to prevent further damage to your transmission.
- **PAYMENT TERMS** — Warranty repairs, including parts and labor, will be covered per the schedule shown in the chart contained in section "APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE."
- **OBTAINING REPAIRS** — To obtain warranty repairs, take the vehicle to any Allison Transmission Distributor or authorized Dealer within a reasonable amount of time and request the needed repairs. A reasonable amount of time must be allowed for the Distributor or Dealer to perform necessary repairs.
- **TRANSMISSION REMOVAL AND REINSTALLATION** — Labor costs for the removal and re-installation of the transmission, when necessary to make a warranty repair, are covered by this warranty.
- **WARRANTY PERIOD** — The warranty period for all coverages shall begin on the date the transmission is delivered to the first retail purchaser, with the following exception:

Demonstration Service - A transmission in a new truck or bus may be demonstrated to a total of 5000 miles (8000 kilometers). If the vehicle is within this limit when sold to a retail purchaser, the warranty start date is the date of purchase. Normal warranty services are applicable to the demonstrating Dealer. Should the truck or bus be sold to a retail purchaser after these limits are reached, the warranty period will begin on the date the vehicle was first placed in demonstration service and the purchaser will be entitled to the remaining warranty.

APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE

APPLICABLE MODELS	WARRANTY LIMITATIONS (Whichever occurs first)		ADJUSTMENT CHARGE TO BE PAID BY THE CUSTOMER	
	Months	Transmission Miles Or Kilometers	Parts	Labor
MT, MD 3000, 3200, 3500, 3700	0-24	No Limit	No Charge	No Charge
HT with Hydraulic Controls	0-24	No Limit	No Charge	No Charge
AT, 1000 Series™, 2000 Series™, 2400 Series™	0-36	No Limit	No Charge	No Charge
HT with Electronic Controls	0-60	No Limit	No Charge	No Charge
HD 1000 EVS, 2100 EVS, 2200 EVS 2350 EVS, 2500 EVS, 2550 EVS, 3000 EVS, 3500 EVS, 4000, 4000 EVS, 4500, 4500 EVS, 4700, 4700 EVS, 4800, 4800 EVS	0-60	No Limit	No Charge	No Charge

WHAT IS NOT COVERED

- **DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION** — Defects and damage caused as the result of any of the following are not covered:
 - Flood, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle;
 - Misuse of the vehicle;
 - Installation into unapproved applications and installations;
 - Alterations or modification of the transmission or the vehicle, and
 - Damage resulting from improper storage (refer to long-term storage procedure outlined in the applicable Allison Service Manual)
 - Anything other than defects in Allison Transmission material or workmanship

NOTE: This warranty is void on transmissions used in vehicles currently or previously titled as salvaged, scrapped, junked, or totaled.

- **CHASSIS, BODY, and COMPONENTS** — The chassis and body company (assemblers) and other component and equipment manufacturers are solely responsible for warranties on the chassis, body, component(s), and equipment they provide. Any transmission repair caused by an alteration(s) made to the Allison transmission or the vehicle which allows the transmission to be installed or operated outside of the limits defined in the appropriate Allison Installation Guideline is solely the responsibility of the entity making the alteration(s).
- **DAMAGE CAUSED by LACK of MAINTENANCE or by the USE of TRANSMISSION FLUIDS NOT RECOMMENDED in the OPERATOR'S MANUAL** — Defects and damage caused by any of the following are not covered:
 - Failure to follow the recommendations of the maintenance schedule intervals applicable to the transmission;
 - Failure to use transmission fluids or maintain transmission fluid levels recommended in the Operator's Manual.
- **MAINTENANCE** — Normal maintenance (such as replacement of filters, screens, and transmission fluid) is not covered and is the owner's responsibility.
- **REPAIRS by UNAUTHORIZED DEALERS** — Defects and damage caused by a service outlet that is not an authorized Allison Transmission Distributor or Dealer are not covered.
- **USE of OTHER THAN GENUINE ALLISON TRANSMISSION PARTS** — Defects and damage caused by the use of parts that are not genuine Allison Transmission parts are not covered.
- **EXTRA EXPENSES** — Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of vehicle use; inconvenience; storage; payment for loss of time or pay; vehicle rental expense; lodging; meals; or other travel costs.
- **"DENIED PARTY" OWNERSHIP** — Warranty repair parts and labor costs are not reimbursed to any participating or non-participating OEMs, dealers or distributors who perform warranty work for, or on behalf of, end users identified by the United States as being a "denied party" or who are citizens of sanctioned or embargoed countries as defined by the U.S. Department of Treasury Office of Foreign Assets Control. Furthermore, warranty reimbursements are not guaranteed if the reimbursement would be contrary to any United States export control laws or regulations as defined by the U.S. Department of Commerce, the U.S. Department of State, or the U.S. Department of Treasury.

OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED by the MAGNUSON-MOSS WARRANTY ACT

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Allison Transmission does not authorize any person to create for it any other obligation or liability in connection with these transmissions.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST WAGES OR VEHICLE RENTAL EXPENSES) RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.**

** Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

OTHER TERMS APPLICABLE TO OTHER END-USERS

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE ALLISON TRANSMISSION MODELS LISTED ABOVE AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLISON TRANSMISSION DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH TRANSMISSIONS. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

QUESTIONS

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact any Allison Transmission Distributor or Dealer or write to:

Allison Transmission, Inc.
P.O. Box 894
Indianapolis, IN 46206-0894
Attention: Warranty Administration PF-9



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship - Transmission Oil Cooler Three (3) Year Collateral Damage Coverage

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The transmission cooler shall be free from component or structural failures caused by defects in material and/or workmanship. Collateral damage up to \$10,000 per occurrence is available for the first three (3) years.
Warranty Begins:	The date of delivery to the first retail purchaser.
Warranty Period Ends After:	Five (5) Years on Oil Cooler and three (3) years on collateral damage coverage
Conditions and Exclusions: See Also Paragraphs 2 thru 4	<p>This warranty does not cover repair due to accidents, misuse, and excessive vibration, flying debris, storage damage (freezing), negligence or modification. This warranty is void if any modification or repairs are performed without authorization. This also voids any future warranty.</p> <p>This warranty does not cover cost of maintenance or repairs due to lack of required maintenance services as recommended. Performance of the required maintenance and use of proper fluids are the responsibility of the owner.</p> <p>Towing is covered to the nearest distributor or authorized dealer only when necessary to prevent further damage to your transmission.</p> <p>Labor costs for the removal and reinstallation of goods may be covered when necessary to make repairs. Please contact your OEM for authorization.</p> <p>Replacement of cooler during the warranty period is limited to 100% of reasonable labor costs up to a maximum of \$700 to remove, replace, or repair the oil cooler.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



LIFETIME SERVICE WARRANTY

United Plastic Fabricating, Inc. (hereinafter called "UPF") warrants each POLY-TANK®, Booster/Foam Tank POLYSIDE® Wetside Tank, Integrator Tank/Body, ELLIPSE™ Elliptical Tank, Ellip-T-Tank Tank and DEFENDER™ Skid Tank to be free from defects in material and workmanship for the service life of the original vehicle (vehicle must be actively used in an emergency response for fire suppression). All UPF Tanks must be installed and operated in accordance with the UPF Installation and Operating Guidelines. Failure to do so can void the warranty.

Every UPF Tank is inspected and tested before leaving our facility. Should your UPF Tank require service, please notify UPF via email, fax, in writing or by calling UPF at 1-978-975-4520. Please provide the serial number, a description of the service request, the location along with the phone number and name of the contact person. Our goal is to have scheduled work completed within a reasonable time period.

Under a valid warranty claim, UPF will cover the cost to repair the UPF Tank including the customary and reasonable costs to make the tank accessible such as the removal and reinstallation of the tank if authorized in advance (pre-approved) by UPF. The warranty will not cover tanks that have been improperly installed, operated, misused, abused, or modified from its intended or designed use. Serial number must not have been altered, defaced or removed. Tanks that are not stored or installed properly which results in the tank suffering UV damage will not be covered by this agreement.

Should UPF determine that the service claim is valid under this warranty for a tank located outside of the United States and Canada, UPF will assume the costs for labor and material for the warranty repair as described above plus all travel costs to the U.S. port of embarkation. Costs for airline travel outside of the U.S. and Canada will not be the responsibility of UPF.

In the event the tank shall become stationed in an area of the world that is considered to be a war zone or where unsafe conditions exist for the safe passage of United States Nationals, as reported by the United States Department of State, (<http://www.state.gov>), and a request to perform service or warranty repairs, UPF reserves the right to refuse to honor such requests. It is the purchaser's responsibility to relocate the tank to an area where such repairs can be performed without undue risk to UPF employees or their designee. UPF will make every reasonable effort to support our products through alternative means.

For Ellipse™ elliptical tanks, a separate five year warranty provided by the subcontractor is applied to the sub-frames, chute linings (rubber isolation strips) and metal components. The stainless steel wrap provided by UPF shall be warranted by the subcontractor performing the wrap installation in accordance with their warranty in place at the time of the installation. UPF will not be liable for any warranty costs associated with the wrap, sub-frames, chute linings (rubber isolation strips) and metal components but will assist with all claims on behalf of its customer.

For PolySide® wetsided tanks and Integrator™ Tank/Body units, all polypropylene components related to the tank shall carry the standard UPF lifetime



UNITED PLASTIC FABRICATING, INC.

WARRANTY

FOR: POLY-TANK®, POLYSIDE®, INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™

BOS 2022-01-19 p.1168/1306

service warranty. Other polypropylene components, including but not limited to compartments, wheel wells, fenders and other body related components shall be warranted by UPF for a period of ten years. The warranty for the PolySide® and Integrator™ units excludes paint or hardware, which shall be covered by the manufacturer of the paint/hardware.

All UPF tanks 50 gallons or less utilized for non-fire applications and installed on specialty vehicles such as ATVs, trailers, boats, etc. are covered under a separate warranty policy available from UPF. Further, UPF Protector™ foam and water trailers are warranted under a separate warranty policy available from UPF.

This UPF warranty is transferable within the United States only with prior written approval by UPF (except an original apparatus manufacturer may assign this warranty to the first titled owner/lessee of the apparatus).

UPF will NOT reimburse any unnecessary work and/or work that has not been pre-approved. Any and all third party charges must be pre-authorized and approved in writing by UPF prior to commencing the work. Any unauthorized third party repairs, alterations, actions or modifications will not be covered and can void the warranty. UPF will be the sole determining authority as to whether a service claim will be valid and covered under this warranty.

In no event will UPF be liable for an amount in excess of the purchase price of the booster/foam tank at the time of manufacture or for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of failure of its product. Loss of contents (water, foam, etc.) shall not be the responsibility of UPF. Further, UPF is not responsible for costs associated with service repairs to chassis, sub-frames, bodies, valves, dumps, hoses, pressure vacuum vents, and other components (i.e. liquid level transducers, etc.). Further, UPF will not cover the cost for travel of the vehicle to and from a repair facility.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UPF neither assumes, nor authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation or incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATION OR LIABILITIES ON THE PART OF UPF.

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BULLETIN



TO: All Dealer Service Representatives

From: Kevin Hanegraaf

DATE: January 4, 2010

RE: UPF Tank Warranty Policy – Truck in Accident

Service Topic #292

To keep the UPF tank warranty valid on trucks that have been involved in a vehicular accident, it is UPF's policy that the customer must remove the tank from the truck and send it back to one of UPF's facilities for inspection. In the event that this does not take place, the warranty will be considered null and void.

The customer must remove and send the tank back to UPF for inspection in order to maintain the original warranty coverage, at which time it will be:

- *Filled with water*
- *Visually inspected*
- *Ultraviolet spark tested on articulating test stand in the dark*
- *Recommendation for repairs if necessary provided by UPF*
- *Fully evaluated and repaired by UPF*

If your customer chooses to leave the tank on the truck and wants a technician to inspect and/or repair the tank in the field, then **the warranty is no longer in effect.** This direction is upheld by UPF because the technician cannot inspect the entire tank when it is still installed on the truck.

Note: This memo is intended to relay the information Pierce has received on UPF's tank warranty for trucks that are in a vehicular accident. In the event of an actual claim, we direct you to consult with UPF's service Manager Maura Watts (800-638-8265 x253)



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity Apparatus Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The apparatus body shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the body tubular support and mounting structures and other structural components of the body of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Pierce Warranty Statement for Gortite Roll Up Doors Rev 2/24/2011

All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle. All parts covered under this warranty shall be to the original owner.

A&A manufacturing warrants that painted doors shall be free of blistering, peeling, bubbling, or any other adhesion defect caused by defective manufacturing methods or paint material selection. The time period for the coverage shall be 6 years from date of door shipment to Pierce. Satin anodized finish doors shall be warranted for 6 years against corrosion defects from date of door shipment to Pierce. Replacement of decals/Scotchlite is not covered.

The maximum amount A&A will reimburse for labor is \$60.00 per hour and the maximum amount of time allowed for repair is as follows:

Door	1.0 Hr.
Slat Replacement	1.0 Hr.
Pennant Plate Replacement	1.0 Hr.
Roller Replacement	.5 Hr.
Seal Replacement	.5 Hr.
Switch/Magnet Replacement	1.0 Hr.
Travel Time	4.0 Hr.

Waterous Five-Year Limited Warranty

WATEROUS warrants, to the original Buyer only, that products manufactured by WATEROUS will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date the product is first placed in service, or five and one-half (5-1/2) years from the date of shipment by WATEROUS, whichever period shall be the first to expire; provided the Buyer notifies WATEROUS, in writing, of the defect in said product within the warranty period, and said product is found by WATEROUS to be nonconforming with the aforesaid warranty. When required in writing by WATEROUS, defective products must be promptly returned by Buyer to WATEROUS at WATEROUS' plant at South St. Paul, Minnesota, or at such other place as may be specified by WATEROUS, with transportation and other charges prepaid. A Returned Material Authorization (RMA) is required for all products and parts and may be requested by phone, fax, email, or mail. The aforesaid warranty excludes any responsibility or liability of WATEROUS for:

- (a) damages or defects due to accident, abuse, misuse, abnormal operating conditions, negligence, accidental causes, use in non-firefighting applications, or improper maintenance, or attributable to written specifications or instructions furnished by Buyer;
- (b) defects in products manufactured by others and furnished by WATEROUS hereunder, it being understood and agreed by the parties that the only warranty provided for such products shall be the warranty provided by the manufacturer thereof which, if assignable, WATEROUS will assign to Buyer, if requested by Buyer;
- (c) any product or part, altered, modified, serviced or repaired other than by WATEROUS, without its prior written consent;
- (d) the cost of dismantling, removing, transporting, storing, or insuring the defective product or part and the cost of reinstallation; and
- (e) normal wear items (packing, strainers, filters, light bulbs, anodes, intake screens, mechanical seals, etc.).

ALL OTHER WARRANTIES ARE EXCLUDED, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER CAUSE OF ACTION, SHALL WATEROUS BE LIABLE FOR ANY PUNITIVE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR PERSONAL INJURY OR PROPERTY DAMAGES.

The exclusive remedy of Buyer and the sole liability of WATEROUS, whether based on contract, warranty, tort or any other basis of recovery whatsoever, is expressly limited at the election of WATEROUS to:

- (a) the replacement at the agreed point of delivery of any product or part, which upon inspection by WATEROUS or its duly authorized representative, is found not to conform to the limited warranty set forth above, or
- (b) the repair of such product or part, or
- (c) the refund or crediting to Buyer of the net sales price of the defective product or part.

BUYER'S REMEDIES CONTAINED HEREIN ARE EXCLUSIVE OF ANY OTHER REMEDY OTHERWISE AVAILABLE TO BUYER.

Waterous Company
125 Hardman Avenue South
South St. Paul, MN 55075 USA
www.waterousco.com



F-2113 (07/17/12)



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship Stainless Steel Piping Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Stainless steel piping shall be free from structural failures caused by defects in material and workmanship, or perforation caused by corrosion.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	<p>Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the stainless steel piping or components which Pierce determines to have failed due to defective material and workmanship, or perforation caused by corrosion.</p> <p>This warranty does not cover the use of fluoroprotein (FP) type foam. The sodium chloride within FP foam can cause long-term damage to system components if not thoroughly flushed immediately after use.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion Custom Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the body shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	<p>This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:</p> <p>Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25%</p> <p>Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25%</p> <p>Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10%</p> <p>Corrosion Perforation 0-120 months 100%</p> <p>This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty.</p> <p>Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

One (1) Year Material and Workmanship Graphics Fading and Deterioration

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Each graphic lamination shall be free from defects in material workmanship, fading, and deterioration.
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	One (1) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0156

Statement of Compliance to NFPA 1901-2016

Vehicle Stability

Pierce fire apparatus comply with NFPA 1901 Section 4.13 Vehicle Stability using the tilt table method. As prescribed by the standard, each apparatus is compared to a substantially similar apparatus that has been loaded as required and tested on a tilt table per the SAE J2180 test procedure. If the apparatus configuration was not expected to meet the minimum tilt table criteria, then it will be equipped with the Electronic Stability Control option. A listing of all tested apparatus is maintained by the Research and Development lab and is available for inspection at the Appleton factory.



4.13 Vehicle Stability.

4.13.1* Rollover Stability. The apparatus shall meet the criteria defined in 4.13.1.1, or it shall be equipped with a stability control system in accordance with 4.13.1.2.

4.13.1.1 The apparatus shall meet the criteria defined in either of the following:

- (1)*The apparatus shall remain stable to 26.5 degrees in both directions when tested on a tilt table in accordance with SAE J2180, *A Tilt Table Procedure for Measuring the Static Rollover Threshold for Heavy Trucks*.
- (2) The calculated or measured center of gravity (CG) shall be no higher than 80 percent of the rear axle track width.

4.13.1.1.1 Compliance shall be certified by testing, calculating, or measuring the apparatus or by comparing the apparatus to a compliant, substantially similar example apparatus, and the certification shall be delivered with the fire apparatus.

4.13.1.1.2 The example apparatus shall be considered substantially similar if it includes a chassis with the same or higher CG height, the same or narrower rear axle track width, the same or greater water tank size and CG height, the same type of front and rear suspension, and the same type and size of aerial device.

4.13.1.1.3 For purposes of 4.13.1.1, the apparatus shall be loaded with fuel, fire-fighting agents, hose, ladders, a weight of 250 lb in each seating position, and weight equivalent to the miscellaneous equipment allowance as defined in Table 12.1.2.

4.13.1.1.3.1 If the apparatus is designed to meet a specified higher equipment loading or larger hose bed capacity or to carry additional ground ladders, these greater loads shall be included in the testing, calculating, or measuring.

4.13.1.1.3.2 The weight added to the fire apparatus for the purpose of test, calculation, or measurement shall be distributed to approximate typical in-service use of the fire apparatus while not exceeding the manufacturer's published individual compartment weight ratings.

4.13.1.2 If the apparatus is equipped with a stability control system, the system shall have, at a minimum, a steering wheel position sensor, a vehicle yaw sensor, a lateral accelerometer, and individual wheel brake controls.

VALIDATION TEST: Multiple Tests

Pierce Manufacturing, Inc.

David W. Archer
Vice President of Engineering
June 1, 2017

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0155

Engine Installation – Enforcer GHG17 Cummins L9 Engine

Pierce Manufacturing, Inc. certifies that the GHG17 Cummins L9 Engine as installed in an Enforcer chassis meets the engine installation requirements of the engine manufacturer, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce engine design standards.

Validation testing was conducted in the Pierce wind tunnel chassis dynamometer and cooling test laboratory. Test results have been reviewed and accepted by representatives of the engine supplier.



Pierce Manufacturing, Inc.

David W. Archer
Vice President of Engineering
June 5, 2017



March 13, 2017

Mr. Chad Radtke
Pierce Manufacturing Inc.
2600 American Drive
Appleton, WI 54913

Dear Chad:

We have reviewed the installation of the Cummins 2017 L9 engine in the Enforcer chassis and have found that the engine models listed below are installed in concurrence with our installation recommendations. Please notify us if there are any changes to the installation of these engines. If any changes are made, they must be reviewed and a new statement will be issued regarding concurrence.

Engine Models Reviewed: L9 450
L9 400
L9 380
L9 370

Please let me know if you need any additional information.

Sincerely,

Michael Bartkowski
General Sales Manager, OEM On-Highway

cc: John Schultz, Jon Stage, Kevin Bourgo

Cummins Sales and Service
800 West Ryan Road
Oak Creek, WI 53154
Tel (414) 768-7400
Fax (414) 768-9441
salesandservice.cummins.com

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0158

Engine Installation – Saber FR GHG17 Cummins L9 Engine

Pierce Manufacturing, Inc. certifies that the GHG17 Cummins L9 Engine as installed in a Saber FR chassis meets the engine installation requirements of the engine manufacturer, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce engine design standards.

Validation testing was conducted in the Pierce wind tunnel chassis dynamometer and cooling test laboratory. Test results have been reviewed and accepted by representatives of the engine supplier.



Pierce Manufacturing, Inc.

David W. Archer
Vice President of Engineering
June 5, 2017



March 13, 2017

Mr. Chad Radtke
Pierce Manufacturing Inc.
2600 American Drive
Appleton, WI 54913

Dear Chad:

We have reviewed the installation of the Cummins 2017 L9 engine in the Saber FR chassis and have found that the engine models listed below are installed in concurrence with our installation recommendations. Please notify us if there are any changes to the installation of these engines. If any changes are made, they must be reviewed and a new statement will be issued regarding concurrence.

Engine Models Reviewed: L9 450
L9 400
L9 380
L9 370

Please let me know if you need any additional information.

Sincerely,

Michael Bartkowski
General Sales Manager, OEM On-Highway

cc: John Schultz, Jon Stago, Kevin Bourgo

Cummins Sales and Service
800 West Ryan Road
Oak Creek, WI 53154
Tel (414) 768-7400
Fax (414) 768-9441
salesandservice.cummins.com

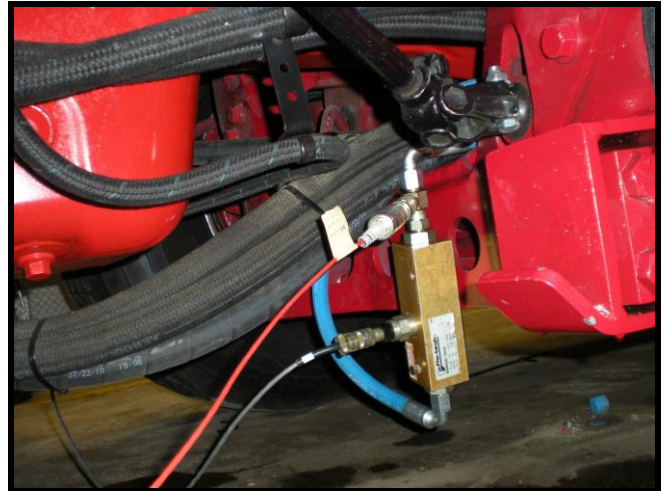
PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0098 Power Steering System

Pierce Manufacturing, Inc. certifies that the power steering system as installed in our custom chassis meets the requirements of the component supplier, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce internal design standards.



VALIDATION TEST: RD1987, RD2055
RD2056, RD2057, RD2058, RD2059

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "David W. Archer".

David W. Archer
Director of Engineering
June 03, 2011

PIERCE MANUFACTURING INC.®

AN OSHKOSH TRUCK CORPORATION® COMPANY



Certification Document CD0130
Saber® FR - Enforcer™
Cab Integrity Certification

Pierce Manufacturing certifies the integrity of the Saber® FR – Enforcer™ cab relative to occupant protection.

A specimen representing the substantial structural configuration of the Saber® FR – Enforcer™ cab models has been successfully tested in accordance with the following standards.

- SAE J2422 Cab Roof Strength Evaluation – Quasi-Static Loading Heavy Trucks.
- European Occupant Protection Standard ECE Regulation No. 29.
- SAE J2420 COE Frontal Strength Evaluation – Dynamic Loading Heavy Trucks.

Side Impact: The test cab was subjected to dynamic preload where a 14,253 lb moving barrier was slammed into the side of the cab at 5.25 mph, striking with an impact of 13,000 ft-lbs of energy. This test is not required to meet the ECE 29 standard, but is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a roll-over incident.



Frontal Impact: The test cab was struck by the 14,253 lb moving barrier at a speed sufficient to impart the required 32,549 ft-lbs of energy.



Roof Crush: This same test cab was then subjected to a roof crush force of 24,453 lbs. This value meets the ECE 29 criteria, which must be equivalent to the front axle rating up to a maximum of 10 metric tons.



Pass-Fail criteria of the SAE tests and the ECE 29 test is a measure of whether the “survival space” inside the cab is compromised, all doors remain shut, and the cab remained attached to the chassis frame in at least one location. The Pierce cab met all of the Performance Criteria requirements on all 3 integrity tests.

Witnessed and Certified by:

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "David Archer". The signature is stylized with a large initial "D" and a long, sweeping underline.

David Archer
Vice President of Engineering

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY

**Certification Document CD0137
Saber®FR – Enforcer™
Cab Doors**

Pierce Manufacturing certifies the integrity of the Saber®FR – Enforcer™ cab doors.

Specimens representing the substantial structural configuration of the Saber®FR – Enforcer™ cab front and crew doors have been successfully tested to meet the following objectives:

OBJECTIVES:

- Survive a 200,000-cycle door slam test with a slam acceleration up to 20 g's on one representative
- Validate the assembly concept of the main structure of the door by evaluating the durability of the bonding technique.
- Evaluate components, structure, and mounting of the door during and the end of the test for fatigue and failure to ensure durability.
- Verify that the door seals function properly at the end of the test.
- Evaluate the new extrusions and castings of the cab doorframe during and at the end of the test for fatigue, failure, and deformation of seal flanges.
- Evaluate various mounting options for the electronic control module for durability during portions of the slam test.

CONCLUSIONS:

- The door structure and doorframe successfully completed a 200,000-cycle door slam test with a door slam acceleration of 20 g's.

VALIDATION TEST: RD2425

Pierce Manufacturing, Inc.

David Archer
November 18, 2014



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0132
Saber®FR – Enforcer™
Windshield Wiper System

Pierce Manufacturing certifies the integrity of the Saber® FR –Enforcer™ Windshield Wiper System.

Specimens representing the configuration of the Saber® FR –Enforcer™ windshield wipers have been successfully tested to meet the following objectives:

OBJECTIVES:

- Complete 3,000,000 cycles of windshield wiper operation per SAE J198 § 6.2
- Inspect wiper motor, pivots, linkages, and mounts frequently to validate cumulative wiper system integrity.

CONCLUSIONS:

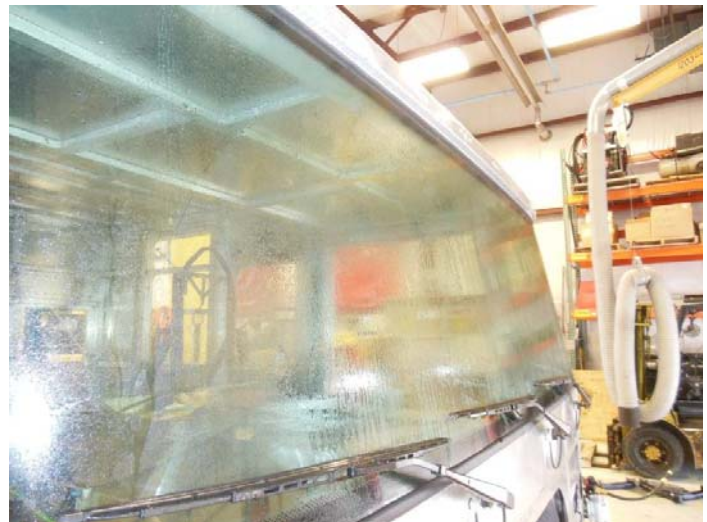
- The wiper linkage, pivots, and mounts successfully completed the 3,000,000 cycles.

VALIDATION TEST: RD2462

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "David Archer".

David Archer
Vice President of Engineering



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0134

Saber® FR – Enforcer™ Seats and Seat Belts

Pierce Manufacturing certifies the conformance of the Saber® FR – Enforcer™ cab seats and seat belts to Federal Motor Vehicle Safety Standards. Representative Saber® FR – Enforcer™ Seat and Seat Belt designs have been tested successfully in accordance with FMVSS 207.

Physical testing was performed to qualify passenger seats to meet Federal Motor Vehicle Safety Standards (FMVSS) 207 and 210. This requires that a minimum of 3,000 lbf be applied to both the lap and shoulder belts via appropriate body blocks. A third force of twenty times the mass of the seat must be applied at the center-of-gravity (CG) of the seat. All three forces are applied at the same time, reached within thirty seconds of the start of the test, and be held for a minimum of ten seconds.

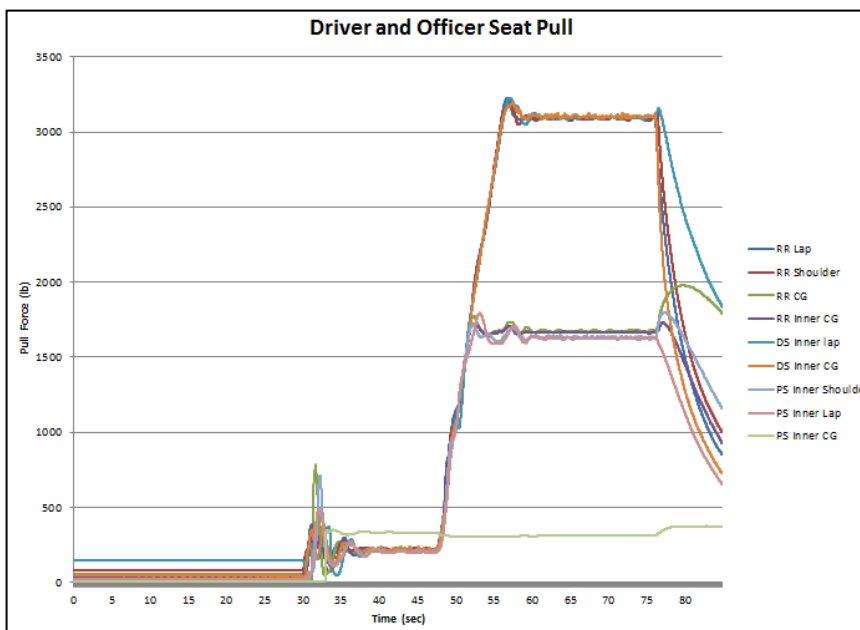
A force equal to twenty times the mass of the seat was applied to each seat in the direction opposite to the combination pull. A moment of 275 lb-ft was applied to the seat with reference to the H-point.

This testing ensures that the seat mounting and seat belt anchors are adequate to retain the seats and occupants in a crash. The Federal requirements are based on the high deceleration rates of passenger vehicles, so the design requirements are significantly more conservative considering the slower crash speeds of heavy trucks.

VALIDATION TESTS: RD2397

Pierce Manufacturing, Inc.

David Archer
Vice President of Engineering



PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0131

Saber® FR – Enforcer™

Cab Heater & Defrost

Pierce Manufacturing certifies the performance of the Saber® FR – Enforcer™ cab heat and defroster systems.

The Saber®FR - Enforcer™ Heater and Defroster System was tested successfully in an environmental chamber.

Defrosting

Defroster testing was performed in accordance with *SAE J381 Windshield Defrosting Systems Test Procedure and Performance Requirements-Trucks, Buses, and Multipurpose Vehicles*.

This SAE Recommended Practice establishes uniform test procedures and performance requirements for the defrosting system of enclosed cab trucks, buses, and multipurpose vehicles. Current engineering practice prescribes that for laboratory evaluation of defroster systems, an ice coating of known thickness be applied to the windshield and left- and right-hand side windows to provide more uniform and repeatable test results, even though under actual conditions such a coating would necessarily be scraped off before driving. The test condition, therefore, represents a more severe condition than the actual condition, where the defroster system must merely be capable of maintaining a cleared viewing area.

During the test, the vehicle is cold-soaked to 0° F in a cold chamber. A prescribed layer of ice is applied to the windshield. The defroster is then run and the advancing melt boundary marked as the test proceeds.

The SAE prescribed area of the windshield was 100% cleared and the side windows were 75% cleared within the specified 30 minute period.



Start of Test

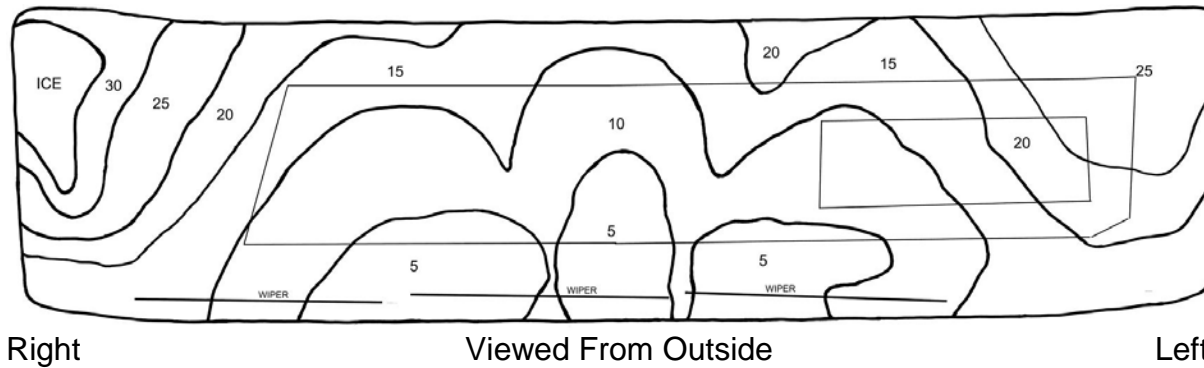


10 Minutes



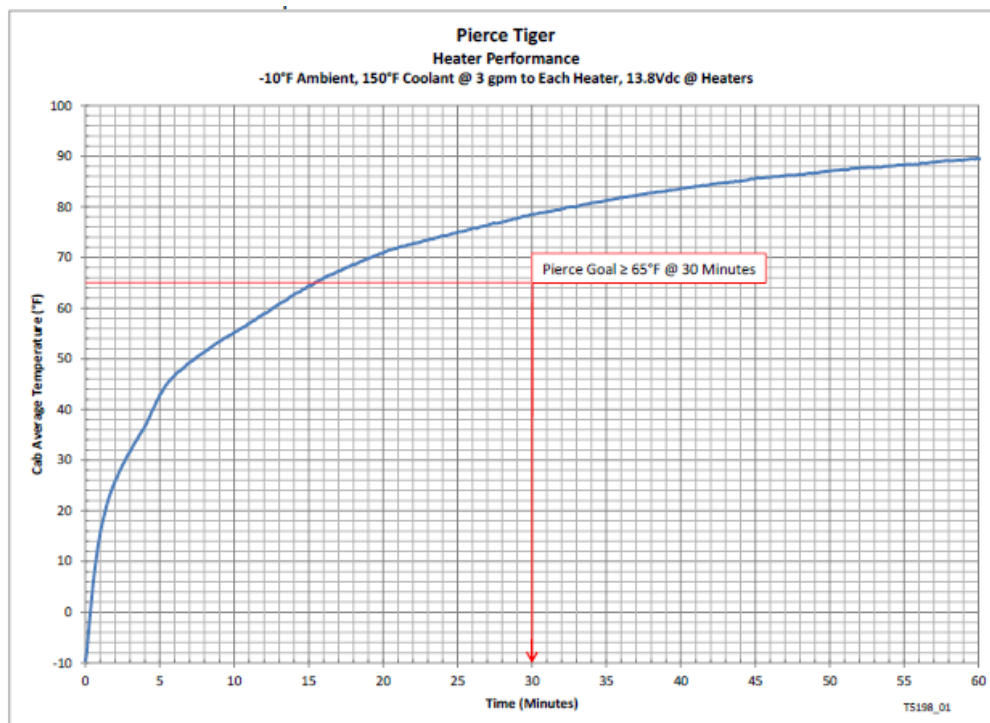
30 Minutes

Defrost Results



Heater:

Heater testing was performed using the coolant supply procedures from SAE J381. The average cab temperature increased 88.3° F from -10° F to 78.3° F within the prescribed 30 minutes. The cab was contained in a cold chamber at -10° F during the duration of the test.

**VALIDATION TEST: T5198REP**

Pierce Manufacturing, Inc.

David Duke

David Archer
Vice President of Engineering

PIERCE MANUFACTURING INC.®

AN OSHKOSH CORPORATION® COMPANY



Certification Document CD0135

Saber® FR - Enforcer™

Air Conditioning

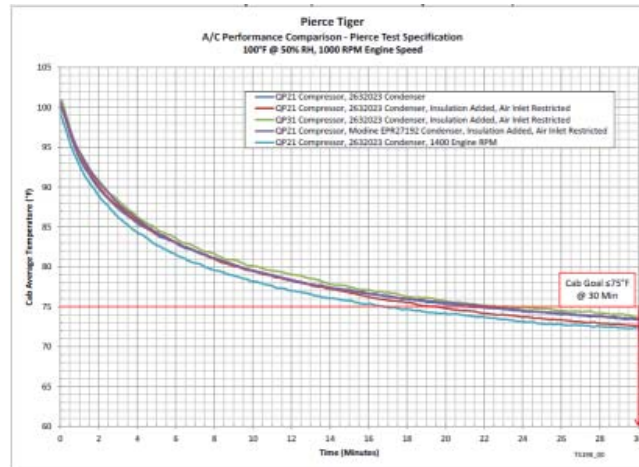
Pierce Manufacturing certifies the performance of the Saber®FR - Enforcer™ cab air conditioning system.

The air conditioning system was tested successfully in an environmental chamber.

Air conditioning performance testing was conducted at an ambient of 100°F and 50 percent relative humidity. The engine speed was maintained at both 1000 and 1400 RPM to simulate both the Cummins engine and Detroit Diesel engine. Both the QP21 and QP31 compressors were tested with the controls set to maximum cooling.

The vehicle was heat soaked in the environmental chamber. All temperature probes were monitored to confirm temperature stabilization. The transient test began when all the vehicle doors were closed and the air conditioning turned on.

The average cab temperature dropped to a maximum of 73.6°F within 30 minutes in all configurations.



VALIDATION TEST: RD2455

Pierce Manufacturing, Inc.

David W. Archer
Vice President of Engineering

Appendix I

COUNTY OF FLUVANNA

GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

These General Terms, Conditions and Instructions to Bidders and Contractor (hereinafter referred to as the “General Conditions”) shall apply to all purchases and be incorporated into and be a part of each Solicitation (as defined below) and every Contract (as defined below) awarded by Fluvanna County, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the “County”) unless otherwise specified by the County in writing. Bidders, Offerors and Contractors or their authorized representatives are expected to inform themselves fully as to these General Conditions before submitting Bids or Proposals to and/or entering into any Contract with the County: failure to do so will be at the Bidder’s/Contractor’s own risk and except as provided by law, relief cannot be secured on the plea of error.

Subject to all Federal, State and local laws, policies, resolutions, regulations, rules, limitations and legislation, including the County’s Procurement Policies and Procedures, Bids or Proposals on all Solicitations issued by County will bind Bidders or Offerors, as applicable, and Contracts will bind Contractors, to all applicable terms, conditions, instructions, rules and requirements herein set forth unless otherwise SPECIFICALLY set forth by the County in writing in the Solicitation or Contract. All provisions of these General Conditions are material to any contract between the County and a Contractor.

INTRODUCTION

1. **VIRGINIA PUBLIC PROCUREMENT ACT AND ETHICS IN PUBLIC CONTRACTING:** The Virginia Public Procurement Act of Virginia Code §§ 2.2-4300 *et seq.* (hereinafter the “VPPA”) is incorporated herein by reference. Nothing in these General Conditions is intended to conflict with the VPPA and in case of any conflict, the VPPA controls. Specifically, the provisions of Article 6 of the VPPA (Virginia Code §§ 2.2-4367 through 2.2-4377) relating to ethics in contracting, shall be applicable to all Solicitations and Contracts solicited or entered into by the County. By submitting their Bids or signing any Contract, all Bidders and Contractors certify that they have not violated any of the provisions of Article 6 of the VPPA, including, but not limited to, that their Bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements.
2. **DEFINITIONS:** The definitions of Virginia Code §§ 2.2-4301, 2.2-4302.1 and 2.2-4302.2 are specifically incorporated herein by reference and as used in these General Conditions, whether capitalized or not, any of such defined terms have the same meaning as such terms have under the VPPA: such defined terms include: “Affiliate”, “Best Value”, “Business”, “Competitive Negotiation”, “Competitive Sealed Bidding”, “Construction”, “Construction Management Contract”, “Design-Build Contract”, “Employment Services Organization”, “Goods”, “Informality”, “Job Order Contracting”, “Multiphase Professional Services Contract”, “Nonprofessional Services”, “Potential Bidder or Offeror”, “Professional Services”, “Public Body”, “Public Contract”, “Responsible Bidder or Offeror”, “Responsive Bidder”, “Reverse Auctioning” and

“Services”. Additionally, as used in these General Conditions, the following terms, whether capitalized or not, have the following meanings:

- a. Bid/Proposal: The offer of a Bidder or Offeror to provide specific Goods or Services at specified prices and/or other conditions specified in the Solicitation. The term “Bid” is used throughout these General Conditions and where appropriate includes the term “Proposal” or any modifications or amendments to any Bid or Proposal.
- b. Bidder/Offeror/Vendor: Any individual(s), company, firm, corporation, partnership or other organization bidding or offering on any Solicitation issued by the County and/or offering to enter into Contracts with the County. The term “Bidder” is used throughout these General Conditions and where appropriate includes the term “Offeror” and/or “Vendor”.
- c. Contract: Any contract to which the County will be a party.
- d. Contractor: Any individual(s), company, firm, corporation, partnership, or other organization to whom an award is made by the County or whom enters into any contract to which the County is a party.
- e. County: The County of Fluvanna, a political subdivision of the Commonwealth of Virginia, including where applicable all agencies and departments of the County.
- f. County Administrator: The Fluvanna County Administrator.
- g. County Attorney: The Fluvanna County Attorney.
- h. Purchasing Agent: The County Administrator is the County’s Purchasing Agent and is responsible for the purchasing activity of Fluvanna County; and has signatory authority to bind the County to all contracts and purchases made lawfully under the Fluvanna County Small Purchasing Procedures. The Purchasing Agent has signatory authority to bind the County to all other contracts and purchases only after the contracts or purchases have been approved by a vote of the Fluvanna County Board of Supervisors.
- i. General Terms, Conditions and Instructions to Bidders and Contractors (also referred to herein as the “General Conditions”): These General Terms, Conditions and Instructions to Bidders and Contractors shall be attached to and made a part of all Solicitations by the County and all Contracts to which the County is party.
- j. His: Any references to “his” shall include his, her, their, or its as appropriate.
- k. Invitation to Bid (also referred to herein as an “IFB”): A request which is made to prospective Bidders for their quotation on Goods or Services desired by the County. The issuance of an IFB will contain or incorporate by reference the General Conditions and the other specifications and contractual terms and

conditions applicable to the procurement.

- l. Purchasing Officer: The Purchasing Officer employed by the County and to whom Bidders/Contractors can submit questions relating to any Bid or Contract.
 - m. Request for Proposal (also referred to herein as a “RFP”): A request for an offer from prospective Offerors which shall indicate the general terms which are sought to be procured from Offerors. The RFP will specify the evaluation factors to be used and will contain or incorporate by reference the General Conditions and other applicable contractual terms and conditions, including any unique capabilities or qualifications that will be required of the Contractor.
 - n. Small Purchasing Procedures: The County’s Small Purchasing Procedures, being Chapter 4 of the County’s Procurement Policies and Procedures, a method of purchasing not requiring competitive sealed bids or competitive negotiation for single or term contracts for goods and services other than professional services if the aggregate or the sum of all phases is not expected to exceed \$50,000; and also allowing for single or term contracts for professional services without requiring competitive negotiation, provided the aggregate or the sum of all phases is not expected to exceed \$50,000.
 - o. Solicitation: The process of notifying prospective Bidders or Offerors that the County wishes to receive Bids or Proposals on a set of requirements to provide Goods or Services. “Solicitation” includes any notification of the County requirements may consist of public advertising (newspaper, County’s website, or other electronic notification), the mailing of notices of Solicitation, any Invitation for Quotes (“IFQ”), Initiations to Bid (“IFB”), or Requests for Proposal (“RFP”), the public posting of notices, issuance of an Open Market Procurement (“OMP”), or telephone calls to prospective Bidders or Offerors.
 - p. State: The Commonwealth of Virginia.
3. **AUTHORITY**: The Purchasing Agent shall serve as the principal public purchasing official for the County, and shall be responsible for the procurement of goods, services, insurance and construction in accordance with the County’s Procurement Policies and Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every Solicitation, Contract and purchase order issued by the County under the County’s Small Purchasing Procedures. The Purchasing Agent has signatory authority to bind the County to all contracts and purchases made lawfully under the County’s Small Purchasing Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every other Solicitation, Contract and purchase order issued by the County except that the Purchasing Agent has signatory authority to bind the County to all other contracts and purchases ONLY after the contracts or purchases have been adopted and approved by a vote of the Fluvanna County Board of Supervisors (the “Board”).

Unless specifically delegated by the Board or the Purchasing Agent, and consistent with the limited authority granted thereto, no other County officer or employee is authorized to order supplies or Services, enter into purchase negotiations or Contracts, or in any way obligate the County for any indebtedness. Any purchase or contract made which is contrary to such authority shall be of no effect and void and the County shall not be bound thereby.

For convenience, the County's Purchasing Officer shall serve as an intermediary between the Purchasing Agent and the Bidder or Contractor and any Bidder or Contractor may direct communications regarding any purchase, Solicitation or Contract to the Purchasing Officer; however as stated *supra* only the Board or County's Purchasing Agent can bind the County and only upon the conditions stated *supra*.

CONDITIONS OF BIDDING

4. **COMPETITION INTENDED:** It is the County's intent to encourage and permit open and competitive bidding in all Solicitations. It shall be the Bidder's responsibility to advise the County in writing if any language, requirement, specification, etc., or any combination thereof, stifles competition or inadvertently restricts or limits the requirements stated in a Solicitation to a single source. The County must receive such notification not later than seven (7) business days prior to the deadline set for acceptance of the Bids. In submitting a Bid, the Bidder guarantees that he or she has not been a party with other Bidders to an agreement to bid a fixed or uniform price. Violation of this implied guarantee shall render the Bid of any Bidder involved void.
5. **DISCRIMINATION PROHIBITED:** Pursuant to Virginia Code § 2.2-4310, the County does not discriminate against Bidders, Offerors or Contractors because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. Whenever solicitations are made, the County shall include businesses selected from a list made available by the Department of Small Business and Supplier Diversity. Pursuant to Virginia Code § 2.2-4343.1, the County does not discriminate against "faith-based organizations", being a religious organization that is or applies to be a contractor to provide goods or services for programs funded by the block grant provided pursuant to the Personal Responsibility and Work Reconciliation Act of 1996, P.L. 104-193.
6. **CLARIFICATION OF TERMS:** Pursuant to Virginia Code § 2.2-4316, if any Bidder has questions or comments about the specifications or other Solicitation documents, the prospective Bidder should contact the County no later than seven (7) business days prior to the date set for the opening of Bids or receipt of Proposals. Any revisions to the Solicitation will be made only by written addendum issued by the County. Notifications regarding specifications may not be considered if received in less than seven (7) business days of the date set for opening of Bids/receipt of Proposals.
7. **MANDATORY USE OF COUNTY FORM AND TERMS AND CONDITIONS:** Unless otherwise specified in the Solicitation, all Bids must be submitted on the forms

provided by the County, including but not limited to, a Cover Sheet or Pricing Schedule, if applicable, properly signed in ink in the proper spaces and submitted in a sealed envelope or package. Unauthorized modification of or additions to any portion of the Solicitation may be cause for rejection of the Bid. However, the County reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject any Bid or Proposal which has been modified. These General Conditions are mandatory provisions of all Solicitations and all Contracts of the County.

8. LATE BIDS & MODIFICATION OF BIDS: Any Bid or modification thereto received at the office designated in the Solicitation after the exact time specified for receipt of the Bid is considered a late Bid or modification thereof. The County is not responsible for delays in the delivery of the mail by the U.S. Postal Service, private carriers or the inter-office mail system. It is the sole responsibility of the Bidder to ensure their Bid reaches County by the designated date and hour. The following rules apply to all Bids submitted to the County:

- a. The official time used in the receipt of Bids/Proposals is that time on the automatic time stamp machine in the Finance Department;
- b. Late Bids or modifications thereof will be returned to the Bidder UNOPENED, if Solicitation number, due date and Bidder's return address is shown on the container;
- c. If a Bid is submitted on time, however a modification thereto is submitted after the due date and time, then the County in its sole discretion may choose to consider the original Bid except that the County may not consider such original Bid if the Bid is withdrawn by the Bidder pursuant to Section 9 below; and
- d. If an emergency or unanticipated event or closing interrupts or suspends the County's normal business operations so that Bids cannot be received by the exact time specified in the Solicitation, then the due date/time specified for receipt of Bids will be deemed to be extended to the same time of day specified in the Solicitation on the first work day on which normal County business operations resume.

9. WITHDRAWAL OF BIDS:

- a. Pursuant to Virginia Code § 2.2-4330, a Bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his Bid from consideration if the price bid was substantially lower than the other Bids due solely to a mistake in the Bid, provided the Bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn.

If a Bid contains both clerical and judgment mistakes, a Bidder may withdraw his Bid from consideration if the price bid would have been substantially lower than the other Bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn. The Bidder shall give notice in writing to the County of his or her claim of right to withdraw his or her Bid within two (2) business days after the conclusion of the Bid opening procedure and shall submit original work papers with such notice.

- b. A Bidder for a Contract other than for public construction may request withdrawal of his or her Bid under the following circumstances:
 - i. Bids may be withdrawn on written request from the Bidder received at the address shown in the Solicitation prior to the time of opening.
 - ii. Requests for withdrawal of Bids after opening of such Bids but prior to award shall be transmitted to the County, in writing, accompanied by full documentation supporting the request. If the request is based on a claim of error, documentation must show the basis of the error. Such documentation may take the form of supplier quotations, Bidder work sheets, etc. If Bid bonds were tendered with the Bid, the County may exercise its right of collection.
- c. No Bid may be withdrawn under this Section 9 when the result would be the awarding of the Contract on another Bid of the same Bidder or of another Bidder in which the ownership of the withdrawing Bidder is more than five percent (5%).
- d. If a Bid is withdrawn under the authority of this Section 9 the lowest remaining Bid shall be deemed to be the low Bid.
- e. No Bidder who, is permitted to withdraw a Bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn Bid was submitted.
- f. The County shall notify the Bidder in writing within five (5) business days of its decision regarding the Bidder's request to withdraw its Bid. If the County denies the withdrawal of a Bid under the provisions of this Section 9, it shall State in such notice the reasons for its decision and award the Contract to such Bidder at the Bid price, provided such Bidder is a responsible and responsive Bidder. At the same time that the notice is provided, the County shall return all work papers and copies thereof that have been submitted by the Bidder.

- g. Under these procedures, a mistake shall be proved only from the original work papers, documents and materials delivered as required herein. The work papers, documents and materials submitted by the bidder shall, at the bidder's request, be considered trade secrets or proprietary information subject to the conditions of subsection F of Virginia Code § 2.2-4342.

10. ERRORS IN BIDS: When an error is made in extending total prices, the unit Bid price will govern. Erasures in Bids must be initialed by the Bidder. Carelessness in quoting prices, or otherwise in preparation of the Bid, will not relieve the Bidder. Bidders/Offerors are cautioned to recheck their Bids for possible error. Errors discovered after public opening cannot be corrected and the Bidder will be required to perform if his or her Bid is accepted.

11. IDENTIFICATION ON BID ENVELOPE: All Bids, Proposals and requested copies thereof submitted to the County shall be in a separate envelope or package, sealed and identified with the following information clearly marked on the outside of the envelope or package:

- a. Addressed as indicated on page 1 of the solicitation;
- b. Solicitation number;
- c. Title;
- d. Bid due date and time;
- e. Bidder's name and complete mailing address (return address); and
- f. Pursuant to Virginia Code § 2.2-4311.2, the Bidder's identification number issued by the State Corporation Commission, or if the bidder is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bids or proposal a statement describing why the bidder or offeror is not required to be so authorized.

If a Bid is not addressed with the information as shown above, the Bidder takes the risk that the envelope may be inadvertently opened and the information compromised, which may cause the Bid to be disqualified. Bids may be hand delivered to the designated location in the County's offices. No other correspondence or other Proposals/Bids should be placed in the envelope. Any Bidder or Offeror that fails to provide the information required in (f) above shall not receive an award unless a waiver is specifically granted by the County Administrator.

12. ACCEPTANCE OF BIDS: Unless otherwise specified, all formal Bids or Proposals submitted shall be valid for a minimum period of one hundred twenty (120) calendar days following the date established for opening or receipt, respectively, unless extend by mutual agreement of the parties. At the end of the one hundred twenty (120) calendar days the Bid/Proposal may be withdrawn at the written request of the Bidder. Thereafter, unless and until the Proposal is withdrawn, it remains in effect until an award is made or the Solicitation is canceled by the County. The County may cancel any Solicitation at any time by notice of such cancelation to the Bidders.

- 13. COMPLETENESS:** To be responsive, a Bid must include all information required by the Solicitation.
- 14. CONDITIONAL BIDS:** Conditional Bids are subject to rejection in whole or in part.
- 15. RESPONSE TO SOLICITATIONS:** In the event a Bidder cannot submit a Bid on a Solicitation, the Bidder is requested to return the Solicitation cover sheet with an explanation as to why the Bidder is unable to Bid on these requirements, or if there be no cover sheet for the Solicitation a letter to the County explaining the same.
- 16. BIDDER INTERESTED IN MORE THAN ONE BID AND COLLUSION:** More than one bid from an individual, firm, partnership, corporation or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for the work contemplated will cause rejection of all bids in which the bidder is interested. Any or all bids may be rejected if there is any reason for believing that collusion exists among the bidders. Participants in such collusion may not be considered in future bids for the same work. Each bidder, as a condition of submitting a bid, shall certify that he is not a party to any collusive action as herein defined. However, a party who has quoted prices on work, materials, or supplies to a Bidder is not thereby disqualified from quoting prices to other Bidders or firms submitting a Bid directly for the work, materials or supplies.
- 17. BID OPENING:** Pursuant to Virginia Code § 2.2-4301, all Bids received in response to an IFB will be opened at the date, time and place specified, and announced publicly, and made available for inspection as provided in Section 21 of these General Conditions. Proposals received in response to an RFP will be made available for inspection as provided in Section 21 of these General Conditions.
- 18. TAX EXEMPTION:** The County is exempt from the payment of any federal excise or any Virginia sales tax. The price bid must be net, exclusive of taxes. Tax exemption certificates will be furnished if requested by the Bidder.
- 19. DEBARMENT STATUS:** By submitting their Bids, Bidders certify that they are not currently debarred from submitting Bids on Contracts by the County, nor are they an agent of any person or entity that is currently debarred from submitting Bids or Proposals on Contracts by the County or any agency, public entity/locality or authority of the State.
- 20. NO CONTACT POLICY:** No Bidder shall initiate or otherwise have contact related to the Solicitation with any County representative or employee, other than the Purchasing Officer or Purchasing Agent, after the date and time established for receipt of Bids. Any contact initiated by a Bidder with any County representative, other than the Purchasing Officer or Purchasing Agent, concerning this Solicitation is prohibited and may cause the disqualification of the Bidder.

21. VIRGINIA FREEDOM OF INFORMATION ACT: As provided under Virginia Code § 2.2-4342, all proceedings, records, Contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act of Virginia Code §§ 2.2-3700 *et seq.*, except:

- a. Cost estimates relating to a proposed procurement transaction prepared by or for the County shall not be open to public inspection;
- b. Any competitive sealed bidding Bidder, upon request, shall be afforded the opportunity to inspect Bid records within a reasonable time after the opening of Bids but prior to award, except in the event that the County decides not to accept any of the Bids and to reopen the Contract. Otherwise, Bid records shall be open to public inspection only after award of the Contract;
- c. Any competitive negotiation Offeror, upon request, shall be afforded the opportunity to inspect Proposal records within a reasonable time after the evaluation and negotiations of Proposals are completed but prior to award except in the event that the County decides not to accept any of the Proposals and to reopen the Contract. Otherwise, Proposal records shall be open to the public inspection only after award of the Contract;
- d. Any inspection of procurement transaction records under this Section 21 shall be subject to reasonable restrictions to ensure the security and integrity of the records;
- e. Trade secrets or proprietary information submitted by a Bidder, Offeror or Contractor in connection with a procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the Bidder, Offeror or Contractor must invoke the protections of this Section 21 prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and State the reasons why protection is necessary; and
- f. Nothing contained in this Section 21 shall be construed to require the County, when procuring by “competitive negotiation” (RFP), to furnish a Statement of reasons why a particular Proposal was not deemed to be the most advantageous to the County.

22. CONFLICT OF INTEREST: Bidder/Contractor certifies by signing any Bid/Contract to/with the County that no conflict of interest exists between Bidder/Contractor and County that interferes with fair competition and no conflict of interest exists between Bidder/Contractor and any other person or organization that constitutes a conflict of interest with respect to the Bid/Contract with the County.

SPECIFICATIONS

23. OMISSIONS OR DISCREPANCIES: Any items or parts of any equipment listed in a Solicitation which are not fully described or are omitted from such specification, and which are clearly necessary for the completion of such equipment and its appurtenances, shall be considered a part of such equipment although not directly specified or called for

in the specifications. Should a Bidder find a discrepancy or ambiguity in, or an omission from, the Solicitation, including the drawings and/or specifications, he or she shall so notify the County within twenty-four (24) hours of noting the discrepancy, ambiguity or omission and in any event no less than five (5) days prior to the date set for the opening of Bids. If necessary, the County will send a written addendum for clarification to all Bidders no later than three (3) days before the date set for opening of Bids. Any notification regarding specifications received less than five (5) days prior to the date set for the opening of Bids may or may not be considered by the County in its sole discretion. The Bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission, but shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever the mention is made of any articles, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed as to the minimum requirements of these specifications.

24. BRAND NAME OR EQUAL ITEMS: Pursuant to Virginia Code § 2.2-4315, unless otherwise provided in the Solicitation, the name of a certain brand, make or manufacturer does not restrict Bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the County in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Bidder is responsible to clearly and specifically indicate the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the County to determine if the product offered meets the requirements of the Solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding, only the information furnished with the Bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a Bid non-responsive. Unless the Bidder clearly indicates in its Bid that the product offered is "equal" product, such Bid will be considered to offer the brand name product referenced in the Solicitation.

25. FORMAL SPECIFICATIONS: When a Solicitation contains a specification which states no substitutes, no deviation therefrom will be permitted and the Bidder will be required to furnish articles in conformity with that specification.

26. CONDITION OF ITEMS: Unless otherwise specified in the Solicitation, all items shall be new, in first class condition.

AWARD

27. RESPONSIBLE BIDDERS: In determining whether a Bidder is a responsible Bidder as defined herein, at minimum, the following criteria will be considered:

- a. The ability, capacity and skill of the Bidder to perform the Contract or provide the service required under the Solicitation;

- b. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
- c. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
- d. The quality of performance of previous Contracts or Services;
- e. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or Services;
- f. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service;
- g. The quality, availability and adaptability of the Goods or Services to the particular use required;
- h. The ability of the Bidder to provide future maintenance and service for the use of the subject of the Contract;
- i. The number and scope of the conditions attached to the Bid;
- j. Whether the Bidder is in arrears to the County on debt or Contract or is a defaulter on surety to the County or whether the Bidder's County taxes or assessments are delinquent; and
- k. Such other information as may be secured by the County, the Purchasing Agent or the Purchasing Officer having a bearing on the decision to award the Contract. If an apparent low Bidder is not awarded a Contract for reasons of nonresponsibility, the County shall so notify that Bidder and shall have recorded the reasons in the Solicitation or Contract file.

28. AWARD OR REJECTION OF BIDS; WAIVER OF INFORMALITIES: The County shall award the Contract to the lowest responsive and responsible Bidder complying with all provisions of the IFB, provided the Bid price is reasonable and it is in the best interest of the County to accept it. Awards made in response to a RFP will be made to the highest qualified Offeror whose Proposal is determined, in writing, to be the most advantageous to the County taking into consideration the evaluation factors set forth in the RFP. The County reserves the right to award a Contract by individual items, in the aggregate, or in combination thereof, or to reject any or all Bids and to waive any informality in Bids received whenever such rejection or waiver is in the best interest of the County. Award may be made to as many Bidders/Offerors as deemed necessary to fulfill the anticipated requirements of the County. The County also reserves the right to reject the Bid if a Bidder is deemed to be a non-responsible Bidder. Pursuant to Virginia Code § 2.2-4319, an IFB, a RFP, any other solicitation, or any and all bids or proposals, may be canceled or rejected by the County at any time. The reasons for cancellation or rejection shall be made part of the contract file. The County shall not cancel or reject an IFB, a RFP, any other solicitation, bid or proposal solely to avoid awarding a contract to a particular responsive and responsible bidder or offeror.

29. EXCLUSION OF INSURANCE BIDS PROHIBITED: Pursuant to Virginia Code § 2.2-4320, notwithstanding any other provision of law or these General Conditions, no insurer licensed to transact the business of insurance in the State or approved to issue surplus lines insurance in the State shall be excluded from presenting an insurance bid proposal to the County in response to a RFP or an IFB; excepting that the County may

debar a prospective insurer pursuant to its Debarment Policy, see Chapter 2 of the County's Procurement Policies and Procedures.

30. ANNOUNCEMENT OF AWARD: Upon the award or announcement of the decision to award a Contract as a result of this Solicitation, the County will publicly post such notice on the County's bulletin board located at 72 Main Street, 2nd Floor, Palmyra, Virginia 22963. Award results may also be viewed on the County's website.

31. QUALIFICATIONS OF BIDDERS OR OFFERORS: The County may make such reasonable investigations as deemed proper and necessary to determine the ability of the Bidder to perform the work/furnish the item(s) and the Bidder shall furnish to the County all such information and data for this purpose as may be requested. The County reserves the right to inspect Bidder's physical facilities prior to award to satisfy questions regarding the Bidder's capabilities. The County further reserves the right to reject any Bid or Proposal if the evidence submitted by or investigations of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work/furnish the item(s) contemplated therein.

32. TIE BIDS AND PREFERENCE FOR VIRGINIA PRODUCTS WITH RECYCLED CONTENT AND FOR VIRGINIA FIRMS:

- a. Pursuant to Virginia Code § 2.2-4328, in the case of a tie bid on an IFB only, the County may give preference to Goods, Services and construction produced in Fluvanna County or provided by persons, firms or corporations having principal places of business in Fluvanna County. If such choice is not available, preference shall then be given to Goods produced in Virginia, or for goods, services or construction provided by Virginia persons, firms, corporations, pursuant Virginia Code § 2.2-4324. If no County or State choice is available, the tie shall be decided publicly by lot. The decision by the County to make award to one or more such Bidders shall be final.
- b. Whenever the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a percentage preference, a like preference shall be allowed to the lowest responsive and responsible bidder who is a resident of Virginia and is the next lowest bidder. If the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a price-matching preference, a like preference shall be allowed to responsive and responsible bidders who are residents of Virginia. If the lowest bidder is a resident contractor of a state with an absolute preference, the bid shall not be considered. The Department of General Services shall post and maintain an updated list on its website of all states with an absolute preference for their resident contractors and those states that allow their resident contractors a percentage preference, including the respective percentage amounts. For purposes of compliance with this Section 32, the County may rely upon the accuracy of the information posted on this website.
- c. Notwithstanding the provisions of subsections a and b, in the case of a tie bid in instances where goods are being offered, and existing price preferences have

already been taken into account, preference shall be given to the bidder whose goods contain the greatest amount of recycled content.

- d. For the purposes of this Section 32, a Virginia person, firm or corporation shall be deemed to be a resident of Virginia if such person, firm or corporation has been organized pursuant to Virginia law or maintains a principal place of business within Virginia.

33. NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER: Pursuant to Virginia Code § 2.2-4318, unless cancelled or rejected, a responsive Bid from the lowest responsible Bidder shall be accepted as submitted, except that if the Bid from the lowest responsible Bidder exceeds available funds, the County may negotiate with the apparent low Bidder to obtain a Contract price within available funds. However, the negotiation may be undertaken only under conditions and procedures described in writing and approved by the County prior to issuance of the IFB and summarized therein.

CONTRACT PROVISIONS

34. APPLICABLE LAW AND COURTS: Any Bid or Contract resulting from a Solicitation and its terms, including, but not limited to, the parties' obligations under it, and the remedies available to each party for breach of it, shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Virginia, and exclusive jurisdiction and venue of any dispute or matters involving litigation between the parties hereto shall be in the courts of Fluvanna County, Virginia. Any jurisdiction's choice of law, conflict of laws, rules, or provisions, including those of the Commonwealth of Virginia, that would cause the application of any laws other than those of the Commonwealth of Virginia, shall not apply. The Contractor shall comply with applicable federal, State and local laws, ordinances, rules and regulations in performance of the Contract.

35. PROVISION AND OWNERSHIP OF INFORMATION: The County shall make a good faith effort to identify and make available to the Contractor all non-confidential technical and administrative data in the County's possession which the County may lawfully release including, but not limited to Contract specifications, drawings, correspondence, and other information specified and required by the Contractor and relating to its work under any Contract. The County reserves its rights of ownership to all material given to the Contractor by the County and to all background information documents, and computer software and documentation developed by the Contractor in performing any Contract.

36. DOCUMENTS: All documents, including but not limited to data compilations, drawings, reports and other material, whether in hard copy or electronic format, prepared, developed or furnished by the Contractor pursuant to any Contract shall be the sole property of the County. At the direction of the County, the Contractor shall have the right to make copies of the documents produced available to other parties. The County shall be entitled to delivery of possession of all documents, upon payment in accordance with the terms of any Contract for the service incurred to produce such documents.

37. CONFIDENTIALITY: Contractor shall not publish, copyright or otherwise disclose or permit to be disclosed or published, the results of any work performed pursuant to this contract, or any particulars thereof, including forms or other materials developed for the County in connection with the performance by Contractor of its services hereunder, without prior written approval of the County. Contractor, cognizant of the sensitive nature of much of the data supplied by the County, shall not disclose any information (other than information which is readily available from sources available to the general public) obtained by it in the course of providing services hereunder without the prior written approval of the County, unless disclosure of such information by it is required by law, rule or regulation or the valid order of a court or administrative agency.

38. INDEPENDENT CONTRACTOR: The Contractor and any agents, or employees of the Contractor, in the performance of any Contract shall act as an independent contractor and not as officers, employees or agents of the County.

39. INSURANCE: The Contractor agrees that, during the period of time it renders services to the County pursuant to any Contract, it shall carry (and provide the County with evidence of coverage) the following minimum amounts of insurance:

Automobile	\$500,000	Liability Medical Payment Comprehensive Collision
Public Liability	\$1,000,000	
Professional Liability	\$1,000,000	
Excess Liability	\$2,000,000	Aggregate Over Above Policy Limits (Excluding Professional Liability)
Worker's Compensation	Amount required by Virginia law	

The Contract may specifically require the Contractor to carry higher minimum amounts of insurance.

In addition, the Contractor shall require, and shall include in every subcontract, that any subcontractor providing any goods or services related to such Contract obtain, and continue to maintain for the duration of the work, workers' compensation coverage in the amount required by Virginia law.

40. KEY PERSONNEL: For the duration of any Contract, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment, or as expressly approved by the County. The Contractor

shall notify the County within five (5) calendar days after the occurrence of any of these events and provide the information required by the paragraph below.

The Contractor shall provide a detailed explanation of the circumstances necessitating any proposed substitution, complete resumes for the proposed substitute, and any additional information requested by the County. The proposed substitute should have comparable qualifications to those of the person being replaced. The County will notify the Contractor within fifteen (15) calendar days after receipt of all required information of its approval or disapproval of the proposed substitution.

- 41. SEVERABILITY:** If any term, covenant or provision of these General Conditions or any Contract shall be held to be invalid, illegal or unenforceable in any respect, these General Conditions and any Contract shall remain in effect and be construed without regard to such provision.
- 42. TITLES:** The titles and section headings herein and in any Contract are inserted solely for convenience and are not to be construed as a limitation on the scope of the provisions to which they refer.
- 43. ATTORNEYS' FEES:** In the event of a dispute between the County and Contractor under any Contract which cannot be amicably resolved, in addition to all other remedies, the party substantially prevailing in any litigation shall be entitled to recover its reasonable expenses, including, but not limited to, reasonable attorneys' fees.
- 44. NO WAIVER:** Neither any payment for, nor acceptance of, the whole or any part of the services by the County, nor any extension of time, shall operate as a waiver of any provision of any Contract, nor of any power herein reserved to the County, or any right to damages herein provided, nor shall any waiver of any breach of any Contract be held to be a waiver of any other or subsequent breach. Failure of the County to require compliance with any term or condition of any Contract shall not be deemed a waiver of such term or condition or a waiver of the subsequent enforcement thereof.
- 45. NO FINANCE CHARGES:** No finance charges shall be paid by the County.
- 46. ANTITRUST:** By entering into a Contract, the Contractor conveys, sells, assigns, and transfers to the County all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust law of the United States or the State, relating to the particular Goods or Services purchased or acquired by the County under said Contract. Consistent and continued tie bidding could cause rejection of Bids by the County and/or investigation for antitrust violations.
- 47. PAYMENT:** Pursuant to Virginia Code § 2.2-4352, unless more time is provided in the Solicitation or Contract, payment will be made forty-five (45) days after receipt by the County of a proper invoice, or forty-five (45) days after receipt of all Goods or acceptance of work, whichever is later. The County reserves the right to withhold any or all payments or portions thereof for Contractor's failure to perform in accordance with the

provision of the Contract or any modifications thereto. Within twenty (20) days of receipt of proper invoice or of goods or services, the County shall notify the Contractor if any defect or impropriety that would prevent payment by the payment date. The following provisions apply to such payments:

- a. Invoices for items/Services ordered, delivered/performed and accepted shall be submitted by the Contractor in duplicate directly to the payment address shown on the purchase order, Solicitation or Contract, as applicable. All invoices shall show the Contract number, purchase order number, or Solicitation number, as applicable, and as required under Virginia Code § 2.2-4354, either the individual Contractor's social security number or the Contractor's federal employer identification number, whichever is applicable.
- b. Any payment terms requiring payment in less than forty-five (45) days will be regarded as requiring payment forty-five (45) days after receipt of proper invoice or receipt of all Goods or acceptance of work, whichever occurs later. Notwithstanding the foregoing, offers of discounts for payment in less than forty-five (45) days are valid and enforceable.
- c. Pursuant to Virginia Code § 2.2-4353, the date any payment shall be deemed the date of postmark in all cases where payment is made by mail.
- d. The County's fiscal year is July 1 to June 30. Contractors are advised to submit invoices, especially for Goods and/or Services provided in the month of June, for the entire month (i.e. June 1 - June 30), so that expenses are recognized in the appropriate fiscal year.
- e. Any payment made by the Contractor to the County shall only be made in U.S. Dollars. If payment is received in foreign currency the County may, in its sole discretion, reject such payment and require immediate compensation in U.S. Dollars.

48. SUBCONTRACTORS: Pursuant to Virginia Code § 2.2-4354, in the event that any subcontractors are used by Contractor in connection with the work, Contractor shall:

- a. Within seven (7) days after receipt of amounts paid to the Contractor for work performed by a subcontractor, either:
 - i. Pay the subcontractor for the proportionate share of the total payment received attributable to the work performed by the subcontractor under any Contract; or
 - ii. Notify the County and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

- b. Contractor shall require each subcontractor to provide either (i) for an individual, their social security numbers, or (ii) for proprietorships, partnerships, and corporations to provide their federal employer identification numbers.
- c. The Contractor shall pay interest to any subcontractor on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from the County for work performed by the subcontractor under any Contract, except for amounts withheld as allowed in subdivision (a)(II) above. Unless otherwise provided under the terms of any Contract, interest shall accrue at the rate of one percent (1%) per month.
- d. The Contractor shall include in each of its subcontracts under any Contract a provision requiring each subcontractor to include or otherwise be subject to the above payment and interest requirements (a), (b) and (c) with respect to each lower tier subcontractor.
- e. The Contractor's obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this Section 48 shall not be construed to be an obligation of the County. No Contract modification may be made for the purpose of providing reimbursement for such interest charge. No cost reimbursement claim may include any amount for reimbursement for such interest charge.

49. RETAINAGE ON CONSTRUCTION CONTRACTS: Pursuant to Virginia Code 2§ 2.2-4333, if a Contract for construction provides for progress payments in installments based upon an estimated percentage of completion, then the contractor shall be paid at least ninety-five percent (95%) of the earned sum when payment is due, with no more than five percent (5%) being retained to ensure faithful performance of the contract. All amounts withheld may be included in the final payment. Any subcontract related to work on a Contract that provides for similar progress payments shall be subject to the provisions above and the Contractor agrees to include such provisions in every subcontract.

50. SUCCESSORS AND ASSIGNS: The County and the Contractor bind themselves and their respective successors and assigns to any Contract. The foregoing notwithstanding, the Contractor shall not assign, sublet or transfer its interest in any Contract without the prior written consent of the County, which may be granted or withheld in the County's sole discretion. Nothing hereinafter mentioned shall be construed as creating any personal liability on the part of any officer, agent or employee of the County, nor shall it be construed as giving any benefits hereunder to anyone other than the County and the Contractor.

51. DEFAULT: Failure of a Contractor to deliver Goods or Services in accordance with Contract terms and conditions and/or within the time specified, or within reasonable time as interpreted by the County in its sole discretion, or failure to make replacements/corrections of rejected articles/services when so requested, immediately or as directed by the County, or failure of the Contractor to act in accordance with the Contract in any material respect, as reasonably determined by the County, shall constitute

a “default” by the Contractor and shall further authority for the County to purchase in the open market articles/services of comparable grade/quality to replace the services, articles rejected, and/or not delivered. On all such purchases, the Contractor shall reimburse the County, within a reasonable time specified by the County, for any expense incurred in excess of Contract prices including, but not limited to, any purchase and administrative costs. Such purchases shall be deducted from the Contract quantities, if applicable. Should public necessity demand it, the County reserves the right to use or consume articles delivered or services performed which are substandard in quality, subject to an adjustment in price to be determined by the County. In case of any default, the County, after due oral or written notice if required in accordance with the Contract, may terminate the Contract at its option in its sole discretion effective immediately. These remedies shall be in addition to any other remedies which the County may have, including but not limited to, any remedies at law, under the Contract or in equity.

Notwithstanding the foregoing, the Contractor shall not be liable for damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, act of God, act of Government, act of an alien enemy or by any other circumstances which, in the County's opinion, are beyond the control of the Contractor. Under such circumstances, however, the County may, at its sole discretion, terminate or cancel the Contract effective immediately.

52. NON-DISCRIMINATION ASSURANCES: The Contractor shall conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Act of 1975, as amended, where applicable, and § 2.2-4311 of the Virginia Procurement Act:

- a. During the performance of any Contract, the Contractor agrees as follows: the Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. The Contractor, in all Solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer. Notices, advertisements and Solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this Section 52.
- b. The Contractor shall include the provisions of paragraph (a) above in every subcontract or purchase over \$10,000.00 so that the provisions will be binding upon each subcontractor or Vendor.

53. MODIFICATION:

- a. Pursuant to Virginia Code § 2.2-4309, these General Conditions and any Contract entered into by the County and any Contractor shall not be subject to change, modification, or discharge except by written instrument signed by the County and Contractor, but no fixed-price contract may be increased by more than twenty-five percent (25%) of the amount of the contract or \$50,000, whichever is greater, without the advance written approval of the County's Board. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of an offeror from the consequences of an error in its bid or offer.
- b. The County may, but is not obligated to, extend the term of an existing contract for services to allow completion of any work undertaken but not completed during the original term of the contract.
- c. Nothing in this Section 53 shall prevent the County from placing greater restrictions on contract modifications.

54. INDEMNIFICATION: Contractor agrees to indemnify, keep and save harmless the County, its officers, agents, officials, employees and volunteers against any and all claims, claims of injuries, death, damage to property, patent claims, suits, liabilities, judgments, losses, costs and expenses, including but not limited to costs of investigation, all reasonable attorneys' fees (whether or not litigation results), and the cost of any appeal, occurring or arising in connection with the Contractor's, its agents', subcontractors', employees', or volunteers' negligence or wrongful acts or omissions in connection with its performance of any Contract. The Contractor shall, at his or her own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and if any judgment shall be rendered against the County in any such action, the Contractor shall, at his or her own expenses, satisfy and discharge the same. Contractor expressly understands and agrees that any performance bond or insurance protection required by any Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County as herein provided. Nothing contained in this Solicitation or the Contract shall be deemed to be a waiver of the County's sovereign immunity.

55. DRUG-FREE WORKPLACE: Pursuant to Virginia Code § 2.2-4312, in every Contract over \$10,000.00 the following provisions apply: During the performance of any Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a Statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all Solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the

foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this Section, “*drug-free workplace*” means a site for the performance of work done in connection with a specific Contract awarded to a Contractor in accordance with this the VPPA and the County’s Procurement Procedures, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Contract.

56. TERMINATION: Contracts will remain in force for full periods specified and/or until all articles ordered before date of termination shall have been satisfactorily delivered and accepted and thereafter until all requirements and conditions shall have been met, unless:

- a. Terminated prior to expiration date by satisfactory deliveries of entire Contract requirements;
- b. Terminated by the County upon thirty (30) days written notice to the Contractor at the County’s convenience in the County’s sole discretion (“termination for convenience”), unless a termination for convenience is specifically and expressly prohibited by the Contract. Any Contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of the termination;
- c. Terminated by the County for cause, default or negligence on the part of the Contractor. However, pursuant to Section 51 of these General Conditions, the County may hold the Contractor responsible for any resulting additional purchase and administrative costs. There is no advance notice requirement in the event of Termination for Cause and termination is effective immediately upon notice to Contractor of the termination for cause;
- d. Extended upon written authorization of County and accepted by Contractor, to permit ordering of unordered balances or additional quantities at Contract prices and in accordance with Contract terms.

57. APPROPRIATIONS: Notwithstanding any other provision of any Contract, the payment of the County's obligations under any Contract shall be subject to annual appropriations by the Board of Supervisors of the County in each fiscal year of monies sufficient to satisfy the same.

58. REFERENCES TO VIRGINIA LAW: Any reference in these General Conditions to the Code of Virginia or other relevant Federal, State or local law is incorporated in whole herein by reference as in effect at the time of the Solicitation or Contract as such statutory provisions may be amended or replaced by any statute dealing with the same or similar subject matter.

59. COOPERATIVE PROCUREMENT: Except as prohibited by the current Code of Virginia, all resultant Contracts will be extended to other Public Bodies of the Commonwealth of Virginia, to permit their ordering of Goods, supplies and/or Services at the prices and terms of the resulting Contract (“cooperative procurement”). By submitting any Bid or entering into any Contract with the County a Bidder/Contractor expressly authorizes cooperative procurement under Virginia Code § 2.2-4304 to the full extent permitted by law. If any other public body decides to use any Contract, the Contractor must deal directly with that public body concerning all matters relating thereto, including but not limited to, the placement or orders, issuance of the purchase order, contractual disputes, invoicing and payment. The County acts only as the “Contracting Agent” for these public bodies. Any resulting contract with other public bodies shall be governed by the laws of that specific entity. It is the Contractor’s responsibility to notify the public bodies of the availability of the Contract. Fluvanna County shall not be held liable for any direct or indirect costs, damages or other claim of any kind incurred by another public body or any Contractor as a result of any cooperative procurement.

60. AUDIT: The Contractor hereby agrees to retain all books, records and other documents relative to any Contract for five (5) years after final payment, or until audited by the County, whichever is sooner. The County, its authorized agents, and/or County auditors shall have full access to and right to examine any of said materials during said period.

61. GUARANTIES AND WARRANTIES: All guarantees, representations and warranties required shall be furnished by the Contractor and shall be delivered to the Purchasing Agent before final payment on any Contract is made. In addition to any guarantees, representations and warranties required under the Contract, the Contractor agrees to:

- a. Save the County, its agents and employees harmless from liability of any nature or kind for the use of any copyrighted or un-copyrighted composition; secret process, patented or unpatented; invention; article or appliance furnished or used in the performance of a Contract for which the Contractor is not the patentee, assignee, licensee or owner;
- b. Protect the County against latent defective material or workmanship and to repair or replace any damages or marring occasioned in transit or delivery;
- c. Furnish adequate protection against damage to all work and to repair damages of any kind to the building or equipment, to the Contractor’s own work or to the work of other contractors, for which the Contractor’s workers are responsible;
- d. Pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the County; and
- e. Protect the County from loss or damage to County owned property while it is in the custody of the Contractor;

- f. At minimum supply all Goods or Services with the manufacturer's standard warranty, if applicable; and
 - g. For any Contract involving Services of any nature, the Contractor further agrees to:
 - i. Enter upon the performance of Services with all due diligence and dispatch, assiduously press to its complete performance, and exercise therein the highest degree of skill and competence;
 - ii. Allow Services to be inspected or reviewed by an employee of the County at any reasonable time and place selected by the County;
 - iii. Acknowledges that the County shall be under no obligation to compensate Contractor for any Services not rendered in strict conformity with the Contract; and
 - iv. Stipulates that the presence of a County Inspector shall not lessen the obligation of the Contractor for performance in accordance with the Contract requirements, or be deemed a defense on the part of the Contractor for infraction thereof. The Inspector is not authorized to revoke, alter, enlarge, relax, or release any of the requirements of any Contract. Any omission or failure on the part of the Inspector to disapprove or reject any work or material shall not be construed to be an acceptance of any such defective work or material.
- 62. PRICE REDUCTIONS:** If at any time after the date of the Bid/Contract the Contractor makes a general price reduction in the comparable price of any material covered by the Contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to any Contract for the duration of the Contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. For purpose of this provision, a "general price reduction" shall mean any horizontal reduction in the price of an article or service offered (1) to Contractor's customers generally, or (2) in the Contractor's price schedule for the class of customers, i.e., wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this Solicitation. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a "general price reduction" under this provision. The Contractor shall submit his or her invoice at such reduced prices indicating on the invoice that the reduction is pursuant to the "Price Reduction" provision of the Contract documents. The Contractor in addition will within ten (10) days of any general price reduction notify the County of such reduction by letter. FAILURE TO DO SO IS A DEFAULT UNDER THE CONTRACT AND MAY RESULT IN TERMINATION OF THE CONTRACT IN THE COUNTY'S DISCRETION. The Contractor, if requested, shall furnish, within ten (10) days after the end of the Contract period, a statement certifying either (1) that no general price reduction, as defined above, was made after the date of the Bid or Contract, or (2) if any such general price reductions were made, that as provided above, they were reported to the County within ten (10) days and the County was billed at the reduced prices. Where one or more such general price reductions were made, the statement furnished by

the Contractor shall include with respect to each price reduction (1) the date when notice of any such reduction was issued, (2) the effective date of the reduction, and (3) the date when the County was notified of any such reduction.

63. COMPLIANCE WITH IMMIGRATION LAW: Pursuant to Virginia Code § 2.2-4311.1, in every Contract the following provision applies: the Contractor does not, and shall not during the performance of the Contract, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

64. VIRGINIA STATE CORPORATION COMMISSION: Pursuant to Virginia Code § 2.2-4311.2, Any Bidder or Contractor organized as a stock or non-stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia, or as otherwise required by law, at the time of the Bid, Proposal or any response to Solicitation and during the term of the Contract and any Contract renewal. The Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required, to be revoked or cancelled at any time during the term or any renewal of the Contract. If the Contractor fails to remain in compliance with the provisions of this Section 64, the Contract may become void at the option of the County.

65. CLAIMS PROCEDURE:

- a. The procedure for consideration by the County of contractual claims for any Contract shall be that set forth in Virginia Code § 15.2-1243, *et seq.*
- b. In addition, pursuant to Virginia Code § 2.2-4364, contractual claims, whether for money or other relief, shall be submitted in writing to the County Administrator no later than sixty (60) days after final payment; however, written notice of the Contractor's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. Nothing herein shall preclude a Contract from requiring submission of an invoice for final payment within a certain time after completion and acceptance of the work or acceptance of the Goods. Pendency of claims shall not delay payment of amount agreed due in the final payment.
- c. No written decision denying a claim or addressing issues related to the claim shall be considered a denial of the claim unless the written decision is signed by the Board or the County Administrator. The contractor may not institute legal action prior to receipt of the final written decision on the claim unless the County fails to render a decision within ninety (90) days of submission of the claim. Failure of the County to render a decision within ninety (90) days shall not result in the contractor being awarded the relief claimed or in any other relief or penalty. The sole remedy for the County's failure to render a decision within 90 days shall be the contractor's right to institute immediate legal action.

- d. A Contractor may not institute legal action, prior to receipt of the County's decision on the claim, unless the County fails to render such decision within the time specified by law. A failure by the County to render a decision within the time provided by law shall be deemed a final decision denying the claim by the County.
 - e. The decision of the Board or the County Administrator shall be final and conclusive unless the Contractor appeals within six (6) months of the date of the final written decision by instituting legal action as provided in Virginia Code § 2.2-4364.
 - f. No administrative appeals procedure pursuant to Virginia Code § 2.2-4365 has been adopted for contractual claims by the County.
 - g. Nothing herein shall be construed to prevent the County from instituting legal action against any Contractor or Bidder.
- 66. NOTICES:** All written notices required or permitted under any Solicitation, Bid or Contract shall be deemed sufficient if delivered in person to the County Purchasing Agent or Bidder/Contractor, as applicable, or sent by first class mail to the County or Bidder/Contractor at the addresses set forth in the Solicitation, Bid or Contract or at such other address as a party may designate from time to time by notice given in accordance with the terms of this Section 66; except that where a Solicitation, Bid or Contract expressly requires notice to a specific individual or at a specific location, such shall control. Such notices are deemed received when actually delivered to the party or its representative or agent if hand delivered, or one (1) business day after deposited into the United States mail, if mailed.

DELIVERY

- 67. SHIPPING INSTRUCTIONS-CONSIGNMENT:** Unless otherwise specified in the Solicitation or Contract, as applicable, each case, crate, barrel, package, etc., delivered under the Contract must be plainly stenciled or securely tagged, stating the Contractor's name, purchase order number, and delivery address as indicated in the order. Where shipping containers are to be used, each container must be marked with the purchase order number, name of the Contractor, the name of the item, the item number, and the quantity contained therein. Deliveries must be made within the hours of 8:00 a.m. – 3:00 p.m. Deliveries at any other time will not be accepted unless specific arrangements have been previously made with the designated individual at the delivery point. No deliveries will be accepted on Saturdays, Sundays and holidays unless previous arrangements have been made. It shall be the responsibility of the Contractor to insure compliance with these instructions for items that are drop-shipped.
- 68. RESPONSIBILITY FOR SUPPLIES TENDERED:** The Contractor shall be responsible for the materials or supplies covered by the Contract until they are delivered

at the designated point. The Contractor shall additionally bear all risk on rejected materials or supplies after notice of rejection is tendered by the County. Rejected materials or supplies must be removed by and at the expense of the Contractor promptly after notification of rejection, unless public health and safety require immediate destruction or other disposal of rejected delivery. If rejected materials are not removed by the Contractor within ten (10) days after date of notification, the County may return the rejected materials or supplies to the Contractor at the Contractor's risk and expense or dispose of them as abandoned property.

- 69. INSPECTIONS:** The County reserves the right to conduct any test/inspection it may deem advisable to assure supplies and Services conform to the specification in the Solicitation, Bid or Contract, as applicable. Inspection and acceptance of materials or supplies will be made after delivery at destinations herein specified unless otherwise stated. Unless otherwise specified in the Contract, if inspection is made after delivery at the destination specified, the County will bear the expense of inspection except for the value of samples used in case of rejection. Final inspection shall be conclusive except in regard to latent defects, fraud or such gross mistakes as to amount to fraud. Final inspection and acceptance or rejection of the materials or supplies will be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the County for such materials or supplies as are not in accordance with the specifications.
- 70. COMPLIANCE:** Delivery must be made as ordered and in accordance with the Solicitation, Bid or Contract, as applicable, or as directed by the County when not in conflict with the Bid/Contract. The decision as to reasonable compliance with delivery terms shall be final. Burden of proof of delay in receipt of Goods by the purchaser shall rest with the Contractor. Any request for extension of time of delivery from that specified must be approved by the County, such extension applying only to the particular item or shipment affected. Unless otherwise specified in the Contract, should the Contractor be unreasonably delayed by the County, there shall be added to the time of completion a time equal to the period of such delay caused by the County. However, the Contractor shall not be entitled to claim damages or extra compensation for such delay or suspension. These conditions may vary for construction Contracts.
- 71. POINT OF DESTINATION:** All materials shipped to the County must be shipped F.O.B. DESTINATION unless otherwise stated specifically in the Solicitation, Bid or Contract, as applicable. The materials must be delivered to the "Ship To" address indicated on the purchase order or Solicitation, as applicable.
- 72. REPLACEMENT:** Materials or components that have been rejected by the County, in accordance with the terms of the Contract, shall be replaced by the Contractor at no cost to the County.
- 73. DAMAGES:** Any and all damages to property of the "County" that is the direct result of the Contractor, the employees of the Contractor and/or its subcontractors, agents, licensees, successors, or assigns, shall be the sole responsibility of the Contractor. The

property shall be repaired to its last known condition prior to the damages and/or replaced at no cost to the County. The County shall approve any and all repairs/replacements prior to acceptance of the repairs/replacement.

74. PACKING SLIPS OR DELIVERY TICKETS: All shipments shall be accompanied by Packing Slips or Delivery Tickets and shall contain the following information for each item delivered:

- a. Purchase Order Number;
- b. Name of Article and Stock Number;
- c. Quantity Ordered;
- d. Quantity Shipped;
- e. Quantity Back Ordered; and
- f. The Name of the Contractor.

Contractors are cautioned that failure to comply with these conditions shall be considered sufficient reason for refusal to accept the Goods.

75. ADDITIONAL CHARGES: No delivery charges of any kind shall be added to any invoice; except that (i) if Goods are expressly bought F.O.B. "shipping point" under the Contract and the Contractor prepays transportation, then delivery charges shall be added to invoices; and (ii) if express delivery is authorized and substituted by the County on orders for the method specified in the Contract, then the difference between freight or mail and express charges may be added to invoice.

76. METHOD AND CONTAINERS: Unless otherwise specified, Goods shall be delivered in commercial packages in standard commercial containers, so constructed as to ensure acceptance by common or other carrier for safe transportation to the point of delivery. Containers become the property of the County unless otherwise specified by bidder.

VENDOR DATA SHEET

Note: The following information is required as part of your response to this solicitation. Failure to complete and provide this sheet may result in finding your bid nonresponsive.

1. Qualification: The vendor must have the capability and capacity in all respects to satisfy fully all of the contractual requirements.

2. Vendor's Primary Contact:

Name: Kevin Sandridge Phone: 434-953-5153

3. Years in Business: Indicate the length of time you have been in business providing this type of good or service;

11 Years 4 Months

4. Vendor Information:

FIN or FEI Number: 27-3187193 If Company, Corporation, or Partnership

5. Indicate below a listing of at least four (4) current or recent accounts, either commercial or governmental, that your company is servicing, has serviced, or has provided similar goods. Include the length of service and the name, address, and telephone number of the point of contact.

Company: Henrico County Virginia	Contact: Dave Wood
Phone: 804-349-2213	Email: woo36@co.henrico.va.us
Dates of Service: 3-25-2020	\$\$ Value: \$2,799,206.00

Company: Goochland County, VA	Contact: Wanda Tomey
Phone: 804-556-5802	Email: wtomey@goochlandva.us
Dates of Service: 8-12-21	\$\$ Value: \$1,400,577.00

Company: County of Albemarle, VA	Contact: Chip Walker
Phone: 434-825-8432	Email: jwalker2@albemarle.org
Dates of Service: 8-3-21	\$\$ Value: \$886,125.00

Company: Louisa County, VA	Contact: Fire Chief Robert Dube
Phone: 540-967-3491	Email: rdube@louisa.org
Dates of Service: 1-7-21	\$\$ Value:

I certify the accuracy of this information.

Signed: 1-12-22  Title: Vice President Date: _____

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment A)

PROOF OF AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

THIS FORM MUST BE SUBMITTED WITH YOUR PROPOSAL/BID. FAILURE TO INCLUDE
THIS FORM MAY RESULT IN REJECTION OF YOUR PROPOSAL/BID

Pursuant to Virginia Code §2.2-4311.2, an Offeror/Bidder organized or authorized to transact business in The Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its proposal/bid the identification number issued to it by the State Corporation Commission ("SCC"). Any Offeror/Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its proposal/bid a statement describing why the Offeror/Bidder is not required to be so authorized. Any Offeror/Bidder described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the County Administrator, as applicable. If this quote for goods or services is accepted by the County of Fluvanna, Virginia, the undersigned agrees that the requirements of the Code of Virginia Article IV.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applies and providing the requested information. **PLEASE NOTE: The SCC number is NOT your federal ID number or business license number.**

A. ☒ Offeror/Bidder is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is
07262991.

B. ☐ Offeror/Bidder is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is
_____.

C. ☐ Offeror/Bidder does not have an Identification Number issued to it by the SCC and such vendor is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

Please attach additional sheets if you need to explain why such Offeror/Bidder is not required to be authorized to transact business in Virginia.

Legal Name of Company (as listed on W-9) AtlantiE Emergency Solutions

Legal Name of Offeror/Bidder AtlantiE Emergency Solutions

Date 01/13/2022

Authorized Signature

Print or Type Name and Title Tack Jackson, Secretary

PLEASE RETURN THIS PAGE WITH BID SUBMISSION (Attachment B)

CERTIFICATION OF NO COLLUSION

The undersigned, acting on behalf of Atlantic Emergency Solutions, does hereby certify in connection with the procurement and bid to which this Certification of No Collusion is attached that:

This bid is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce; nor is this bid the result of, or affected by, any act of fraud punishable under Article 1.1 of Chapter 12 of Title 18.2 Code of Virginia, 1950 as amended (&&18.2-498.1 et seq.)

[Signature], Secretary
Signature of Company Representative

Atlantic Emergency Solutions
Name of Company

01/13/2022
Date

ACKNOWLEDGEMENT**STATE OF VIRGINIA**

York ~~FLUVANNA~~ COUNTY, to wit:

The foregoing Certification of No Collusion bearing the signature of Jack Jackson and dated January 13, 2022 was subscribed and sworn to before the undersigned notary public by Pamela Merritt Karickhoff on January 13, 2022.

[Signature]
Notary Public

My commission expires: May 31, 2023

**CODE OF VIRGINIA**

& 18.2-498.4. Duty to provide certified statement:

A. The Commonwealth, or any department or agency thereof, and any local government or any department or agency thereof, may require that any person seeking, offering or agreeing to transact business or commerce with it, or seeking, offering or agreeing to receive any portion of the public funds or moneys, submit a certification that the offer or agreement or any claim resulting thereon is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce, or any act of fraud punishable under this article.

B. Any person required to submit a certified statement as provided in paragraph A, above who knowingly makes a false statement shall be guilty of a Class 6 felony. (1980, c.472)

a false statement shall be guilty of a Class 6 felony. (1980, c.472)

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment C)

OFFEROR STATEMENT

Undersigned Bidder hereby certifies that he/she has carefully examined all conditions and specifications of this invitation for Bid and hereby submits this bid pursuant to such instructions and instructions.

Jack Jackson, Secretary

Type or Print Name & Title of Authorized Person

[Signature]

Signature of Authorized Person Submitting This Bid

01/13/2022

Date

SUBSCRIBED AND SWORN to before me by the above named

Jack Jackson on the 13 day of January, 2013 2022

Pamela Merritt Karickhoff

Notary Public in and for the State of Virginia

My commission expires: May 31, 2022



Pamela Merritt Karickhoff
Commonwealth of Virginia
Notary Public
Commission No. 7502133
My Commission Expires 5/31/2022

PLEASE RETURN THIS PAGE WITH BID SUBMISSION- (Attachment D)

KNOW ALL MEN BY THESE PRESENT:

That, _____ the Contractor ("Principal") whose principal place of business is located at _____ and _____ ("Surety") are held and firmly bound unto the County of Fluvanna, Virginia, the Owner ("Obligee") in the amount of Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated the ____ day of _____, 20__ entered into a contract with Obligee for which contract (the "Contract") is by reference expressly made a part hereof;

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly and faithfully perform said Contract in strict conformity with the plans, specifications and conditions of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Provided, that any alterations which may be made in the terms of the Contract, or in the Work to be done under it, or the giving by the Obligee of any extension of the time for the performance of the Contract, or any other alterations, extensions or forbearance on the part of either or both of the Obligee or the Principal to the other shall not in any way release the Principal and the Surety, or either of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety of any such alterations, extension, or forbearance being hereby waived.

No action shall be brought on this bond unless brought within one year after: (a) completion of the Contract and all Work thereunder, including expiration of all warranties and guarantees, or (b) discovery of the defect or breach of warranty or guarantee if the action be for such. The Surety represents to the Principal and to the Obligee that it is legally authorized to do business in the Commonwealth of Virginia. Exclusive venue and jurisdiction for any dispute arising hereunder shall be in the courts of the County of Fluvanna, Virginia.

Signed and sealed this ____ day of _____, 20__ .

Principal

Surety (must be signed by a Virginia Resident Agent of Surety)

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

Address: _____

Approved as to form:

Fluvanna County Attorney

Bond No.: _____

**FLUVANNA COUNTY BOARD OF SUPERVISORS
AGENDA ITEM STAFF REPORT**

TAB D

MEETING DATE:	January 19, 2022				
AGENDA TITLE:	Adoption of the Fluvanna County Board of Supervisors January 12, 2022 Meeting Minutes.				
MOTION(s):	I move the meeting minutes of the Fluvanna County Board of Supervisors Regular Meeting on Wednesday, January 12, 2022, be adopted.				
STRATEGIC INITIATIVE?	Yes	No	If yes, list initiative(s):		
		X			
AGENDA CATEGORY:	Public Hearing	Action Matter	Presentation	Consent Agenda	Other
				XX	
STAFF CONTACT(S):	Caitlin Solis, Clerk to the Board				
PRESENTER(S):	Eric Dahl, County Administrator				
RECOMMENDATION:	Approve				
TIMING:	Routine				
DISCUSSION:	None.				
FISCAL IMPACT:	N/A				
POLICY IMPACT:	N/A				
LEGISLATIVE HISTORY:	None				
ENCLOSURES:	Draft Minutes for January 12, 2022.				
REVIEWS COMPLETED:	Legal	Finance	Purchasing	HR	Other
					X

FLUVANNA COUNTY BOARD OF SUPERVISORS
REGULAR MEETING MINUTES
Carysbrook Performing Arts Center
8880 James Madison Hwy, Fork Union, VA 23055
January 12, 2022
Regular Meeting 5:00pm

MEMBERS PRESENT: John M. (Mike) Sheridan, Columbia District, Chair
Tony O’Brien, Rivanna District, Vice Chair
Mozell Booker, Fork Union District
Patricia Eager, Palmyra District
Christopher Fairchild, Cunningham District

ABSENT: None.

ALSO PRESENT: Eric M. Dahl, County Administrator
Kelly Belanger Harris, Assistant County Administrator
Fred Payne, County Attorney
Caitlin Solis, Clerk for the Board of Supervisors

1 - CALL TO ORDER, PLEDGE OF ALLEGIANCE, & MOMENT OF SILENCE

At 5:03pm Mr. Eric Dahl, County Administrator called to order the 2022 Organizational Meeting. After the recitation of the Pledge of Allegiance, a moment of silence was observed.

2022 Organizational Meeting of the Fluvanna County Board of Supervisors

Election of Chair - This action will elect a Chair to the Board of Supervisors for 2022. Mr. Eric M. Dahl, County Administrator, called for nominations.

- Mrs. Booker nominated Supervisor O’Brien. Motion failed for lack of a second.
- Mr. O’Brien nominated Supervisor Sheridan.

NOMINATION: Supervisor Sheridan

SUPERVISOR	NOMINATE	SECOND	AYE	NAY	ABSTAIN	ABSENT
Mozell H. Booker, Fork Union District				X		
Patricia B. Eager, Palmyra District		X	X			
Christopher Fairchild, Cunningham District			X			
Anthony P. O’Brien, Rivanna District	X		X			
John M. Sheridan, Columbia District					X	
3-1-1 (Sheridan abstained)						

Following the election of Chair, Mr. Dahl turned the gavel, and the meeting, over to Chair Sheridan.

Election of Vice-Chair - This action will elect a new Vice-Chairperson to the Board of Supervisors for 2022. Chair Sheridan opened the floor for nominations for Vice-Chair.

- Mr. Eager nominated Supervisor O’Brien.

NOMINATION: Supervisor O’Brien

SUPERVISOR	NOMINATE	SECOND	AYE	NAY	ABSTAIN	ABSENT
Mozell H. Booker, Fork Union District		X	X			
Patricia B. Eager, Palmyra District	X		X			
Christopher Fairchild, Cunningham District			X			
Anthony P. O’Brien, Rivanna District					X	
John M. Sheridan, Columbia District			X			
4-0-1 (O’Brien abstained)						

Supervisor O’Brien was elected Vice Chair, and the nomination/voting process was complete.

Resolution Entitled “Organizational Meeting of the Fluvanna County Board of Supervisors 2022” - The Code of Virginia requires an annual organizational meeting of the Board of Supervisors for the election of officers and the conduct of such other business as to meeting times and dates.

MOTION:	<p>To adopt the Resolution entitled “<i>Organizational Meeting of the Fluvanna County Board of Supervisors 2022</i>” which designates the location, day, and time of meetings.</p> <ul style="list-style-type: none">• Meeting Place: Circuit Courtroom of the Fluvanna County Courts Building• Meeting Times:
---------	---

	Day Meetings begin at 5:00 p.m. and end at 9:00 p.m., unless extended; Night Meetings begin at 7:00 p.m. and end at 11:00 p.m., unless extended; <ul style="list-style-type: none">When scheduled, Work Sessions begin at 5:00 p.m. prior to the evening meeting.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O'Brien	Mr. Sheridan
ACTION:	Second	Motion			
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

Selection of Dates for the Board Meetings - This action will adopt the Board of Supervisors 2022 Regular Meeting Calendar.

- During the month of July, only one meeting will be held on the first Wednesday starting at 5:00 p.m., breaking for dinner, then reconvening at 7:00 p.m. for public hearings.

MOTION:	Adopt the Board of Supervisors 2022 Regular Meeting Calendar as presented.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O'Brien	Mr. Sheridan
ACTION:	Motion	Second			
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

Adoption of Board By-Laws and Rules of Practice and Procedures - This action will adopt the Fluvanna County Board of Supervisors By-Laws and Rules of Practice and Procedures.

MOTION:	Adopt the Board of Supervisors By-Laws and Rules of Practice and Procedure.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O'Brien	Mr. Sheridan
ACTION:	Second			Motion	Second
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

Appointment of Board of Supervisor Members to Boards, Commissions and Committees – Every two years in even years, the Board determines Board member assignments on various Boards, Commissions and Committees.

MOTION:	Adopt the following Supervisor appointments to various boards and commissions for terms effective January 1, 2022, through December 31, 2023: <ul style="list-style-type: none">Agricultural/Forestral Advisory Committee - FairchildCentral Virginia Regional Jail Authority - FairchildCommunity Policy Management Team (CPMT) – BookerEDTAC - EagerEmergency Services Director (Chair or COAD - § 44-146.19) – (County Administrator) DahlFinance Board (Chair) - (Chair) SheridanFluvanna Partnership for Aging Committee (Discretionary) - BookerFork Union Sanitary District Advisory Committee - BookerParks & Recreation Advisory Board - FairchildPiedmont Workforce Network Council - O'BrienPlanning Commission - EagerRivanna River Basin Commission (RRBC) - Mbr #1 - BookerRivanna River Basin Commission (RRBC) - Mbr #2 - O'BrienSocial Services Board - EagerThomas Jefferson Planning District Commission (TJPDC) - O'BrienVirginia Association of Counties (VACo) Legislative Contact (Chair) – (Chair) Sheridan				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O'Brien	Mr. Sheridan
ACTION:		Second		Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

3 - ADOPTION OF AGENDA

MOTION:	Accept the Agenda, for the January 12, 2022 Regular Meeting of the Board of Supervisors, as amended.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O'Brien	Mr. Sheridan
ACTION:	Second			Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

4 - COUNTY ADMINISTRATOR’S REPORT

Mr. Dahl reported on the following topics:

Announcements and Updates

- A HUGE thank you to all that assisted during Winter Storm Frida!
- Fluvanna Fire, Fluvanna Rescue and Lake Monticello Fire & Rescue
- Sheriff’s Office & E911 Dispatch
- Don Stribling and DSS Staff
- EOC (Debbie, Cyndi and Kelly)
- Public Works Staff & FCPS Maintenance Staff
- VDOT, Dominion & CVEC
- LMOA Police and Maintenance Staff

January is Stalking Awareness Month

- Stalking - when someone repeatedly harasses or threatens someone, causing fear or safety concerns.
- Stalking is a crime in all 50 states
- Stalking behavior can include:
 - Unwanted phone calls, emails, texts, social media messages;
 - Approaching a victim or showing up unwanted at victim’s home, workplace or school;
 - Watching, following or tracking a victim;
 - Doing/leaving things to let the victim know they have been there
- Need help? Know someone who does?
 - Call the Fluvanna Victim/Witness Program at 591-1985 or for more information and resources, visit: www.stalkingawareness.org.

New Employees

- Catherine Zatylny, Deputy Treasurer II, Treasurer’s office, Started January 11th
- James Sisson, Facility and Grounds Maintenance, Facilities Department, Started January 11th

Wheelin’ Sportsman Hunt at the Park

- WHEELIN’ Sportsman Hunt at Pleasant Grove Park; December 31, 2021
 - Five hunters had a great mid 60’s degrees and clear weather day last Friday between 2 - 5:20pm.
 - Four deer were harvested during the event; areas marked with yellow circle on the right.
 - Thanks to Fred Payne, Sheriff Hess and the Sheriff’s Department along with volunteer Emily Beasley Brown whom is a Fluvanna native; as well as Parks & Recreation Staff Dylan Morris and Aaron Spitzer all assisted with the event.

Fluvanna Senior Holiday Luncheon

- The Annual Holiday Celebration was back this year (the previous one was December 2019), held at the County’s Carysbrook Gym on December 15, 2021.
- All four centers were represented: Beaver Dam Baptist Church, Cunningham VFW, Fork Union Community Center, and Kent’s Store ARC.
- Parks and Recreation provided warm individually prepared meals from EW Thomas for 39 Seniors and 14 workers.
- Catherine Garcia brought 7 cadets from FUMA dressed in their suits.
- The Central 4 year old program kids weren’t able to visit, but we had a craft, photos, and a great meal with dessert.
- For the last 6 months, Faith Stuart recorded “volunteer hours” for each time a person went the “extra mile” during a center day to help others. Of the 78 individual people whom attended one of our four centers, 56 of them worked at least one “volunteer hour” totaling 257 hours.
- The top 3 was George Fuller from Cunningham and Troy, Betsy Kingrea from Fork Union, and Elberta Higdon from Cunningham.
- This event says thank you to the Seniors who have made each center truly their own and a way to get them all together for socialization!

Community of Lights at Pleasant Grove Park

- Second Annual event was held December 16 - 19 from 5 - 9pm.
- We had 15 displays for patrons to view. We had five displays last year.

- Santa made an appearance on Saturday night from 6 - 8pm meeting with 65 groups. Thanks to Bob Kenward, owner of Fluvanna Sports Photography, for taking a complementary picture for each child/family that spoke with Santa. Traffic per night
 - Thursday = 123
 - Friday = 175
 - Saturday = 320
 - Sunday = 183
 - TOTAL = 801 vehicles
- BRHD administered 10 COVID shots: adult boosters - 5; ages 5-11 years old - 1 first shot & 4 second shots.
- Thanks to the Sheriff's Department for the use of the road flares!
- P&R hopes to keep growing this event each year!

Next BOS Meetings:

Day	Date	Time	Purpose	Location
Wed	Jan 19	5:00 PM	BOS Budget Work Session – Non-Profit Presentations	Performing Arts Center
Wed	Jan 19	7:00 PM	Regular Meeting	Performing Arts Center
Wed	Feb 2	5:00 PM	Regular Meeting	Performing Arts Center
Wed	Feb 2	7:00 PM	County Administrator’s FY23 Budget Proposal and Revenue/Expenditure Brief	Performing Arts Center

5 - PUBLIC COMMENTS #1

At 6:18pm, Chair Sheridan opened the first round of Public Comments.

- Rudy Garcia, 802 Rivanna Woods Dr., addressed the Board on behalf of the Economic Development Authority in support of the Small Business Development Center’s budget request.
- Delores Christmas, 223 Shepherd Ln., addressed the Board as a business owner in support of the Small Business Development Center.

With no one else wishing to speak, Chair Sheridan closed the first round of Public Comments at 6:24pm.

6 - PUBLIC HEARING

None.

7 - ACTION MATTERS

Tyler Technologies, Inc. Merchant Services Contract – Cyndi Toler, Purchasing Officer

- The County has been working toward credit card acceptance for quite some time. Unfortunately, the routes taken previously did not interface with the county’s financial system and caused a great deal of additional work and processing problems.
- In September of 2021, an RFP was issued with specific requirements that the new process integrates seamlessly with Tyler’s Munis, Energov, and Cashiering. While we received five proposals and interviewed two, the only truly seamless integration, without the need of including a third party, was with Tyler themselves. Tyler has only recently started offering this service so it had not been available to us in the past.
- The County would like to set up terminals at all 4 public stations at the Treasurer’s office as well as one each in the Building Department and the Planning and Zoning Department. These 2 offices do collect funds from citizens and having that option in those locations will make them a one stop shop for citizens doing business with them. There is also the possibility to extend the number of terminals in the future if additional departments discover the need for the service.
- This proposed solution will bill convenience and service fees directly to the cardholder, not to the county.
 - Utility bills per transaction: \$2.95
 - Other county fees per transaction: 2.95% (\$2.50 minimum)
 - ECheck per transaction:\$1.25
- Using credit cards and echecks will also be available to citizens online once Citizen Self Service is implemented. They will be able to see and pay tax bills online as well as apply and pay for billing permits and any other county payments they need to access.
- There is a small cost to the county annually.
 - The first fee is for the cost of renting the terminals. The county did decide on renting rather than purchasing to avoid the costs and hassle of maintenance and replacements for the devices.
 - Also, there is a PCI Service Fee. PCI DSS (Payment Card Industry Data Security Standards Counsel) is an organization created and controlled by the major U.S. card networks and is responsible for overseeing and enacting data security policies regarding the card processing industry. All merchants are required to participate in this to ensure security standards are met.

- For the six terminals, the county will be paying \$2,736 annually (\$456 per device).

MOTION:	Approve a budget transfer of \$1,368 from the FY22 BOS contingency budget to the FY22 Information Technology budget to implement Merchant Card Services.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:	Second	Motion			
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

MOTION:	Approve the 3rd Amendment between Fluvanna County and Tyler Technologies for the addition of Merchant Card Services, and further authorize the County Administrator to execute the agreement subject to approval as to form by the County Attorney.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:		Second		Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

Advertise a Public Hearing for the FY22 American Rescue Plan Act (ARPA) Funds – Eric Dahl, County Administrator

The American Response Plan Act of 2021

- Fluvanna Allocation: \$5,296,878
- Payments to local governments will be made in two tranches - first half 60 days after enactment, second half one year later.
 - The County received the first tranche of funds on June 10, 2021 in the amount of \$2,648,439.00
 - The second amount of \$2,649,439 should be received around June 2022.
- Restrictions on eligible uses:
 - Funds cannot be used to directly or indirectly offset tax reductions or delay a tax/tax increase; funds cannot be deposited into any pension fund.
 - The covered period begins March 3, 2021 and ends on December 31, 2024, with a few important distinctions and exceptions to the covered period:
 - Funds must be INCURRED (i.e. obligated) by December 31, 2024
 - Funds must be EXPENDED with all WORK PERFORMED and COMPLETED by December 31, 2026
- Eligible uses include:
 - to respond to the public health emergency with respect to the Coronavirus Disease 2019 (COVID–19) or its negative economic impacts, including assistance to households, small businesses, and nonprofits, or aid to impacted industries such as tourism, travel, and hospitality;
 - to respond to workers performing essential work during the COVID–19 public health emergency by providing premium pay to eligible workers of the State, territory, or Tribal government that are performing such essential work, or by providing grants to eligible employers that have eligible workers who perform essential work;
 - or the provision of government services to the extent of the reduction in revenue of such State, territory, or Tribal government due to the COVID–19 public health emergency relative to revenues collected in the most recent full fiscal year of the State, territory, or Tribal government prior to the emergency; or
 - to make necessary investments in water, sewer, or broadband infrastructure.

Budget Supplement Requirement

- Per the Code of Virginia 15.2.2507, any additional appropriation(s) which increases the total budget by more than 1% of the total expenditure budget for that fiscal year is required to be advertised for a public hearing at least seven days prior to the Board of Supervisors’ approval of such appropriation; with such advertisements authorized by the County Administrator, unless the County Administrator deems such request for advertisement should require Board of Supervisors approval.

MOTION:	Approve the advertisement of a Public Hearing for the supplemental appropriation of \$2,648,439 of American Rescue Plan Act Funding for FY22.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:	Second	Motion			
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

7A – BOARDS AND COMMISSIONS

None.

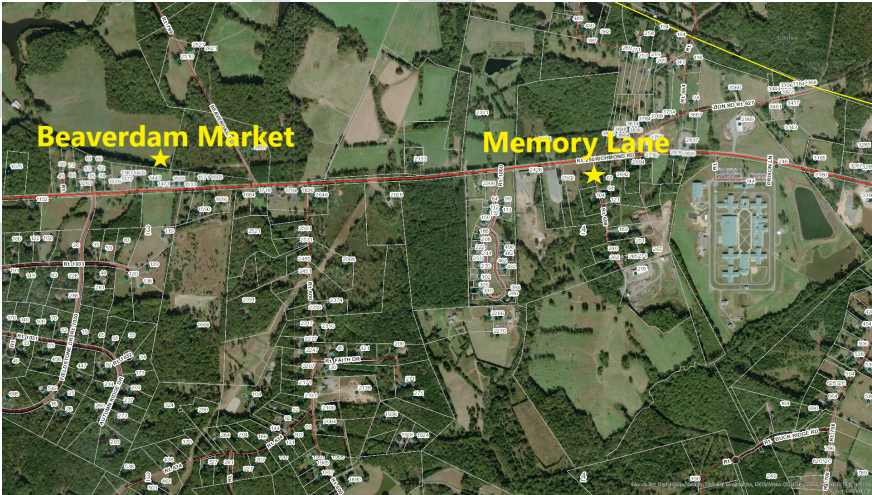
8 - PRESENTATIONS

Zion Crossroads West Waterline Extension Update – Eric Dahl, County Administrator

Overview

- In February 2020, the Virginia Department of Environmental Quality (DEQ) approached the County about extending the Zion Crossroads waterline on U.S. Rt. 250 1.1 miles west of where it currently terminates on Memory Lane, to properties contaminated by an old petroleum release.
- Four petroleum impacted properties currently have water treatment systems until a permanent solution is provided. In addition, two nearby properties are at risk of petroleum contamination. This project extension helps to provide a reliable water source to the affected residents of the County and advances a Phase 2 component earlier with the assistance of DEQ.
- The County has coordinated with DEQ and we have received a formal letter outlining their proposal and available funding. DEQ will fund:
 - Up to \$200,000 for Engineering Services (*Agreement already approved*)
 - Up to \$800,000 for Construction Services and/or excess of remaining Engineering funds
- The overall cost for this Phase 2 Zion Crossroads waterline extension back in June 2020 was estimated at \$1.5M. DEQ would provide a maximum funding for this project of \$1.0M and Fluvanna County Board of Supervisors issued Revenue Bonds for the \$500K remainder of the project.

Project Location



Total Cost Estimates – June 2020 vs. Nov 2021

ZXR West Waterline Extension	June 2020 Est.	Nov. 2021 Est.
Engineering Costs		
Design, Survey, Geo-Tech., Environmental	\$ 130,000	\$ 150,000
Bidding, Construction Admin., Constuction Insp.	\$ 70,000	\$ 100,000
Legal Costs		
RFP/Contracts, Doc Prep (deeds, plats, appraisal review, title)	\$ 75,000	\$ 75,000
Easement Acquisition Estimates		
Acquire easements from property owners for 1.1 mile project	\$ 35,000	\$ 35,000
Estimated Construction Cost	\$ 1,200,000	\$ 2,000,000
ESTIMATED TOTAL	\$ 1,510,000	\$ 2,360,000

ZXR Rte. 250 Waterline Extension to Beaverdam Market
Fluvanna County Department of Public Utilities Final Budgetary Construction Cost Estimate

Description	Quantity	Unit	Unit Cost	Extension
General Items				
Mobilization/Demobilization	1	LS	\$ 50,000	\$ 50,000
Pavement Demo/Repair	3,575	SF	\$ 7	\$ 25,025
Gravel Driveway Demo/Repair	1,540	SF	\$ 5	\$ 7,700
Excavation of Rock Material	25	CY	\$ 200	\$ 5,000
Excavation of Unsatisfactory Soil	50	CY	\$ 50	\$ 2,500
Subtotal =				\$ 90,000
Water Main Items				
Furnish and Install 12-inch PVC Water main	6,580	LF	\$ 185	\$ 1,217,300
Horizontal Bore 12-inch PVC Complete (Includes 24-inch Steel Casing)	53	LF	\$ 1,500	\$ 79,500
Open Cut install 24-inch Steel Casing and 12-inch DI Carrier	94	LF	\$ 400	\$ 37,600
Open Cut install 24-inch Steel Casing and 12-inch PVC Carrier	120	LF	\$ 500	\$ 60,000
Furnish and Install 12-inch Gate Valve & Box	17	EA	\$ 5,000	\$ 85,000
Furnish and Install PRV Vault	1	LS	\$ 166,500	\$ 166,500
Furnish and Install Fire Hydrant Assembly (includes 6-inch Gate Valve)	12	EA	\$ 5,000	\$ 60,000
Furnish and Install Water Quality Monitoring Station	2	EA	\$ 2,500	\$ 5,000
3/4" Water Service, Meter Setter, and Meter Box	6	EA	\$ 2,500	\$ 15,000
Subtotal =				\$ 1,726,000
Summary				
			Total Cost=	\$ 1,816,000
			Contingency (10%) =	\$ 181,600
			Total Construction Cost Estimate =	\$ 1,997,600

- Next Steps
- Final design is complete
 - Current total cost estimates are ~\$850K higher
 - DEQ does NOT currently have additional funding to offset the cost increase
 - They could potentially request more funding for this project around spring/summer 2022
 - If approved, funds would not be available until October 2022 and may not cover all cost increases.
 - Other funding options:
 - Federal Infrastructure Bill funding may become available for localities
 - Fluvanna County American Rescue Plan Act (ARPA) funding may be eligible
- After some discussion, the Board of Supervisors decided to wait to see what funds are eligible through DEQ or other potential sources for the project.

9 - CONSENT AGENDA

The following items were approved under the Consent Agenda for January 12, 2022:

- Minutes of December 15, 2021 – Caitlin Solis, Clerk to the Board
- FY22 FCPS Grants Supplemental Appropriation – Tori Melton, Management Analyst
- FY22 Litter Prevention Grant Supplemental Appropriation – Tori Melton, Management Analyst
- FY22 Voluntary Contributions – Tori Melton, Management Analyst

MOTION:	Approve the consent agenda, for the January 12, 2022 Board of Supervisors meeting.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O'Brien	Mr. Sheridan
ACTION:	Second			Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

10 - UNFINISHED BUSINESS

None.

11 - NEW BUSINESS

Confirmation of Local Emergency Declaration – Debbie Smith, Emergency Management Coordinator

- Beginning Monday, January 3, 2022, Fluvanna County Public Safety and Emergency Management Staff determined that the threat of potential injury from Winter Storm Frida, forecast to impact Central Virginia, was great enough to warrant coordinated local government action to prevent or alleviate any potential damage, loss, hardship, or suffering. A Declaration of Local Emergency grants Fluvanna County access to state and federal resources in order to address any public safety needs that may arise as a result of the anticipated storm and its residual effects.
- Governor Ralph Northam declared a State of Emergency on Wednesday, January 5, 2022, effective January 2 – 31, 2022. The State of Emergency was declared in anticipation of a second winter weather system forecasted to again impact Fluvanna County.
- This action is consistent with the requirements of the Code of Virginia Emergency Services and Disaster Law.

• **Code of Virginia § 44-146.21. Declaration of local emergency.**

(a) A local emergency may be declared by the local director of emergency management with the consent of the governing body of the political subdivision. In the event the governing body cannot convene due to the disaster or other exigent circumstances, the director, or in his absence, the deputy director, or in the absence of both the director and deputy director, any member of the governing body may declare the existence of a local emergency, subject to confirmation by the governing body at its next regularly scheduled meeting or at a special meeting within fourteen days of the declaration, whichever occurs first. The governing body, when in its judgment all emergency actions have been taken, shall take appropriate action to end the declared emergency.

MOTION:	Confirm the decision to declare a local emergency effective January 2 through January 31, 2022 in response to the effects of Winter Storm Frida.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:		Second		Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

12 - PUBLIC COMMENTS #2

At 7:07pm, Chair Sheridan opened the second round of Public Comments. With no one wishing to speak, Chair Sheridan closed the second round of Public Comments at 7:07pm.

13 - CLOSED MEETING

MOTION:	At 7:08pm, move the Fluvanna County Board of Supervisors enter into a closed meeting, pursuant to the provisions of Section 2.2-3711 A.1, A.3, & A.8 of the Code of Virginia, 1950, as amended, for the purpose of discussing: <ul style="list-style-type: none">- Personnel – OSHA Emergency Temporary Standard- Real Estate – Acquisition of Real Estate- Legal Matters – Construction of Zion Crossroads Water and Sewer System				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:	Second			Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

MOTION:	At 7:39pm, move Closed Meeting be adjourned and the Fluvanna County Board of Supervisors convene again in open session and “BE IT RESOLVED, the Board of Supervisors does hereby certify to the best of each member’s knowledge (i) only public business matters lawfully exempted from open meeting requirements under Section 2.2-3711-A of the Code of Virginia, 1950, as amended, and (ii) only such public business matters as were identified in the motion by which the closed meeting was convened were heard, discussed, or considered in the meeting.”				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:	Second			Motion	
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

FY23 NON-PROFIT BUDGET PRESENTATIONS

- Central Virginia Small Business Development Center
- Ready Kids
- Shelter for Help in Emergency
- JABA – Jefferson Area Board of Aging
- Child Health Partnership
- MACAA – Monticello Area Community Action Agency
- OAR – Jefferson Area Community Corrections
- Piedmont Housing Alliance
- PVCC – Piedmont Virginia Community College
- Region Ten
- Rivanna Conservation Alliance
- SARA – Sexual Assault Resource Agency

MOTION TO EXTEND

- *At 9:00pm, a motion was made to extend the Board of Supervisors meeting.*

MOTION:	Approve a motion to extend the January 12, 2022 Regular Board of Supervisors meeting to 9:15pm.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:		Second	Motion		
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

- Mr. Dahl mentioned Strategic Initiatives to the Board of Supervisors to see when they are interested in scheduling a new Leadership Retreat. After a brief discussion, staff proposed bringing possible dates to the Board to schedule a Leadership Retreat before the budget process is through.

14 - ADJOURN

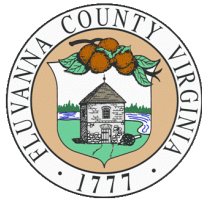
MOTION:	Adjourn the regular meeting of Wednesday, January 12, 2022 at 9:07pm.				
MEMBER:	Mrs. Booker	Mrs. Eager	Mr. Fairchild	Mr. O’Brien	Mr. Sheridan
ACTION:					
VOTE:	Yes	Yes	Yes	Yes	Yes
RESULT:	5-0				

ATTEST:

FLUVANNA COUNTY BOARD OF SUPERVISORS

Caitlin Solis
Clerk to the Board

John M. Sheridan
Chair



BOARD OF SUPERVISORS
County of Fluvanna
Palmyra, Virginia

RESOLUTION No. 01-2022

**A RESOLUTION RECOGNIZING THE
2022 ORGANIZATIONAL MEETING OF THE BOARD OF SUPERVISORS**

At the annual Organizational Meeting of the Fluvanna County Board of Supervisors held in the Carysbrook Performing Arts Center at 5:00 PM on Wednesday, January 5, 2022, the following resolution was adopted by the Board of Supervisors, the vote being as shown below and recorded in the minutes of the meeting.

WHEREAS, the Code of Virginia requires an annual organizational meeting for the Board of Supervisors for the election of officers and the conduct of such other business as to meeting times and dates and,

WHEREAS, the Board of Supervisors does now conduct such an organizational meeting;

NOW, THEREFORE BE IT RESOLVED by the Board of Supervisors that it does hereby designate the Circuit Courtroom in the Fluvanna Courts Building as its meeting place for Regular Meetings to be held on the first Wednesday of each month at 5:00 p.m. and the third Wednesday of each month at 7:00 p.m., except for the month of July when the only meeting shall be on the first Wednesday starting at 5:00 p.m., breaking for dinner, then reconvening at 7:00 p.m. for additional business or public hearings. When scheduled, Work Sessions will be held the third Wednesday of each month at 5:00 p.m. prior to the regular meeting.

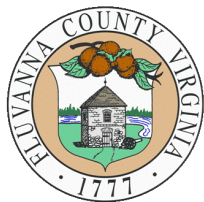
BE IT FURTHER RESOLVED by the Board of Supervisors that it does hereby designate the fourth Wednesday at 7:00 p.m. as the meeting date for any such regular meeting that is postponed due to weather or such other circumstances.

THE FOREGOING RESOLUTION WAS DULY AND REGULARLY ADOPTED by the Fluvanna County Board of Supervisors at the annual Organizational Meeting of the Board held on the 5th day of January, 2022;

	AYE	NAY	ABSTAIN	ABSENT	MOTION	SECOND
Mozell H. Booker, Fork Union District	X					X
Patricia B. Eager, Palmyra District	X				X	
Christopher Fairchild, Cunningham District	X					
Anthony P. O'Brien, Rivanna District	X					
John M. Sheridan, Columbia District	X					

A Copy, teste:

Caitlin Solis
Clerk to the Board of Supervisors
Fluvanna County, Virginia



BOARD OF SUPERVISORS
County of Fluvanna
Palmyra, Virginia

RESOLUTION No. 02 - 2022

RESOLUTION FOR THE DECLARATION OF LOCAL EMERGENCY

WHEREAS, on Saturday, January 1, 2022, the National Weather Service forecasted Winter Storm Frida, a strong winter weather storm moving eastward from the Great Plains and predicted to cause widespread disruption in Central Virginia; and

WHEREAS, County Public Safety and Emergency Management Staff, and the Director of Emergency Management, determined that the threat of potential injury from Winter Storm Frida was great enough to warrant coordinated local government action to prevent or alleviate any potential damage, loss, hardship, or suffering; and

WHEREAS, a State of Emergency throughout the Commonwealth was previously declared by the Governor on January 5, 2022;

NOW, THEREFORE, BE IT RESOLVED that, pursuant to Virginia Code Section 44-146.21, the Director of Emergency Management has declared the existence of a local emergency for Fluvanna County, which such local emergency exists throughout Fluvanna County effective retroactively to Sunday, January, 2, 2022 and expiring on January 31, 2022, and to which declaration the Board of Supervisors hereby consents; and

BE IT FURTHER RESOLVED that during the existence of said local emergency, the Director of Emergency Management and the Emergency Management Coordinator, of Fluvanna County respectively, shall have the powers, functions, and duties prescribed by Virginia Code Section 44-146.21(c1) and by the Fluvanna County Emergency Operations Plan in order to mitigate and recover from the effects of said local emergency.

THE FOREGOING RESOLUTION WAS DULY AND REGULARLY ADOPTED by the Fluvanna County Board of Supervisors at a regular meeting of the Board held on the 12th day of January, 2022:

SUPERVISORS	AYE	NAY	ABSTAIN	ABSENT	MOTION	SECOND
Mozell H. Booker, Fork Union District	X					
Patricia B. Eager, Palmyra District	X					X
Anthony P. O’Brien, Rivanna District	X				X	
John M. Sheridan, Columbia District	X					
Chris Fairchild, Cunningham District	X					

A Copy, teste:

Caitlin Solis
Clerk to the Board of Supervisors
Fluvanna County, Virginia

John M. Sheridan
Chair, Board of Supervisors
Fluvanna County, Virginia

TAB E

MEMORANDUM

Date: January 11, 2022
From: Finance Department
To: Board of Supervisors
Subject: **Accounts Payable Report for December 2021**

1. Staff recommends that the Board of Supervisors ratify the expenditures in the attached report and summarized below.

CATEGORY	AMOUNT
General	\$703,918.14
Capital Improvements	\$48,716.53
Debt Service	\$2025.00
Sewer	\$2,034.84
Fork Union Sanitary District	\$175,402.13
Zion Crossroads Water & Sewer	\$50,113.46
TOTAL AP EXPENDITURES	\$982,210.10
Payroll	\$1,157,141.93
TOTAL	\$2,139,352.03

MOTION

I move the Accounts Payable and Payroll be ratified for December 2021 in the amount of \$2,139,352.03

Encl:
AP Report

	A	B	C	D	F	G	H	J
1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
5	Fund # - 100 GENERAL FUND							
6	GENERAL FUND							
7	ERIC LEE	CUSTOMERS	SIGN DEPOSIT REFUND	112221EL	11/18/2021	12/10/2021	90.00	
8	SUNTRIBE SOLAR	CUSTOMERS	SIGN DEPOSIT REFUND	111821SS	11/18/2021	12/10/2021	90.00	
9						Total:	\$180.00	
10								
11	REAL ESTATE TAXES							
12	BALLARD, APRIL LYNN	R E 2021 - 1ST	RE 2021 18A-1-252	91675	12/13/2021	12/17/2021	42.33	
13	BENCO LLC	R E 2021 - 1ST	EXP#000002	91805	12/16/2021	12/17/2021	165.31	
14	BLACKWELL, HALEY B & RYAN	R E 2021 - 1ST	RE 2021 39-13-40	91705	12/13/2021	12/17/2021	79.51	
15	BRADLEY, TRUDY M	R E 2021 - 1ST	EXP#000004	91807	12/16/2021	12/17/2021	10.12	
16	BULLOCK, DELORES A., ET ALS	R E 2021 - 1ST	RE 2021 3-24-3	91677	12/13/2021	12/17/2021	83.96	
17	BUSCHMANN, THERESA L.	R E 2021 - 1ST	EXP#000005	91808	12/16/2021	12/17/2021	98.00	
18	CAMPBELL, FRANCIS J & LORI LAMONT	R E 2021 - 1ST	RE 2021 18A-8-268	91702	12/13/2021	12/17/2021	741.90	
19	CHRISTINE MARSHALL	R E 2021 - 1ST	EXP#000016	91819	12/16/2021	12/17/2021	93.60	
20	CORELOGIC CENTRALIZED REFUND.	R E 2021 - 1ST	Lockbox Payment Refund	91720	12/13/2021	12/17/2021	449.95	
21	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91730	12/13/2021	12/17/2021	766.00	
22	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91674	12/13/2021	12/17/2021	628.53	
23	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91676	12/13/2021	12/17/2021	550.73	
24	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91680	12/13/2021	12/17/2021	696.28	
25	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91682	12/13/2021	12/17/2021	1,996.27	
26	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91683	12/13/2021	12/17/2021	769.52	
27	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91685	12/13/2021	12/17/2021	1,084.67	
28	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91686	12/13/2021	12/17/2021	773.50	
29	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91687	12/13/2021	12/17/2021	616.15	
30	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91689	12/13/2021	12/17/2021	2,612.22	
31	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91691	12/13/2021	12/17/2021	19.89	
32	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91694	12/13/2021	12/17/2021	945.84	
33	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91696	12/13/2021	12/17/2021	1,158.04	
34	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	RE 2021 29-11-5	91701	12/13/2021	12/17/2021	962.68	
35	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91703	12/13/2021	12/17/2021	1,321.58	
36	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91704	12/13/2021	12/17/2021	822.12	
37	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91706	12/13/2021	12/17/2021	1,251.30	
38	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91709	12/13/2021	12/17/2021	948.98	
39	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91710	12/13/2021	12/17/2021	670.07	
40	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91711	12/13/2021	12/17/2021	25.31	
41	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91714	12/13/2021	12/17/2021	1,061.24	
42	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91715	12/13/2021	12/17/2021	19.89	

	A	B	C	D	F	G	H	J
1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
43	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91716	12/13/2021	12/17/2021	44.20	
44	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91717	12/13/2021	12/17/2021	1,122.24	
45	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91718	12/13/2021	12/17/2021	71.78	
46	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91719	12/13/2021	12/17/2021	97.24	
47	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91726	12/13/2021	12/17/2021	689.08	
48	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91727	12/13/2021	12/17/2021	943.23	
49	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91729	12/13/2021	12/17/2021	975.05	
50	CORELOGIC CENTRALIZED REFUNDS	R E 2021 - 1ST	Lockbox Payment Refund	91731	12/13/2021	12/17/2021	221.00	
51	D'AMICO, ISADORE & CONSTANCE F.	R E 2021 - 1ST	EXP#000007	91810	12/16/2021	12/17/2021	83.71	
52	DIGGES, COLE E V	R E 2021 - 1ST	RE 2021 4-23-8	91684	12/13/2021	12/17/2021	404.60	
53	EKM PROPERTIES LLC	R E 2021 - 1ST	RE 2021 36A-A-30	91708	12/13/2021	12/17/2021	7.42	
54	ELSIE WHEELER	R E 2009 - 1ST	EXP#000001	91804	12/16/2021	12/17/2021	5.69	
55	FOSTER, VIRGINIA H LIVING TRUST	R E 2021 - 1ST	EXP#000009	91812	12/16/2021	12/17/2021	7.00	
56	FRAZIER, PAULA S	R E 2021 - 1ST	EXP#000010	91813	12/16/2021	12/17/2021	100.00	
57	GARNER, LISA A ET AL	R E 2021 - 1ST	RE 2021 19-A-47	91690	12/13/2021	12/17/2021	2.79	
58	GOLDEN, VIRGINIA ELIZABETH	R E 2021 - 1ST	RE 2021 18A-2-179	91692	12/13/2021	12/17/2021	9.45	
59	GRIMES, EMILY W & MATTHEW R	R E 2021 - 1ST	RE 2021 18A-12-132	91693	12/13/2021	12/17/2021	57.59	
60	HARRIS, MEGAN	R E 2021 - 1ST	RE 2021 48-A-4	91695	12/13/2021	12/17/2021	454.82	
61	HOADLEY, NANCY J	R E 2021 - 1ST	RE 2021 18A-5-328	91698	12/13/2021	12/17/2021	2.00	
62	HOUK, AMBER GAYE HAMILTON &	R E 2020 - 1ST	RE 2020 18-5-1B	91612	12/10/2021	12/17/2021	0.92	
63	HOUK, AMBER GAYE HAMILTON &	R E 2020-2ND	RE 2020 18-5-1B	91612	12/10/2021	12/17/2021	0.93	
64	HOUK, AMBER GAYE HAMILTON &	R E 2021 - 1ST	RE 2021 18-5-1B	91614	12/10/2021	12/17/2021	0.89	
65	HOUK, AMBER GAYE HAMILTON &	R E 2021 - 2ND	RE 2021 18-5-1B	91614	12/10/2021	12/17/2021	0.88	
66	HOURLIHAN, MICHAEL E & MELISSA R	R E 2021 - 1ST	RE 2021 18A-12-209	91699	12/13/2021	12/17/2021	743.16	
67	JACKSON, LAVINIA	R E 2021 - 1ST	EXP#000011	91814	12/16/2021	12/17/2021	21.43	
68	JACKSON, SUSAN P & DAVID AND	R E 2021 - 1ST	EXP#000012	91815	12/16/2021	12/17/2021	73.76	
69	JEAN JACKSON	R E 2021 - 1ST	EXP#000021	91824	12/16/2021	12/17/2021	19.74	
70	JONES, JOANNE S	R E 2021 - 1ST	EXP#000013	91816	12/16/2021	12/17/2021	100.00	
71	JONES, RICHARD H & PATRICIA TRUST	R E 2021 - 1ST	EXP#000006	91809	12/16/2021	12/17/2021	251.81	
72	KILMON, KATHRYN JEFFERIES	R E 2021 - 1ST	EXP#000014	91817	12/16/2021	12/17/2021	87.48	
73	KRITZER LIVING TRUST	R E 2021 - 1ST	RE 2021 59-A-118A	91700	12/13/2021	12/17/2021	20.00	
74	LERETA LLC	R E 2021 - 1ST	EXP#000008	91811	12/16/2021	12/17/2021	121.55	
75	LERETA, LLC	R E 2021 - 1ST	Lockbox Payment Refund	91673	12/13/2021	12/17/2021	905.21	
76	LERETA, LLC	R E 2021 - 1ST	Lockbox Payment Refund	91722	12/13/2021	12/17/2021	246.81	
77	LERETA	R E 2021 - 1ST	Lockbox Payment Refund	91679	12/13/2021	12/17/2021	2,905.26	
78	LEWIS, JUDITH SUSAN	R E 2021 - 1ST	EXP#000015	91818	12/16/2021	12/17/2021	880.90	
79	LIBERTY HOMES VA INC	R E 2021 - 1ST	RE 2021 31-A-11	91712	12/13/2021	12/17/2021	18.69	
80	MARSHALL RAMSEY JR.	R E 2021 - 1ST	RE 2021 21-A-31B	91713	12/13/2021	12/17/2021	80.11	

	A	B	C	D	F	G	H	J
1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
81	MARSHALL, SHANNON B & MARK A	R E 2021 - 1ST	RE 2021 32-15-4A	91681	12/13/2021	12/17/2021	21.53	
82	MOMENT, VERGIE J	R E 2021 - 1ST	RE 2021 41-13-C	91707	12/13/2021	12/17/2021	8.88	
83	MR COOPER	R E 2021 - 1ST	RE 2021 18A-2-144	91688	12/13/2021	12/17/2021	1,294.18	
84	MURPHY, KRISTI &	R E 2021 - 1ST	RE 2021 18A-3-163	91678	12/13/2021	12/17/2021	596.25	
85	MURPHY, KRISTI &	R E 2021 - 2ND	RE 2021 18A-3-163	91678	12/13/2021	12/17/2021	83.01	
86	NGOV, ERIN ELIZABETH	R E 2021 - 1ST	RE 2021 48-13-9	91728	12/13/2021	12/17/2021	14.56	
87	PAUL, JASON L	R E 2021 - 1ST	EXP#000017	91820	12/16/2021	12/17/2021	782.34	
88	REUSCHLING, CHAD	R E 2021 - 1ST	EXP#000018	91821	12/16/2021	12/17/2021	63.55	
89	SEVEN ISLAND PARTNERS LLC	R E 2021 - 1ST	EXP#000019	91822	12/16/2021	12/17/2021	4.37	
90	SHIFFLETT, AMOS R & JANET M	R E 2021 - 1ST	EXP#000020	91823	12/16/2021	12/17/2021	18.51	
91	SPART, EMILY JACKSON	R E 2021 - 1ST	RE 2021 18A-6-117	91721	12/13/2021	12/17/2021	1,232.74	
92	STEGE, PATRICK M & JESSICA	R E 2021 - 1ST	RE 2021 29-A-23	91697	12/13/2021	12/17/2021	40.47	
93	SYCAMORE SQUARE LLC	R E 2021 - 1ST	RE 2021 9-A-14C	91615	12/10/2021	12/17/2021	28.73	
94	SYCAMORE SQUARE LLC	R E 2021 - 2ND	RE 2021 9-A-14C	91615	12/10/2021	12/17/2021	28.73	
95	TABB, RANDOLPH P., JR. & PATRICIA	R E 2021 - 1ST	RE 2021 29-13-B	91723	12/13/2021	12/17/2021	7.00	
96	TARNWOOD, CORP	R E 2021 - 1ST	EXP#000022	91825	12/16/2021	12/17/2021	41.47	
97	TAYLOR, AUTHOR	R E 2021 - 1ST	EXP#000003	91806	12/16/2021	12/17/2021	5.00	
98	TAYLOR, JEFFREY A & CYNTHIA L	R E 2021 - 1ST	EXP#000023	91826	12/16/2021	12/17/2021	10.00	
99	THOMPSON, WILLIAM JAMES III	R E 2021 - 1ST	RE 2021 36-A-48	91724	12/13/2021	12/17/2021	127.15	
100	TURNER, REBECCA	R E 2021 - 1ST	EXP#000024	91827	12/16/2021	12/17/2021	122.44	
101	WALKER, ROBERT	R E 2021 - 1ST	RE 2021 17-17-2	91725	12/13/2021	12/17/2021	16.47	
102	WESTFALL, BETTY N	R E 2018 - 1ST	RE 2018 10-A-60A	91610	12/10/2021	12/17/2021	113.62	
103	WESTFALL, BETTY N	R E 2018 - 2ND	RE 2018 10-A-60A	91610	12/10/2021	12/17/2021	113.62	
104	WESTFALL, BETTY N	R E 2019 - 1ST	RE 2019 10-A-60A	91611	12/10/2021	12/17/2021	111.92	
105	WESTFALL, BETTY N	R E 2019 - 2ND	RE 2019 10-A-60A	91611	12/10/2021	12/17/2021	111.93	
106	WESTFALL, BETTY N	R E 2020 - 1ST	RE 2020 10-A-60A	91613	12/10/2021	12/17/2021	111.92	
107	WESTFALL, BETTY N	R E 2020-2ND	RE 2020 10-A-60A	91613	12/10/2021	12/17/2021	111.93	
108	WIGFIELD, CATHERINE V LIVING	R E 2021 - 1ST	EXP#000025	91828	12/16/2021	12/17/2021	36.00	
109						Total:	\$38,502.23	
110								
111	PERSONAL PROPERTY TAXES							
112	BATRES, MARY WINSTEAD	P P 2021 - 1ST	PP 2021 16510	91619	12/10/2021	12/17/2021	71.27	
113	BATRES, MARY WINSTEAD	P P 2021 - 1ST	PP 2021 16510	91619	12/10/2021	12/17/2021	223.24	
114	CONSULATE HEALTH CARE	P P 2021 - 1ST	PP 2021 219329	91741	12/13/2021	12/17/2021	3.00	
115	CONSULATE HEALTH CARE	P P 2021 - 1ST	PP 2021 229632	91743	12/13/2021	12/17/2021	235.69	
116	DIFAZIO JR, COSMO AMERICO	P P 2020 - 1ST	PP 2020 201676	91616	12/10/2021	12/17/2021	96.89	
117	DIFAZIO JR, COSMO AMERICO	P P 2020 - 2ND	PP 2020 201676	91616	12/10/2021	12/17/2021	96.88	
118	DONOVAN, THEODORE CHARLES	P P 2021 - 1ST	PP 2021 17727	91620	12/10/2021	12/17/2021	83.50	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
119	DONOVAN, THEODORE CHARLES	P P 2021 - 1ST	PP 2021 17727	91620	12/10/2021	12/17/2021	366.49	
120	DONOVAN, THEODORE CHARLES	P P 2021 - 2ND	PP 2021 17727	91620	12/10/2021	12/17/2021	51.71	
121	DYLAN'S WORKSHOP	P P 2021 - 1ST	PP 2021 24246	91740	12/13/2021	12/17/2021	2.22	
122	FARMER, WILLIAM	P P 2021 - 1ST	EXP#000033	91836	12/16/2021	12/17/2021	1.00	
123	LESUEUR, ANDREW DOUGLAS	P P 2021 - 1ST	PP 2021 1597	91749	12/13/2021	12/17/2021	5.95	
124	LLOYD JR, ROBERT	P P 2021 - 1ST	PP 2021 28906	91622	12/10/2021	12/17/2021	41.58	
125	MARKS JR, EARL LEROY	P P 2020 - 1ST	PP 2020 7168	91617	12/10/2021	12/17/2021	138.01	
126	MARKS JR, EARL LEROY	P P 2020 - 2ND	PP 2020 7168	91617	12/10/2021	12/17/2021	138.00	
127	MARKS JR, EARL LEROY	P P 2021 - 1ST	PP 2021 7168	91623	12/10/2021	12/17/2021	35.29	
128	PAYNE, STUART ALLEN	P P 2021 - 1ST	PP 2021 14239	91755	12/13/2021	12/17/2021	56.57	
129	TAWNEY, MARIAH ANTONINA	P P 2021 - 1ST	PP 2021 21639	91762	12/13/2021	12/17/2021	5.93	
130	TOMLIN, DYLAN FRANCES	P P 2021 - 1ST	PP 2021 21807	91624	12/10/2021	12/17/2021	123.68	
131	TOYOTA LEASE TRUST	P P 2021 - 1ST	PP 2021 228960	91625	12/10/2021	12/17/2021	155.51	
132	TOYOTA LEASE TRUST	P P 2021 - 2ND	PP 2021 228960	91625	12/10/2021	12/17/2021	155.52	
133	VARGAS, ESQUIVEL AGUSTIN	P P 2020 - 1ST	PP 2020 2788	91618	12/10/2021	12/17/2021	33.72	
134						Total:	\$2,121.65	
135								
136	MOBILE HOME TAXES							
137	DENBY, KAREN	M H 2021 - 1ST	EXP#000032	91835	12/16/2021	12/17/2021	1.28	
138						Total:	\$1.28	
139								
140	OTHER LOCAL TAXES							
141	AGEE, BROOKE DOLAN	ADMIN FEE VEHICLE LICENSE	PP 2021 16231	91732	12/13/2021	12/17/2021	3.30	
142	ANDERSON, LORENZO JUAN	ADMIN FEE VEHICLE LICENSE	EXP#000026	91829	12/16/2021	12/17/2021	65.42	
143	BAEZ, JESSICA MARIE	ADMIN FEE VEHICLE LICENSE	PP 2021 27807	91733	12/13/2021	12/17/2021	3.30	
144	BALLARD, APRIL LYNN	ADMIN FEE VEHICLE LICENSE	PP 2021 198432	91734	12/13/2021	12/17/2021	8.56	
145	BARBOUR, JEREMY LAMAR	ADMIN FEE VEHICLE LICENSE	PP 2021 217193	91735	12/13/2021	12/17/2021	2.25	
146	BARISONZI, DENISE MARIE	ADMIN FEE VEHICLE LICENSE	EXP#000027	91830	12/16/2021	12/17/2021	20.00	
147	BATRES, MARY WINSTEAD	ADMIN FEE VEHICLE LICENSE	PP 2021 16510	91619	12/10/2021	12/17/2021	33.00	
148	BAXTER, ALISHA MARIE	ADMIN FEE VEHICLE LICENSE	PP 2021 8976	91736	12/13/2021	12/17/2021	23.70	
149	BELEW, MARK CLIFFORD	ADMIN FEE VEHICLE LICENSE	EXP#000028	91831	12/16/2021	12/17/2021	33.00	
150	BOYD, JANA LEE	ADMIN FEE VEHICLE LICENSE	PP 2021 16743	91737	12/13/2021	12/17/2021	54.20	
151	CAMPBELL, DAVID MATTHEW	ADMIN FEE TRAILER LICENSE	PP 2021 214684	91738	12/13/2021	12/17/2021	9.10	
152	CAMPBELL, WILLIAM HARVEY	ADMIN FEE VEHICLE LICENSE	EXP#000029	91832	12/16/2021	12/17/2021	43.56	
153	CHADS BACKHOE SERVICE	ADMIN FEE VEHICLE LICENSE	EXP#000030	91833	12/16/2021	12/17/2021	104.57	
154	CHILDS, CAROLINE YOON KYUNG	ADMIN FEE VEHICLE LICENSE	EXP#000031	91834	12/16/2021	12/17/2021	25.00	
155	CHRISTMAS, ASHLEY HOLLAND	ADMIN FEE VEHICLE LICENSE	PP 2021 18865	91745	12/13/2021	12/17/2021	33.63	
156	DOMINGUEZ VILLEGAS, ERNESTO	ADMIN FEE VEHICLE LICENSE	PP 2021 17718	91739	12/13/2021	12/17/2021	45.00	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
157	DONOVAN, THEODORE CHARLES	ADMIN FEE VEHICLE LICENSE	PP 2021 17727	91620	12/10/2021	12/17/2021	33.00	
158	FERGUSON, MARK	ADMIN FEE VEHICLE LICENSE	PP 2021 17972	91742	12/13/2021	12/17/2021	33.01	
159	FEURY, JARED RANDALL	ADMIN FEE TRAILER LICENSE	EXP#000034	91837	12/16/2021	12/17/2021	7.95	
160	GABLE, JOHN JAMES	ADMIN FEE VEHICLE LICENSE	PP 2021 202813	91744	12/13/2021	12/17/2021	33.00	
161	GARDNER, CHELSEA MARIE	ADMIN FEE VEHICLE LICENSE	EXP#000035	91838	12/16/2021	12/17/2021	202.63	
162	GARRISON, CASSIDY BROOKE	ADMIN FEE VEHICLE LICENSE	EXP#000036	91839	12/16/2021	12/17/2021	75.46	
163	GAULT JR, JOSEPH NELSON	ADMIN FEE VEHICLE LICENSE	EXP#000037	91840	12/16/2021	12/17/2021	18.95	
164	HAISLIP, PAMELA DUNN	ADMIN FEE VEHICLE LICENSE	EXP#000038	91841	12/16/2021	12/17/2021	18.02	
165	HAMEL, JOHN P	ADMIN FEE VEHICLE LICENSE	EXP#000039	91842	12/16/2021	12/17/2021	1.70	
166	HUGHES, WALTER THOMAS	ADMIN FEE VEHICLE LICENSE	PP 2021 222955	91621	12/10/2021	12/17/2021	29.96	
167	HUGHES, WALTER THOMAS	ADMIN FEE VEHICLE LICENSE	PP 2021 222955	91621	12/10/2021	12/17/2021	33.00	
168	JACKSON, RICHARD COLEMAN	ADMIN FEE VEHICLE LICENSE	PP 2021 204988	91746	12/13/2021	12/17/2021	238.59	
169	JOHNSON WOODIE, MAHALIA	ADMIN FEE VEHICLE LICENSE	PP 2021 206321	91747	12/13/2021	12/17/2021	33.00	
170	JOHNSTON, KENNETH BRUCE	ADMIN FEE VEHICLE LICENSE	EXP#000040	91843	12/16/2021	12/17/2021	17.25	
171	JONES, ERIC WAYNE	ADMIN FEE VEHICLE LICENSE	PP 2021 205339	91748	12/13/2021	12/17/2021	29.64	
172	LLOYD JR, ROBERT	ADMIN FEE VEHICLE LICENSE	PP 2021 28906	91622	12/10/2021	12/17/2021	33.00	
173	LOHR-RIVERA, AMBER	ADMIN FEE VEHICLE LICENSE	PP 2021 28911	91750	12/13/2021	12/17/2021	28.53	
174	LUCADO, JERRY RANDOLPH	ADMIN FEE VEHICLE LICENSE	EXP#000041	91844	12/16/2021	12/17/2021	2.00	
175	MATTHEWS, ALYSSA BRIANNE	ADMIN FEE VEHICLE LICENSE	PP 2021 17004	91751	12/13/2021	12/17/2021	45.00	
176	MCGRAW-SCHENCK, TAMELA JENE	ADMIN FEE VEHICLE LICENSE	PP 2021 23919	91752	12/13/2021	12/17/2021	60.22	
177	MENARD, JUDITH ANN	ADMIN FEE VEHICLE LICENSE	EXP#000042	91845	12/16/2021	12/17/2021	20.00	
178	MINGLEDORFF, GARNETT ANN	ADMIN FEE VEHICLE LICENSE	EXP#000043	91846	12/16/2021	12/17/2021	45.00	
179	MORGAN, DAVID LYNN	ADMIN FEE VEHICLE LICENSE	EXP#000044	91847	12/16/2021	12/17/2021	325.90	
180	MULLINS, MYRNA MARCELLA	ADMIN FEE VEHICLE LICENSE	PP 2021 7362	91753	12/13/2021	12/17/2021	24.68	
181	MYER, TIMOTHY DANIEL	ADMIN FEE VEHICLE LICENSE	EXP#000045	91848	12/16/2021	12/17/2021	2.00	
182	OLIVE, CHESTER RALPH	ADMIN FEE VEHICLE LICENSE	EXP#000046	91849	12/16/2021	12/17/2021	8.00	
183	PALMER, NATALIE REGINA	ADMIN FEE VEHICLE LICENSE	PP 2021 7457	91754	12/13/2021	12/17/2021	5.76	
184	PARK, TIFFANY LEE	ADMIN FEE VEHICLE LICENSE	EXP#000047	91850	12/16/2021	12/17/2021	4.26	
185	PECK, SHANNON ANDREW	ADMIN FEE VEHICLE LICENSE	EXP#000048	91851	12/16/2021	12/17/2021	160.11	
186	PIPPIN, MILDRED B	ADMIN FEE VEHICLE LICENSE	PP 2021 209102	91756	12/13/2021	12/17/2021	33.00	
187	RASNAKE, JARROD LYNN	ADMIN FEE VEHICLE LICENSE	PP 2021 14345	91757	12/13/2021	12/17/2021	88.00	
188	RENSCH II, THOMAS EDWARD	ADMIN FEE VEHICLE LICENSE	EXP#000049	91852	12/16/2021	12/17/2021	3.51	
189	REUSCHLING, CHAD FOX	ADMIN FEE TRAILER LICENSE	EXP#000050	91853	12/16/2021	12/17/2021	49.98	
190	REUSCHLING, TABATHA ALDRIDGE	ADMIN FEE VEHICLE LICENSE	EXP#000051	91854	12/16/2021	12/17/2021	57.52	
191	ROCHE, CATHLEEN LOUISE	ADMIN FEE VEHICLE LICENSE	EXP#000052	91855	12/16/2021	12/17/2021	5.18	
192	ROYSTON, CLYDE EDWARD	ADMIN FEE VEHICLE LICENSE	EXP#000053	91856	12/16/2021	12/17/2021	1.44	
193	SAUNDERS, RALPH MITCHELL	ADMIN FEE VEHICLE LICENSE	EXP#000054	91857	12/16/2021	12/17/2021	10.00	
194	SHIFFLETT, VERNON LINWOOD	ADMIN FEE VEHICLE LICENSE	PP 2021 4966	91758	12/13/2021	12/17/2021	165.16	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
195	SIEGEL, LYNDA ANNE	ADMIN FEE VEHICLE LICENSE	PP 2021 21287	91759	12/13/2021	12/17/2021	26.20	
196	SMITH, DAVID J	ADMIN FEE VEHICLE LICENSE	PP 2021 14590	91760	12/13/2021	12/17/2021	3.00	
197	SNEAD, BRENNAN EDWARD	ADMIN FEE VEHICLE LICENSE	EXP#000055	91858	12/16/2021	12/17/2021	2.17	
198	STRIBLING 2ND, DONALD F	ADMIN FEE VEHICLE LICENSE	EXP#000056	91859	12/16/2021	12/17/2021	6.70	
199	SWAIN, ANTHONY HAROLD	ADMIN FEE VEHICLE LICENSE	PP 2021 211571	91761	12/13/2021	12/17/2021	104.11	
200	TERRELL II, MARK ROSCOE	ADMIN FEE VEHICLE LICENSE	EXP#000057	91860	12/16/2021	12/17/2021	2.08	
201	TOMASINO, ANTHONY JOSEPH	ADMIN FEE VEHICLE LICENSE	PP 2021 212108	91763	12/13/2021	12/17/2021	65.99	
202	VARGAS, ESQUIVEL AGUSTIN	ADMIN FEE TRAILER LICENSE	PP 2020 2788	91618	12/10/2021	12/17/2021	18.00	
203	VIA, ALLEN JOSEPH	ADMIN FEE VEHICLE LICENSE	EXP#000058	91861	12/16/2021	12/17/2021	2.00	
204	WALKER, MARY CATHERINE	ADMIN FEE VEHICLE LICENSE	PP 2021 212587	91764	12/13/2021	12/17/2021	33.01	
205	WHITE, CHARLES HENRY	ADMIN FEE VEHICLE LICENSE	EXP#000059	91862	12/16/2021	12/17/2021	126.81	
206	WITKOWSKI, SLAWOMIR MAREK	ADMIN FEE VEHICLE LICENSE	EXP#000060	91863	12/16/2021	12/17/2021	33.01	
207	WOODZELL, CASEY LEE	ADMIN FEE VEHICLE LICENSE	EXP#000061	91864	12/16/2021	12/17/2021	0.02	
208	WYANT, AUSTIN KEBLINGER	ADMIN FEE VEHICLE LICENSE	EXP#000062	91865	12/16/2021	12/17/2021	20.00	
209	ZIEMER, JAYNE LYNN	ADMIN FEE VEHICLE LICENSE	PP 2021 22448	91765	12/13/2021	12/17/2021	33.01	
210						Total:	\$2,967.11	
211								
212	BOARD OF SUPERVISORS							
213	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	COUNTY ADMIN	139P-W1QX-	9/1/2021	12/3/2021	139.98	
214	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	COUNTY ADMIN	1NKD-W7X7-	9/1/2021	12/3/2021	546.52	
215	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	COUNTY ADMIN	1W3D-VJQV-	8/31/2021	12/3/2021	683.15	
216	AMAZON CAPITAL SERVICES	OTHER OPERATING	COUNTY ADMIN	19PP-6T33-	11/30/2021	12/3/2021	108.95	
217	BANK OF AMERICA	OFFICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	57.86	
218	BANK OF AMERICA	OTHER OPERATING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	7.38	
219	BANK OF AMERICA	OTHER OPERATING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	43.38	
220	BANK OF AMERICA	OTHER OPERATING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	89.44	
221	BANK OF AMERICA	OTHER OPERATING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	91.11	
222	BANK OF AMERICA	OTHER OPERATING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	101.24	
223	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	19.99	
224	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	24.19	
225	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	58.50	
226	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	89.44	
227	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	191.00	
228	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	(\$199.89)	
229	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	(\$199.89)	
230	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	199.89	
231	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	242.29	
232	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	599.67	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
233	FLUVANNA REVIEW	ADVERTISING	FLU CO BOARD OF SUPERVISORS	2021F45-9	11/11/2021	12/3/2021	287.50	
234	FLUVANNA REVIEW	ADVERTISING	FLU CO BOARD OF SUPERVISORS	2021F46-15	11/18/2021	12/3/2021	1,560.00	
235	FLUVANNA REVIEW	ADVERTISING	BOARD OF SUPERVISORS	2021F50-11	12/9/2021	12/30/2021	149.50	
236	FLUVANNA REVIEW	ADVERTISING	BOARD OF SUPERVISORS	2021F47-15	11/25/2021	12/30/2021	1,560.00	
237	THE DAILY PROGRESS	ADVERTISING	BOARD OF SUPERVISORS	0001286163	12/13/2021	12/30/2021	704.20	
238	THE DAILY PROGRESS	ADVERTISING	BOARD OF SUPERVISORS	0001285601	12/9/2021	12/30/2021	849.40	
239	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	120.85	
240	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	120.85	
241						Total:	\$8,246.50	
242								
243	COUNTY ADMINISTRATOR							
244	ATLANTIC TECHNOLOGY	PROFESSIONAL SERVICES	PALMYRA VFD-AT&T CO-LOCATION LEASE	1835	11/30/2021	12/3/2021	712.50	
245	BANK OF AMERICA	CONVENTION AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	10.00	
246	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	42.40	
247	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	199.89	
248	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	228.88	
249	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	301.41	
250	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	228.88	
251	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	228.88	
252	ERIC DAHL	MILEAGE ALLOWANCES	2021 VACo CONFERENCE	122121ED	12/21/2021	12/30/2021	173.60	
253	ERIC DAHL	SUBSISTENCE & LODGING	2021 VACo CONFERENCE	122121ED	12/21/2021	12/30/2021	97.00	
254	FLUVANNA COUNTY CHAMBER OF	DUES OR ASSOCIATION	MEMBERSHIP - CHAMBER OF COMMERCE	2065	9/3/2021	12/3/2021	400.00	
255	PITNEY BOWES PURCHASE PWR	LEASE/RENT	ADMIN POSTAGE	3314711969	11/29/2021	12/3/2021	589.17	
256	VA INFORMATION TECHNOLOGIES	TELECOMMUNICATIONS	VA INFORMATION ECHNOLOGY AGENCY -	T445099	12/1/2021	12/10/2021	49.62	
257	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	40.42	
258	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	40.42	
259						Total:	\$3,343.07	
260								
261	COUNTY ATTORNEY							
262	PAYNE & HODOUS, LLC.	COUNTY ATTY LEGAL-	GENERAL , PROCURMENT, SPECIAL, REAL	150920	12/1/2021	12/30/2021	10,000.00	
263	PAYNE & HODOUS, LLC.	COUNTY ATTY LEGAL-	GENERAL , PROCURMENT, SPECIAL, REAL	150920	12/1/2021	12/30/2021	3,214.50	
264	PAYNE & HODOUS, LLC.	COUNTY ATTY LEGAL-	GENERAL , PROCURMENT, SPECIAL, REAL	150920	12/1/2021	12/30/2021	11,201.68	
265						Total:	\$24,416.18	
266								
267	COMMISSIONER OF THE REVENUE							
268	J.D. POWER	PRINTING AND BINDING	COR - BOOK POWER SPORTS 2022	ORDUS115538	1/1/2022	12/30/2021	52.65	
269	J.D. POWER	PRINTING AND BINDING	COR - BOOK OLDER USED CAR 2022	ORDUS111593	1/1/2022	12/30/2021	210.60	
270	J.D. POWER	PRINTING AND BINDING	COR - USED CAR GUIDE-SO-EASTERN 2022	ORDUS119236	1/1/2022	12/30/2021	280.00	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
271	PITNEY BOWES	LEASE/RENT	COMMISSIONER OF REVENUE - LEASING	3314711342	11/25/2021	12/30/2021	463.42	
272	STONEWALL TECHNOLOGIES	PROFESSIONAL SERVICES	CONSULTING - VAMANET PUBLIC SITE	9770	11/30/2021	12/30/2021	300.00	
273	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	40.42	
274	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	40.42	
275						Total:	\$1,387.51	
276								
277	TREASURER							
278	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	TREASURER	16C7-RFMM-	11/19/2021	12/3/2021	87.63	
279	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	130.86	
280	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	130.86	
281	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	130.86	
282	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	130.86	
283	FLUVANNA REVIEW	ADVERTISING	TREASURER - LEGAL 2ND HALF TAXES	2021F47-17	11/25/2021	12/30/2021	125.00	
284	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	103.90	
285	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	40.42	
286						Total:	\$880.39	
287								
288	INFORMATION TECHNOLOGY							
289	AMAZON CAPITAL SERVICES	ADP SUPPLIES	IT DEPARTMENT	1HJ9-T1YW-	10/5/2021	12/3/2021	34.88	
290	AMAZON CAPITAL SERVICES	ADP SUPPLIES	IT DEPARTMENT	1YXN-7G3R-	10/25/2021	12/3/2021	83.92	
291	AMAZON CAPITAL SERVICES	ADP SUPPLIES	IT DEPARTMENT	17PC-F6QX-	11/19/2021	12/3/2021	189.99	
292	AMAZON CAPITAL SERVICES	ADP SUPPLIES	IT DEPT	1RPF-7FHQ-	12/1/2021	12/10/2021	21.98	
293	BANK OF AMERICA	ADP SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	19.00	
294	BANK OF AMERICA	ADP SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	45.00	
295	BANK OF AMERICA	ADP SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	52.99	
296	BANK OF AMERICA	ADP SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	152.81	
297	BANK OF AMERICA	ADP SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	239.88	
298	BANK OF AMERICA	ADP SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	456.00	
299	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	19.00	
300	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	19.17	
301	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	45.00	
302	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	52.99	
303	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	95.85	
304	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	158.72	
305	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	456.00	
306	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	846.00	
307	BANK OF AMERICA	ADP SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	1,512.30	
308	BANK OF AMERICA	ADP SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	699.90	

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309	BANK OF AMERICA	ADP SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	199.00	
310	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	58.95	
311	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	58.95	
312	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	58.95	
313	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	58.95	
314	CDW GOVERNMENT, INC.	ADP SERVICES	QUANTUM SUPERLOADER	P972691	12/20/2021	12/30/2021	861.30	
315	DELL MARKETING, L.P.	EDP EQUIPMENT	IT2021110901	10537136537	11/24/2021	12/3/2021	2,111.85	
316	DELL MARKETING, L.P.	EDP EQUIPMENT	IT DEPT - DELL THUNDERBOLT DOCK	10537976210	11/26/2021	12/10/2021	1,139.56	
317	FIREFLY	TELECOMMUNICATIONS	MONTHLY BILL	11068-NOV21	12/1/2021	12/3/2021	1,447.74	
318	VA INFORMATION TECHNOLOGIES	TELECOMMUNICATIONS	VA INFORMATION ECHNOLOGY AGENCY -	T445099	12/1/2021	12/10/2021	3,096.30	
319	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	128.04	
320	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	128.04	
321						Total:	\$14,549.01	
322								
323	FINANCE							
324	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	176.24	
325	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	176.24	
326	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	176.24	
327	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	176.24	
328	FORMAX	CONTRACT SERVICES	12 MONTH SERVICE - ADMIN	183758	12/1/2021	12/30/2021	832.00	
329	IMAGETREND, INC	CONTRACT SERVICES	FIRE/RESCUE OCT 2021	131823	10/31/2021	12/3/2021	2,850.18	
330	IMAGETREND, INC	CONTRACT SERVICES	NOV 21 - BILLING BRIDGE PROFESSIONAL	132347	11/30/2021	12/17/2021	2,205.60	
331	INTERNAL REVENUE SERVICE	PROFESSIONAL SERVICES	CARES DEFERRED SOCIALSECURITY TAX	LTR3064C	12/16/2021	12/17/2021	695.90	
332	UPS	POSTAL SERVICES	PARKS & REC / ADMIN	0000Y7646Y471	11/20/2021	12/3/2021	9.20	
333	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	40.42	
334	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	40.42	
335						Total:	\$7,378.68	
336								
337	REGISTRAR/ELECTORAL BOARD							
338	ANTIOCH BAPTIST CHURCH	CONTRACT SERVICES	2021 ANNUAL FOR CUNNINGHAM PRECINCT	11152021ABC	11/15/2021	12/3/2021	100.00	
339	AUTOMATED OFFICE SYSTEMS	LEASE/RENT	VOTER REGISTRAR MONTHLY BILL 9/30/21 -	097926	11/28/2021	12/3/2021	155.00	
340	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	(\$11.41)	
341	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	22.53	
342	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	156.90	
343	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	226.70	
344	BANK OF AMERICA	OFFICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	157.88	
345	BANK OF AMERICA	OFFICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	227.38	
346	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	1.65	

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347	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	4.70	
348	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	7.52	
349	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	7.99	
350	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	8.46	
351	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	9.40	
352	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	10.34	
353	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	10.81	
354	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	11.28	
355	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	12.22	
356	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	13.63	
357	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	14.57	
358	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	17.86	
359	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	20.21	
360	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	20.68	
361	BANK OF AMERICA	POSTAL SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	31.05	
362	BANK OF AMERICA	POSTAL SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	2.16	
363	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	451.44	
364	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	9.72	
365	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	28.02	
366	CATHERINE E. HOBBS	CONVENTION AND	REIMBURSEMENT FOR TRAINING FOOD	120621CH	12/6/2021	12/10/2021	158.95	
367	FLUVANNA COUNTY SHERIFF'S OFFICE	CONTRACT SERVICES	11/02/21 REGISTRAR OFFICE	FCR027	11/8/2021	12/3/2021	900.00	
368	PATSY JACKSON	CONTRACT SERVICES	ELECTION OFFICIAL - OFFICER OF	120322pj	11/2/2021	12/3/2021	165.00	
369	ANN BROWN	CONTRACT SERVICES	ELECTION - ADMIN ASSISTANT - PRECINCT	PW301-ANN B.	11/22/2021	12/10/2021	279.00	
370	ANN ZIPSER	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-ANN Z.	11/22/2021	12/10/2021	102.50	
371	ART OKUN	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW501-ART O.	11/22/2021	12/10/2021	165.00	
372	AUDREY FISHER	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW301-	11/22/2021	12/10/2021	165.00	
373	BECKY MARTIN	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW501-BECKY	11/22/2021	12/10/2021	112.50	
374	BEN HUDSON	CONTRACT SERVICES	ELECTIONS - CHIEF - PRECINCT 101	PW101-BEN H.	11/22/2021	12/10/2021	233.00	
375	BERTHA THOMAS	CONTRACT SERVICES	ELECTION - CHIEF - PRECINCT 301	PW301-	11/22/2021	12/10/2021	268.00	
376	BRIAN HAMSHAR	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW301-BRIAN	11/22/2021	12/10/2021	112.50	
377	DELOIS CARTER	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW301-DELOIS	11/22/2021	12/10/2021	165.00	
378	DENICE FLYNN	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW501-DENICE	11/22/2021	12/10/2021	165.00	
379	GREGORY PALMER	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTION -	PW201-	11/22/2021	12/10/2021	165.00	
380	JAMES SCHOENSTER	CONTRACT SERVICES	ELECTIONS - ADMIN ASSISTANT - PRECINCT	PW201-JAMES	11/22/2021	12/10/2021	251.00	
381	JAMES TATANGELO	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW101-JAMES	11/22/2021	12/10/2021	165.00	
382	JANICE TATANGELO	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTION -	PW101-JANICE	11/22/2021	12/10/2021	165.00	
383	JENNIFER DEVORE	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW101-	11/22/2021	12/10/2021	165.00	
384	JENNIFER JOHN	CONTRACT SERVICES	ELECTION - ADMIN ASSISTANT - PRECINCT	PW101-	11/22/2021	12/10/2021	83.00	

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385	JENNIFER JOHN	CONTRACT SERVICES	ELECTION - ADMIN ASSISTANT - PRECINCT	PW101-	11/22/2021	12/10/2021	158.00	
386	KATE BEADLE	CONTRACT SERVICES	ELECTION - ADMIN ASSISTANT - PRECINCT	PW401-KATE B.	11/22/2021	12/10/2021	223.00	
387	KATHLEEN HANCOX	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTION -	PW201-	11/22/2021	12/10/2021	112.50	
388	KAYLA PACE	CONTRACT SERVICES	ELECTIONS - ADMIN ASSISTANT - PRECINCT	PW201-KAYLA	11/22/2021	12/10/2021	211.00	
389	KEVIN DAVIDSON	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW501-KEVIN	11/22/2021	12/10/2021	165.00	
390	KIM CARTER	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW301-KIM C.	11/22/2021	12/10/2021	112.50	
391	LINDA PEREZ	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-LINDA P.	11/22/2021	12/10/2021	112.50	
392	MARGUERITE KRITZER	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTION -	PW201-	11/22/2021	12/10/2021	165.00	
393	MARILYN PAYNE	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW501-	11/22/2021	12/10/2021	165.00	
394	MARK CHASE	CONTRACT SERVICES	ELECTION - ASSISTANT CHIEF - PRECINCT	PW501-MARK C.	11/22/2021	12/10/2021	261.00	
395	MARK RUSSELL	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW301-MARK R.	11/22/2021	12/10/2021	165.00	
396	MAYA LAURINAITIS-DRAKE	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW101MAYA L-	11/22/2021	12/10/2021	165.00	
397	PETER COLEMAN	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-PETER	11/22/2021	12/10/2021	165.00	
398	RICK HENRY	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-RICK H.	11/22/2021	12/10/2021	155.00	
399	ROBERT LANE	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-	11/22/2021	12/10/2021	165.00	
400	SAM TOCCI	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-SAM T.	11/22/2021	12/10/2021	165.00	
401	SANDRA PATTERSON	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTION -	PW201-	11/22/2021	12/10/2021	165.00	
402	SCOTT NEWMAN	CONTRACT SERVICES	ELECTIONS - ASSISTANT CHIEF - PRECINCT	PW101-SCOTT	11/22/2021	12/10/2021	333.50	
403	SHIRLEY ROUNDTREE	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW301-	11/22/2021	12/10/2021	208.00	
404	SUSAN MAY	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTION -	PW201-SUSAN	11/22/2021	12/10/2021	165.00	
405	TRECIA GUNNOE	CONTRACT SERVICES	ELECTION - OFFICER OF ELECTION -	PW401-TRECIA	11/22/2021	12/10/2021	102.50	
406	VALERIE WASHINGTON	CONTRACT SERVICES	ELECTION - ASSISTANT CHIEF - PRECINCT	PW201-	11/22/2021	12/10/2021	269.00	
407	PAULA FALK	CONTRACT SERVICES	ELECTIONS - OFFICER OF ELECTIONS -	165.00	11/22/2021	12/30/2021	165.00	
408	DAN GRAFF	CONVENTION AND	USBs, SNACKS AND MEALS DURING	113021DG	11/30/2021	12/10/2021	102.09	
409	PATRICIA A HASTINGS	CONVENTION AND	FOOD DURING CANVAS OF THE VOTE	112221PH	11/22/2021	12/10/2021	43.23	
410	BEN HUDSON	MILEAGE ALLOWANCES	ELECTIONS - CHIEF - PRECINCT 101	PW101-BEN H.	11/22/2021	12/10/2021	8.23	
411	BERTHA THOMAS	MILEAGE ALLOWANCES	ELECTION - CHIEF - PRECINCT 301	PW301-	11/22/2021	12/10/2021	5.77	
412	LOIS WILLIAMS	MILEAGE ALLOWANCES	ELECTION MILEAGE - CHIEF	PW401-LOIS W.	11/2/2021	12/10/2021	11.90	
413	MARIA GRAFF	MILEAGE ALLOWANCES	ELECTION MILEAGE - CHIEF	PW201-MARIA	11/2/2021	12/10/2021	23.36	
414	PATRICIA A HASTINGS	MILEAGE ALLOWANCES	LOCAL TRAVEL MILEAGE FORM - ELECTION	112221	11/22/2021	12/10/2021	174.72	
415	THE SUPPLY ROOM	OFFICE SUPPLIES	SUITE 115 - WATER DELIVERY	4451199-0	12/6/2021	12/10/2021	16.47	
416	VA INFORMATION TECHNOLOGIES	TELECOMMUNICATIONS	VA INFORMATION ECHNOLOGY AGENCY -	T445099	12/1/2021	12/10/2021	213.83	
417	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	45.42	
418	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	45.42	
419						Total:	\$10,478.08	
420								
421	HUMAN RESOURCES							
422	ANTHEM EAP	PROFESSIONAL SERVICES	EMPLOYEE ASSISTANCE PROGRAM DEC	106538	12/1/2021	12/3/2021	25.80	

	A	B	C	D	F	G	H	J
1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
423	BANK OF AMERICA	DUES OR ASSOCIATION	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	10.00	
424	BANK OF AMERICA	DUES OR ASSOCIATION	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	154.79	
425	BANK OF AMERICA	DUES OR ASSOCIATION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	219.00	
426	BANK OF AMERICA	EMPLOYEE RECOGNITION	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	120.37	
427	BANK OF AMERICA	EMPLOYEE RECOGNITION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	54.25	
428	BANK OF AMERICA	EMPLOYEE RECOGNITION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	100.00	
429	BANK OF AMERICA	EMPLOYEE RECOGNITION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	198.19	
430	BANK OF AMERICA	EMPLOYEE RECOGNITION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	514.83	
431	BANK OF AMERICA	EMPLOYEE RECOGNITION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	2,024.00	
432	BANK OF AMERICA	RECRUITMENT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	119.77	
433	BANK OF AMERICA	RECRUITMENT	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	135.00	
434	BANK OF AMERICA	RECRUITMENT	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	434.70	
435	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	17.62	
436	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	17.62	
437	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	60.22	
438	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	60.22	
439	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	17.62	
440	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	17.62	
441	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	60.22	
442	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	60.22	
443	DEPT OF VA STATE POLICE	OTHER OPERATING	ACCT: B0127 - NOVEMBER 2021	112021-	12/1/2021	12/10/2021	40.00	
444	INTERNATIONAL PUBLIC MGNT	DUES OR ASSOCIATION	MEMBERSHIP RENEWAL 02/01/22 - 01/31/23	65972-C6G6B6	12/28/2021	12/30/2021	270.00	
445	SAM'S CLUB	EMPLOYEE RECOGNITION	HOLIDAY EMPLOYEE LUNCHEON	120821-	12/7/2021	12/10/2021	309.64	
446	SAM'S CLUB	EMPLOYEE RECOGNITION	12/16/21 SAM'S PURCHASE	121621SAMS	12/16/2021	12/30/2021	82.32	
447						Total:	\$5,124.02	
448								
449	GENERAL DISTRICT COURT							
450	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	139.86	
451	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	139.86	
452	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	139.86	
453	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	139.86	
454	PITNEY BOWES INC	MAINTENANCE CONTRACTS	COMBINED COURTS POSTAGE FEE	109590191	12/6/2021	12/30/2021	80.74	
455	PITNEY BOWES	MAINTENANCE CONTRACTS	COMPINED COURT - LEASING CHARGE	3314708524	11/25/2021	12/30/2021	171.15	
456						Total:	\$811.33	
457								
458	COURT SERVICE UNIT							
459	DENNIS CRONIN	CONVENTION AND	REIMBURSEMENT - GRAVES	122821DC	12/28/2021	12/30/2021	25.00	
460						Total:	\$25.00	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
461								
462	CLERK OF THE CIRCUIT COURT							
463	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	CLERK OF COURT DEPT	1F71-19T7-	10/23/2021	12/3/2021	73.42	
464	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	CLERK OF THE CIRCUIT COURT SUPPLIES	11GQ-7Y1C-	12/15/2021	12/30/2021	71.11	
465	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	116.29	
466	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	116.29	
467	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	217.00	
468	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	217.00	
469	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	116.29	
470	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	116.29	
471	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	217.00	
472	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	217.00	
473	LOGAN SYSTEMS, INC.	PROFESSIONAL SERVICES	CLERK OF CIRCUIT COURT - PROFESSIONAL	55928	12/15/2021	12/30/2021	2,541.67	
474	TREASURER OF VIRGINIA	PROFESSIONAL SERVICES	ANNUAL RECORDS MANAGEMENT SYSTEMS	22-065C-RMS1	11/15/2021	12/3/2021	1,750.32	
475						Total:	\$5,769.68	
476								
477	CIRCUIT COURT JUDGE							
478	BANK OF AMERICA	OFFICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	9.30	
479	BANK OF AMERICA	OFFICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	19.99	
480	BUSINESS INFORMATION SYSTEMS	MAINTENANCE CONTRACTS	CICUIT COURT - REMOTE SUPPORT	86421	11/14/2021	12/3/2021	880.00	
481	CHERYL PERKINS DAIDONE	COMPENSATION-GRAND	GRAND JURY SERVICES 12/21/2021	GJ122021-1	12/21/2021	12/30/2021	30.00	
482	DEREK L HAMMOND	COMPENSATION-GRAND	GRAND JURY SERVICE 12/21/2021	GJ122021-2	12/21/2021	12/30/2021	30.00	
483	JOSHUA B HELLS	COMPENSATION-GRAND	GRAND JURY SERVICE 12/21/2021	GJ122021-4	12/21/2021	12/30/2021	30.00	
484	KIMBERLY S KIDD	COMPENSATION-GRAND	GRAND JURY SERVICE 12/21/2021	GJ122021-5	12/21/2021	12/30/2021	30.00	
485	MELISSA TANNER	COMPENSATION-GRAND	GRAND JUR SERVICE 12/21/2021	GJ122021-6	12/21/2021	12/30/2021	30.00	
486	SCOTT C HAMNER	COMPENSATION-GRAND	GRND JURY SERVICE 12/21/2021	GJ122021-3	12/21/2021	12/30/2021	30.00	
487	ANDREW V. SORRELL	COMPENSATION-	JURY COMMISSIONER SERVICE: 11/29/21	GJ112021-4	11/29/2021	12/10/2021	30.00	
488	KIMBERLY L. GIBSON	COMPENSATION-	JURY COMMISSIONER SERVICE: 11/29/21	GJ112021-1	11/29/2021	12/10/2021	30.00	
489	NINA H. MONROE	COMPENSATION-	JURY COMMISSIONER SERVICE: 11/29/21	GJ112021-2	11/29/2021	12/10/2021	30.00	
490	SARAH PULLEN	COMPENSATION-	JURY COMMISSIONER SERVICE 11/29/21	GJ112021-3	11/29/2021	12/3/2021	30.00	
491						Total:	\$1,209.29	
492								
493	COMMONWEALTH ATTY							
494	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	1.00	
495	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	3.00	
496	BANK OF AMERICA	FURNITURE & FIXTURES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	81.07	
497	BANK OF AMERICA	MAINTENANCE CONTRACTS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	119.88	
498	BANK OF AMERICA	MILEAGE ALLOWANCES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	181.00	

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2			To Date: 12/31/2021					
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
499	LAWYERS WEEKLY, INC.	BOOKS/PUBLICATIONS	VA LAWYER WEEKLY SUBSCRIPTION	5683603	12/7/2021	12/10/2021	449.00	
500	MATTHEW BENDER & CO INC	BOOKS/PUBLICATIONS	VA CRIM LAW & PROC 21 SUPP	28741854	12/10/2021	12/30/2021	177.10	
501	MATTHEW BENDER & CO INC	BOOKS/PUBLICATIONS	VA CRIM BENCHBK FOR JUDGES & IAWYERS	28992474	12/10/2021	12/30/2021	428.31	
502	MATTHEW BENDER & CO INC	MAINTENANCE CONTRACTS	COMM ATTORNEY - NOV 21	3093560794	11/30/2021	12/10/2021	148.00	
503	PITNEY BOWES	POSTAL SERVICES	COMMONWEALTH ATTORNY LEASING	3314650614	11/13/2021	12/30/2021	77.37	
504	STAPLES CONTRACT & COMMERCIAL,	OFFICE SUPPLIES	MONTHLY COUNTY BILL	NOV2021	11/27/2021	12/10/2021	363.36	
505	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	40.42	
506	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	40.42	
507						Total:	\$2,109.93	
508								
509	SHERIFF							
510	ADANI SYSTEMS, INC	MAINTENANCE CONTRACTS	SHERIFF'S OFFICE - ANNUAL SERVICE	EF112221FVA	11/22/2021	12/30/2021	3,800.00	
511	ADVANCE AUTO PARTS	VEHICLE/POWER EQUIP	GOODSON OIL FILTER	730132359958	11/19/2021	12/3/2021	2.09	
512	ADVANCE AUTO PARTS	VEHICLE/POWER EQUIP	GOODSONS OIL FILTER	7306132266925	11/18/2021	12/3/2021	2.09	
513	ADVANCE AUTO PARTS	VEHICLE/POWER EQUIP	GOODSONS FILTER	7306132066827	11/16/2021	12/3/2021	4.18	
514	ADVANCE AUTO PARTS	VEHICLE/POWER EQUIP	GOODSONS OIL FILTER	7306133767224	12/3/2021	12/10/2021	2.09	
515	ADVANCE AUTO PARTS	VEHICLE/POWER EQUIP	GOODSONS OIL FILTER	7306134867404	12/14/2021	12/30/2021	4.18	
516	AMAZON CAPITAL SERVICES	INVESTIGATIVE SERVICES	SHERIFF'S DEPARTMENT	11YW-6MCG-	11/21/2021	12/3/2021	149.59	
517	AMAZON CAPITAL SERVICES	POLICE SUPPLIES	SHERIFF'S OFFICE	1WGH-91ML-	9/17/2021	12/3/2021	35.99	
518	AMAZON CAPITAL SERVICES	POLICE SUPPLIES	SHERIFF'S OFFICE	11FQ-LT69-	9/20/2021	12/3/2021	54.99	
519	AMAZON CAPITAL SERVICES	POLICE SUPPLIES	SHERIFF'S DEPARTMENT ORDER	1NN-1-VXVM-	12/12/2021	12/17/2021	341.29	
520	AMERICAN UNIFORM SALES, INC	UNIFORM/WEARING APPAREL	FCSD - TAC VESTS	59183	11/30/2021	12/10/2021	410.34	
521	AT&T MOBILITY	TELECOMMUNICATIONS	LONG DISTANCE SERVICE - NOV - DEC.	7305055828001-	12/6/2021	12/30/2021	53.62	
522	BANK OF AMERICA	CONVENTION AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	10.52	
523	BANK OF AMERICA	CONVENTION AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	60.65	
524	BANK OF AMERICA	CONVENTION AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	85.57	
525	BANK OF AMERICA	CONVENTION AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	317.18	
526	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	267.80	
527	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	7.86	
528	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	12.97	
529	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	26.00	
530	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	26.90	
531	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	27.95	
532	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	29.89	
533	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	68.48	
534	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	140.12	
535	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	225.49	
536	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	251.70	

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2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
537	BANK OF AMERICA	EXTRADITION OF PRISONERS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	447.40	
538	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	9.61	
539	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	24.00	
540	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	27.44	
541	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	28.69	
542	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	33.33	
543	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	35.99	
544	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	50.74	
545	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	60.53	
546	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	140.74	
547	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	178.37	
548	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	189.68	
549	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	206.70	
550	BANK OF AMERICA	EXTRADITION OF PRISONERS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	367.39	
551	BANK OF AMERICA	FOOD SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	44.21	
552	BANK OF AMERICA	FOOD SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	45.33	
553	BANK OF AMERICA	FOOD SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	81.16	
554	BANK OF AMERICA	INVESTIGATIVE SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	75.00	
555	BANK OF AMERICA	INVESTIGATIVE SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	75.00	
556	BANK OF AMERICA	MILEAGE ALLOWANCES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	4.00	
557	BANK OF AMERICA	MILEAGE ALLOWANCES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	6.00	
558	BANK OF AMERICA	MILEAGE ALLOWANCES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	20.00	
559	BANK OF AMERICA	OFFICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	81.13	
560	BANK OF AMERICA	POLICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	449.99	
561	BANK OF AMERICA	POLICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	74.99	
562	BANK OF AMERICA	POLICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	570.55	
563	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	13.38	
564	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	35.84	
565	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	42.31	
566	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	55.82	
567	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	61.77	
568	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	63.13	
569	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	72.53	
570	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	101.12	
571	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	103.34	
572	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	114.74	
573	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	116.58	
574	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	145.15	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
575	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	170.47	
576	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	367.23	
577	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	403.94	
578	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	491.82	
579	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	492.57	
580	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	556.32	
581	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	557.82	
582	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	674.15	
583	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	(\$20.00)	
584	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	52.86	
585	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	539.05	
586	BANK OF AMERICA	VEHICLE FUEL	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	1,071.00	
587	BANK OF AMERICA	VEHICLE/POWER EQUIP	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	270.62	
588	CAMPBELL EQUIPMENT, INC.	VEHICLES REP & MAINT	FORD EXPLORES SQUARD CAR - BALANCE &	FCSD079	12/1/2021	12/3/2021	50.00	
589	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	83.88	
590	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	83.88	
591	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	83.88	
592	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	83.88	
593	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	COPIER SERVICE	122275474	10/21/2021	12/30/2021	348.00	
594	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	0.01	
595	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	441.00	
596	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	441.02	
597	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	0.01	
598	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	0.01	
599	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	441.00	
600	CANON FINANCIAL SERVICES, INC.	MAINTENANCE CONTRACTS	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	491.29	
601	CENTRAL SHENANDOAH EMS	CONVENTION AND	SHERIFF'S OFFICE - HS CPR/AED ROSTER &	31581	10/25/2021	12/30/2021	33.00	
602	CENTURYLINK	TELECOMMUNICATIONS	SHERIFF'S OFFICE	309797542-	11/16/2021	12/3/2021	181.65	
603	CENTURYLINK	TELECOMMUNICATIONS	SHERIFF'S OFFICE	310191749-	11/16/2021	12/3/2021	1,032.12	
604	CENTURYLINK	TELECOMMUNICATIONS	SHERIFF OFFICE MONTHLY BILL	309903768	12/7/2021	12/17/2021	167.40	
605	FIREFLY	TELECOMMUNICATIONS	MONTHLY BILL	11068-NOV21	12/1/2021	12/3/2021	525.00	
606	FLUVANNA ACE HARDWARE	POLICE SUPPLIES	SHERIFF'S OFFICE	90498	11/19/2021	12/3/2021	43.56	
607	FRF, INC.	OFFICE SUPPLIES	FCSO - NAME PLATES	51231	9/10/2021	12/10/2021	27.00	
608	GALLS, LLC.	POLICE SUPPLIES	SHERIFF OFFICE - BADGES	019868649	11/29/2021	12/17/2021	282.00	
609	GALLS, LLC.	UNIFORM/WEARING APPAREL	THOMAS RENSCH UNIFORMS	019873414	11/30/2021	12/10/2021	57.04	
610	GALLS, LLC.	UNIFORM/WEARING APPAREL	SEAN PETERSON UNIFORMS	019873780	11/30/2021	12/10/2021	119.37	
611	GALLS, LLC.	UNIFORM/WEARING APPAREL	SEAN PETERSON UNIFORMS	019776913	11/16/2021	12/10/2021	128.70	
612	GALLS, LLC.	UNIFORM/WEARING APPAREL	SEAN PETERSON UNIFORMS	019810383	11/19/2021	12/10/2021	157.45	

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613	GALLS, LLC.	UNIFORM/WEARING APPAREL	THOMAS RENSCH UNIFORMS		019816701	11/22/2021	12/10/2021	197.00
614	GALLS, LLC.	UNIFORM/WEARING APPAREL	SEAN PETERSON UNIFORMS		019776869	11/16/2021	12/10/2021	227.63
615	GALLS, LLC.	UNIFORM/WEARING APPAREL	SEAN PETERSON UNIFORMS		019847227	11/24/2021	12/10/2021	278.00
616	GALLS, LLC.	UNIFORM/WEARING APPAREL	SHERIFF'S DEPT TACTICAL GEAR		019899990	12/2/2021	12/30/2021	311.55
617	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	VIN 0680 - CABIN AIR FILTER + OIL CHANGE		FLU061	11/19/2021	12/3/2021	54.94
618	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	VIN 2558 - CABIN AIR FILTER & OIL CHANGE		FLU064	12/1/2021	12/3/2021	56.57
619	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	VIN 0411 - STARTER + INSTALL		FLU063	11/30/2021	12/3/2021	312.69
620	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	VIN 9366 - AXLES INSTALL + OIL CHANGE +		FLU062	11/19/2021	12/3/2021	668.05
621	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	PLATE 194306L OIL CHANGE		FLU065	12/7/2021	12/10/2021	40.00
622	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	PLATE 205154L - OIL CHANGE		FLU066	12/7/2021	12/10/2021	40.00
623	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	PLATE 212862L - BRAKES, ROTORS, AIR		FLU067	12/7/2021	12/10/2021	351.01
624	J&A PAINTING	BUILDING	SHERIFF'S OFFICE - CMPLETED PAINTING		21-160	7/9/2021	12/3/2021	2,400.00
625	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021		113021	12/1/2021	12/10/2021	8,180.56
626	MANSFIELD OIL COMPANY OF	VEHICLE FUEL	INVOICE DATES 11/16/21 - 11/30/21		SQLCD-724516	11/30/2021	12/10/2021	65.60
627	MANSFIELD OIL COMPANY OF	VEHICLE FUEL	MANSFIELD FUELS 12/01/21 - 12/15/21		SQLCD-729039	12/15/2021	12/30/2021	31.83
628	MEDEXPRESS URGENT CARE	PROFESSIONAL SERVICES	SHERIFF'S OFFICE - CAVENESS, QUINCY		2086394C3908	11/18/2021	12/3/2021	146.00
629	NATIONAL SHERIFF'S ASSOCIATION	DUES OR ASSOCIATION	NSA MEMBERSHIP DUES THROUGH		279586-2022	12/13/2021	12/30/2021	135.00
630	CTSI	BUILDING	FCSO WIRING INSTALL PROJECT		PSI-4686	6/17/2021	12/10/2021	7,755.00
631	DEPUTY DIANA NEAL	EXTRADITION OF PRISONERS	EXTRADITION (2 TOLL PAYMENTS)		120221DDN	12/2/2021	12/10/2021	8.00
632	DRIVER ERT	EXTRADITION OF PRISONERS	PLATE 197-892L OCT 5TH & 8TH -		1012944368	11/22/2021	12/30/2021	11.56
633	JORDAN JAMES ALLEN	SUBSISTENCE & LODGING	BASICLAW ENFOR. TRAINING ACAD. 1/3-1/6		122021JJA	12/20/2021	12/30/2021	413.00
634	PITNEY BOWES PURCHASE PWR	POSTAL SERVICES	SHERIFF'S OFFICE - POSTAGE		0215-NOV21	11/19/2021	12/3/2021	16.27
635	PSYCHOLOGICAL HEALTH ROANOKE	PROFESSIONAL SERVICES	VAN FITZGERALD		F-C-26654	11/17/2021	12/3/2021	90.00
636	PSYCHOLOGICAL HEALTH ROANOKE	PROFESSIONAL SERVICES	JOSHUA BEAZLEY		B-C-26707	11/17/2021	12/3/2021	95.00
637	PSYCHOLOGICAL HEALTH ROANOKE	PROFESSIONAL SERVICES	ALICIA HERZOG		H-C-26730	11/17/2021	12/3/2021	95.00
638	PSYCHOLOGICAL HEALTH ROANOKE	PROFESSIONAL SERVICES	SETH CAVENESS		C-C-26754	12/8/2021	12/17/2021	95.00
639	SHULL'S AUTOMOTIVE, INC.	VEHICLE/POWER EQUIP	TOW TO FCSD OFFICE		1002093	11/23/2021	12/10/2021	85.00
640	SHULL'S AUTOMOTIVE, INC.	VEHICLES REP & MAINT	PLATE 194 304L		1002094	11/29/2021	12/10/2021	40.00
641	SHULL'S AUTOMOTIVE, INC.	VEHICLES REP & MAINT	TOW TO CHARLOTTESVILLE FROM		FCSD120721TO	12/7/2021	12/10/2021	125.00
642	SHULL'S AUTOMOTIVE, INC.	VEHICLES REP & MAINT	PLATE 184-469L - OIL CHARGER		1002097	12/16/2021	12/30/2021	25.00
643	SPRINT	TELECOMMUNICATIONS	SHERIFF'S DEPARTMENT		313771602-043	11/26/2021	12/3/2021	3,143.57
644	STAPLES CONTRACT & COMMERCIAL,	OFFICE SUPPLIES	MONTHLY COUNTY BILL		NOV2021	11/27/2021	12/10/2021	192.47
645	THE POLICE AND SHERIFFS PRESS	OFFICE SUPPLIES	SHERIFF'S OFFICE - CARD PRINTING		155852	12/1/2021	12/3/2021	17.58
646	UPS	POSTAL SERVICES	PARKS & REC / ADMIN		0000Y7646Y471	11/20/2021	12/3/2021	6.37
647	VA INFORMATION TECHNOLOGIES	TELECOMMUNICATIONS	VA INFORMATION ECHNOLOGY AGENCY -		T445099	12/1/2021	12/10/2021	214.53
648	VERIZON BUSINESS/MCI COMM	TELECOMMUNICATIONS	SHERIFF'S OFFICE		9892387587	11/8/2021	12/3/2021	80.02
649	VERIZON BUSINESS/MCI COMM	TELECOMMUNICATIONS	ADMIN MONTHLY SERVICE BILL		05438115	11/25/2021	12/10/2021	17.87
650	WILLIAM WHITE	SUBSISTENCE & LODGING	NOV 2 - CS CRIMINAL JUSTICE TRAINING		120221WW3	12/2/2021	12/3/2021	178.75

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651	WILLIAM WHITE	SUBSISTENCE & LODGING	OCT - CS CRIMINAL JUSTICE TRAINING	120221WW	12/2/2021	12/3/2021	192.50	
652	WILLIAM WHITE	SUBSISTENCE & LODGING	NOV - CS CRIMINAL JUSTICE TRAINING	120221WW2	12/2/2021	12/3/2021	192.50	
653	WILLIAM WHITE	VEHICLES REP & MAINT	NOV 3 - CS CRIMINAL JUSTICE TRAINING	120221WW4	12/2/2021	12/3/2021	192.50	
654						Total:	\$48,382.13	
655								
656	E911							
657	ALBEMARLE LOCK & SAFE, INC.	BLDGS EQUIP REP & MAINT	SERVICE CYLINDER - SHERIFF DEPT	103753	12/13/2021	12/30/2021	2,036.00	
658	ALBEMARLE LOCK & SAFE, INC.	PROFESSIONAL SERVICES	REKEY 6 IC CORES AT COMMUNICATION	103535	12/3/2021	12/10/2021	605.00	
659	APPLIED DIGITAL SOLUTIONS	MAINTENANCE CONTRACTS	SHERIFF OFFICE 24 CHANNEL UPGRADE TO	46818	12/15/2021	12/30/2021	7,252.50	
660	AT&T MOBILITY	TELECOMMUNICATIONS	SHERIFF'S OFFICE MONTHLY BILL	287284406274X1	11/18/2021	12/3/2021	2.19	
661	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	62.00	
662	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	161.56	
663	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	21.20	
664	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	30.00	
665	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	414.69	
666	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	465.69	
667	BANK OF AMERICA	DUES OR ASSOCIATION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	345.00	
668	BANK OF AMERICA	IT SERVICES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	12.00	
669	BANK OF AMERICA	IT SERVICES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	12.00	
670	BANK OF AMERICA	MAINTENANCE CONTRACTS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	15.00	
671	BANK OF AMERICA	MAINTENANCE CONTRACTS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	24.30	
672	BANK OF AMERICA	MAINTENANCE CONTRACTS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	26.45	
673	BANK OF AMERICA	MAINTENANCE CONTRACTS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	125.00	
674	BANK OF AMERICA	MAINTENANCE CONTRACTS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	212.00	
675	BANK OF AMERICA	MAINTENANCE CONTRACTS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	15.00	
676	BANK OF AMERICA	MAINTENANCE CONTRACTS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	21.71	
677	BANK OF AMERICA	MAINTENANCE CONTRACTS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	25.00	
678	BANK OF AMERICA	MAINTENANCE CONTRACTS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	125.00	
679	BANK OF AMERICA	MAINTENANCE CONTRACTS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	212.00	
680	BANK OF AMERICA	OFFICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	12.99	
681	BANK OF AMERICA	UNIFORM/WEARING APPAREL	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	974.60	
682	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	83.88	
683	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	83.88	
684	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	83.88	
685	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	83.88	
686	CENTURYLINK	TELECOMMUNICATIONS	E911 MONTHLY BILL	310214091-	11/19/2021	12/3/2021	144.21	
687	CENTURYLINK	TELECOMMUNICATIONS	FC SHERIFF'S OFFICE	310042302NOV2	11/10/2021	12/3/2021	2,489.00	
688	CENTURYLINK	TELECOMMUNICATIONS	SHERIFF'S DEPARTMENT	310042302-	12/10/2021	12/30/2021	2,276.12	

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689	COMCAST CORPORATION	TELECOMMUNICATIONS	SHERIFF'S DEPARTMENT MONTHLY INVOICE	0046933-DEC21	12/3/2021	12/17/2021	110.59	
690	MEDICAL PRIORITY CONSULTANTS,	MAINTENANCE CONTRACTS	SHERIFF'S OFFICE SOFTWARE UPGRADE	SIN292433	10/1/2021	12/30/2021	35,562.00	
691	NEWEGG BUSINESS INC.	BLDGS EQUIP REP & MAINT	SHERIFF'S OFFICE - SERVER DRIVE	1303629324	12/14/2021	12/30/2021	86.33	
692	SPRINT	TELECOMMUNICATIONS	SHERIFF'S DEPARTMENT	313771602-043	11/26/2021	12/3/2021	538.04	
693	VA INFORMATION TECHNOLOGIES	TELECOMMUNICATIONS	VA INFORMATION ECHNOLOGY AGENCY -	T445099	12/1/2021	12/10/2021	214.53	
694						Total:	\$54,965.22	
695								
696	FIRE AND RESCUE SQUAD							
697	ANDREW PULLEN	CONVENTION AND	FIREFIGHTER 2 CLASS 2021	11292021AP	11/29/2021	12/3/2021	1,100.00	
698	ERIC GRAZIANO	CONVENTION AND	FIREFIGHTER 2 TRAINING 2021	11302021EG	11/30/2021	12/3/2021	375.00	
699	DANIEL PERKINS	CONVENTION AND	FIREFIGHTER 2 BURNS	121521	12/15/2021	12/17/2021	200.00	
700	RICHIE CONSTANTINO	CONVENTION AND	FIREFIGHTER 2 TRANING 2021	11302021RC	11/30/2021	12/3/2021	300.00	
701	RYAN SAMPSON	CONVENTION AND	FIREFIGHTER 2 TRAINING 2021	112921RS	11/30/2021	12/3/2021	200.00	
702	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	656.97	
703	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	560.14	
704						Total:	\$3,392.11	
705								
706	FOREST WARDEN							
707	VIRGINIA DEPARTMENT OF FORESTRY	FOREST FIRE SUPPRESSION	COUNTY FIRE SUPPRESSION 1400-02411-	20179281	9/30/2021	12/10/2021	9,141.84	
708						Total:	\$9,141.84	
709								
710	CORRECTION AND DETENTION							
711	COUNTY OF ALBEMARLE, VIRGINIA	CONFINEMENT - BRJDC	BILLING FOR JUVENILLE DETENTION	FY2022-	11/15/2021	12/3/2021	14,720.50	
712	COUNTY OF ALBEMARLE, VIRGINIA	CONFINEMENT - BRJDC	BILLING FOR JUVENILE DETENTON CENTER	FY2022-	12/15/2021	12/30/2021	14,720.50	
713						Total:	\$29,441.00	
714								
715	BUILDING INSPECTIONS							
716	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	BUILDING INSPECTIONS SUPPLIES	1KD7-K17R-	11/30/2021	12/30/2021	113.45	
717	ANDREW WILLS	OFFICE SUPPLIES	WELLINGTON BOOTS - AUGUSTA COOP	120521AW	12/5/2021	12/10/2021	112.13	
718	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	257.53	
719	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	241.29	
720	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	241.29	
721						Total:	\$965.69	
722								
723	EMERGENCY MANAGEMENT							
724	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	7.15	
725	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	169.77	
726	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	35.02	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
727	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	35.02	
728	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	35.02	
729	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	35.02	
730	DELTA RESPONSE TEAM LLC	CONTRACT SERVICES	NOVEMBER 2021 EMS STAFFING	202101200	12/2/2021	12/10/2021	(\$525.00)	
731	DELTA RESPONSE TEAM LLC	CONTRACT SERVICES	NOVEMBER 2021 EMS STAFFING	202101200	12/2/2021	12/10/2021	52,615.83	
732	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	154.21	
733	MANSFIELD OIL COMPANY OF	VEHICLE FUEL	INVOICE DATES 11/16/21 - 11/30/21	SQLCD-724516	11/30/2021	12/10/2021	27.83	
734	MANSFIELD OIL COMPANY OF	VEHICLE FUEL	MANSFIELD FUELS 12/01/21 - 12/15/21	SQLCD-729039	12/15/2021	12/30/2021	136.97	
735	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	45.45	
736	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	45.42	
737						Total:	\$52,817.71	
738								
739	FACILITIES							
740	AMAZON CAPITAL SERVICES	BLDGS EQUIP REP & MAINT	PUBLIC WORKS SUPPLIES	14VL-QT1L-	12/15/2021	12/30/2021	33.14	
741	AMAZON CAPITAL SERVICES	GENERAL MATERIALS AND	PUBLIC WORKS	17C6-6JNM-	11/16/2021	12/3/2021	30.42	
742	AMAZON CAPITAL SERVICES	GENERAL MATERIALS AND	PUBIC WORKS	1YKW-D4GY-	11/16/2021	12/3/2021	34.47	
743	AMAZON CAPITAL SERVICES	GENERAL MATERIALS AND	PUBLIC WORKS SUPPLIES	1TLT-YW1J-	12/14/2021	12/30/2021	47.50	
744	AMAZON CAPITAL SERVICES	VEHICLES REP & MAINT	PUBLIC WORKS SUPPLIES	17JG-J7CP-463X	12/9/2021	12/30/2021	34.94	
745	AMAZON CAPITAL SERVICES	VEHICLES REP & MAINT	PUBLIC WORKS SUPPLIES	1LTY-1WL6-	12/21/2021	12/30/2021	183.80	
746	AMAZON CAPITAL SERVICES	VEHICLES REP & MAINT	PUBLIC WORKS SUPPLIES	1LTY-1WL6-	12/21/2021	12/30/2021	247.58	
747	BANK OF AMERICA	AGRICULTURAL SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	132.68	
748	BANK OF AMERICA	AGRICULTURAL SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	176.90	
749	BANK OF AMERICA	AGRICULTURAL SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	88.45	
750	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	29.61	
751	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	46.60	
752	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	120.79	
753	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	122.22	
754	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	391.85	
755	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	432.00	
756	BANK OF AMERICA	BLDGS EQUIP REP & MAINT	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	839.89	
757	BANK OF AMERICA	GENERAL MATERIALS AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	27.99	
758	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	19.56	
759	BANK OF AMERICA	SUBSISTENCE & LODGING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	50.44	
760	BANK OF AMERICA	VEHICLE/POWER EQUIP	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	20.00	
761	BANK OF AMERICA	VEHICLE/POWER EQUIP	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	133.50	
762	BANK OF AMERICA	VEHICLES REP & MAINT	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	30.00	
763	BFPE INTERNATIONAL	BLDGS EQUIP REP & MAINT	LIBRARY - REPLACE HORN/STROBE	2701356	12/15/2021	12/30/2021	468.00	
764	BFPE INTERNATIONAL	BLDGS EQUIP REP & MAINT	PERFORMING ART CENTER - REPLACE	2701357	12/15/2021	12/30/2021	470.00	

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765	BFPE INTERNATIONAL	BLDGS EQUIP REP & MAINT	PALMYRA FIRE COMPANY - TROUBLES	2701358	12/15/2021	12/30/2021	865.00	
766	BRAME SPECIALTY COMPANY, INC.	JANITORIAL SUPPLIES	PUBLIC WORKS - STEVE HESTER	7694840	12/16/2021	12/30/2021	332.08	
767	BRAME SPECIALTY COMPANY, INC.	JANITORIAL SUPPLIES	PUBLIC WORKS SUPPLIES	7694803	12/15/2021	12/30/2021	1,927.71	
768	CAMPBELL EQUIPMENT, INC.	VEHICLES REP & MAINT	CLIFF THOMAS' VAN	FCPW095	12/10/2021	12/30/2021	860.96	
769	DAIKIN APPLIED	BLDGS EQUIP REP & MAINT	REMAINING BALANCE ON INVOICE	5589413B	10/10/2021	12/1/2021	10.00	
770	DAIKIN APPLIED	BLDGS EQUIP REP & MAINT	HEAT KIT	5603351	11/29/2021	12/30/2021	106.08	
771	FLUVANNA ACE HARDWARE	AGRICULTURAL SUPPLIES	NOV 21 STATEMENT	113021STATEM	11/30/2021	12/10/2021	141.95	
772	FLUVANNA ACE HARDWARE	GENERAL MATERIALS AND	NOV 21 STATEMENT	113021STATEM	11/30/2021	12/10/2021	28.93	
773	GOODSON'S AUTO REPAIR	VEHICLES REP & MAINT	PLATE 186513L - EVAP LINE& INSTALL	PCPW005	12/14/2021	12/30/2021	316.88	
774	HILL MANUFACTURING COMPANY INC	AGRICULTURAL SUPPLIES	PUBLIC WORKS SUPPLIES	107978	12/9/2021	12/30/2021	40.00	
775	HILL MANUFACTURING COMPANY INC	GENERAL MATERIALS AND	PUBLIC WORKS SUPPLIES	107978	12/9/2021	12/30/2021	472.83	
776	JAMES RIVER EQUIPMENT	VEHICLE/POWER EQUIP	LANDFILL PARTS	P19504	12/6/2021	12/10/2021	72.40	
777	JAMES RIVER EQUIPMENT	VEHICLE/POWER EQUIP	LANDFILL - PARTS FOR MACHINES	P19720	12/16/2021	12/30/2021	30.48	
778	JAMES RIVER EQUIPMENT	VEHICLE/POWER EQUIP	LANDFILL JOHN DEERE BACKHOE PARTS	P19739	12/17/2021	12/30/2021	31.66	
779	JAMES RIVER EQUIPMENT	VEHICLE/POWER EQUIP	LANDFILL - PARTS FOR MACHINE	P19711	12/16/2021	12/30/2021	271.86	
780	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	1,791.60	
781	JONES AUTOMOTIVE/ALL STAR AUTO	GENERAL MATERIALS AND	NOV 2021 STATEMENT	113021FLUCO	11/30/2021	12/10/2021	40.58	
782	JONES AUTOMOTIVE/ALL STAR AUTO	VEHICLE/POWER EQUIP	NOV 2021 STATEMENT	113021FLUCO	11/30/2021	12/10/2021	238.50	
783	JONES AUTOMOTIVE/ALL STAR AUTO	VEHICLES REP & MAINT	NOV 2021 STATEMENT	113021FLUCO	11/30/2021	12/10/2021	1,092.93	
784	LOWE'S	AGRICULTURAL SUPPLIES	PUBLIC WORKS STATEMENT - 10/25 - 11/24	99000330383	11/25/2021	12/10/2021	392.82	
785	LOWE'S	BLDGS EQUIP REP & MAINT	PUBLIC WORKS STATEMENT - 10/25 - 11/24	99000330383	11/25/2021	12/10/2021	407.61	
786	LOWE'S	GENERAL MATERIALS AND	PUBLIC WORKS STATEMENT - 10/25 - 11/24	99000330383	11/25/2021	12/10/2021	294.31	
787	LOWE'S	OFFICE SUPPLIES	PUBLIC WORKS STATEMENT - 10/25 - 11/24	99000330383	11/25/2021	12/10/2021	104.03	
788	MAPP'S AC EQUIPMENT, LLC	CONTRACT SERVICES	PUBLIC WORKS - SERVICE CALL FOR	17954	11/12/2021	12/30/2021	380.04	
789	MAYER ELECTRIC SUPPLY	BLDGS EQUIP REP & MAINT	PSB - PUBLIC WORKS	29402192	12/15/2021	12/30/2021	478.86	
790	MIDWEST MOTOR SUPPLY CO. INC.	GENERAL MATERIALS AND	PUBLIC WORKS - FORK UNION	9378979	11/12/2021	12/3/2021	65.45	
791	MIDWEST MOTOR SUPPLY CO. INC.	GENERAL MATERIALS AND	PUBLIC WORKS - FORK UNION	9389257	11/16/2021	12/3/2021	378.28	
792	MIDWEST MOTOR SUPPLY CO. INC.	GENERAL MATERIALS AND	PUBLIC WORKS - COLCONA #4HD	9450014	12/9/2021	12/30/2021	116.75	
793	MIDWEST MOTOR SUPPLY CO. INC.	UNIFORM/WEARING APPAREL	PUBLIC WORKS - COLCONA #4HD	9450014	12/9/2021	12/30/2021	756.04	
794	NOLAND	BLDGS EQUIP REP & MAINT	PUBLIC WORKS EQUIPMENT	553811 02	11/9/2021	12/10/2021	192.79	
795	NOLAND	BLDGS EQUIP REP & MAINT	AQUASTATS - PUBLIC WORKS	555611 01	11/30/2021	12/30/2021	1,379.61	
796	PARRISH FORD	VEHICLES REP & MAINT	PLATE 194-188L - BATES FUEL HOUSING	5029273 1	12/7/2021	12/30/2021	73.74	
797	PIEDMONT PAINT & FINISH, LLC	CONTRACT SERVICES	SHERIFF'S OFFICE - PATCH / REPAIR /	17251	12/16/2021	12/30/2021	1,871.00	
798	QUALITY WELDING, INC	VEHICLES REP & MAINT	PUBLIC WORKS - #9 EXPANDED METAL 4'X8'	01767	12/10/2021	12/30/2021	145.50	
799	RAINGUARD ROOFING LLC	CONTRACT SERVICES	LIBRARY- REPAIRS	3491	11/30/2021	12/3/2021	925.00	
800	SHULL'S AUTOMOTIVE, INC.	VEHICLES REP & MAINT	PLATE 197331L - INSPECTION	002594	11/22/2021	12/3/2021	20.00	
801	SHULL'S AUTOMOTIVE, INC.	VEHICLES REP & MAINT	PLATE 149789L - INSPECTION	002595	11/22/2021	12/3/2021	20.00	
802	SHULL'S AUTOMOTIVE, INC.	VEHICLES REP & MAINT	PLATE 178-734L - TOW FROM SHANNON HILL	1002096	12/16/2021	12/30/2021	125.00	

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803	STAPLES CONTRACT & COMMERCIAL,	OFFICE SUPPLIES	MONTHLY COUNTY BILL	NOV2021	11/27/2021	12/10/2021	46.94	
804	STRAIGHTEDGE INC	CONTRACT SERVICES	FORK UNION COMMUNITY CENTER -	12839	12/5/2021	12/10/2021	300.00	
805	STRAIGHTEDGE INC	CONTRACT SERVICES	FORK UNION FIRE DEPARTMENT - GUTTER	12838	12/5/2021	12/10/2021	350.00	
806	TANNERS AUTO GLASS	VEHICLES REP & MAINT	VIN 8576 - DW 1880 GTN	2260	11/29/2021	12/17/2021	200.00	
807	TRANE U.S., INC.	BLDGS EQUIP REP & MAINT	PUBLIC WORKS PARTS - HIGH PRESSURE	11316509	12/8/2021	12/30/2021	234.90	
808	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1184436	11/18/2021	12/3/2021	30.10	
809	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1185560	11/25/2021	12/3/2021	30.10	
810	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1184438	11/18/2021	12/3/2021	106.27	
811	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1185562	11/25/2021	12/3/2021	106.27	
812	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1186650	12/2/2021	12/10/2021	30.10	
813	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1186652	12/2/2021	12/10/2021	106.27	
814	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORM SERVICE	202 1187771	12/16/2021	12/30/2021	30.10	
815	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORM SERVICE	202 1188869	12/16/2021	12/30/2021	30.10	
816	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORM SERVICE	202 1187773	12/16/2021	12/30/2021	106.27	
817	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORM SERVICE	202 1188871	12/16/2021	12/30/2021	106.27	
818	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	485.04	
819	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	485.04	
820	W.W. GRAINGER INC	BLDGS EQUIP REP & MAINT	PUBLIC WORKS - GREASE FITTING KIT	9152759834	12/15/2021	12/30/2021	158.89	
821	W.W. GRAINGER INC	GENERAL MATERIALS AND	PUBLIC WORKS - QUICK RELEASE CLAMP	9141327503	12/6/2021	12/30/2021	33.74	
822	WAYNE OXYGEN & WELDING SUPPLY	GENERAL MATERIALS AND	PUBLIC WORKS SUPPLIES	862318	11/30/2021	12/10/2021	57.60	
823	WAYNE OXYGEN & WELDING SUPPLY	GENERAL MATERIALS AND	PUBLIC WORKS SUPPLIES	415327	12/8/2021	12/30/2021	461.45	
824						Total:	\$24,507.04	
825								
826	GENERAL SERVICES							
827	ALLIED PORTABLE TOILET	MAINTENANCE CONTRACTS	CARYSBROOK BASEBALL FIELD 11/30 - 12/27	A-186177	11/30/2021	12/3/2021	160.00	
828	ALLIED PORTABLE TOILET	MAINTENANCE CONTRACTS	PLEASANT GROVE DOG PARK 11/30 - 12/27	A-186463	11/30/2021	12/3/2021	160.00	
829	ALLIED PORTABLE TOILET	MAINTENANCE CONTRACTS	PLEASANT GROVE BALLFIELD 11/30 - 12/27	A-186464	11/30/2021	12/3/2021	160.00	
830	ALLIED PORTABLE TOILET	MAINTENANCE CONTRACTS	CARYSBROOK BASEBALL FIELD 11/2 - 11/29	A-184834	11/2/2021	12/10/2021	160.00	
831	AMERICAN PEST MANAGEMENT	MAINTENANCE CONTRACTS	STONE JAIL NOV21	6715072	11/15/2021	12/3/2021	97.75	
832	AMERICAN PEST MANAGEMENT	MAINTENANCE CONTRACTS	ADMIN BUILDING NOV21	6714085	11/8/2021	12/3/2021	604.90	
833	AMERICAN PEST MANAGEMENT	MAINTENANCE CONTRACTS	PEST CONTROL MONHLY SERVICE -	6782333	12/13/2021	12/30/2021	604.90	
834	AQUA VIRGINIA, INC.	WATER SERVICES	REGISTRARS OFFICE	0556855-DEC21	12/8/2021	12/17/2021	19.39	
835	AQUA VIRGINIA, INC.	WATER SERVICES	COMMONWEALTH ATTORNEY OFFICE	0550900-DEC21	12/8/2021	12/17/2021	23.70	
836	AQUA VIRGINIA, INC.	WATER SERVICES	PUBLIC WORKS OFFICE	0552932-DEC21	12/8/2021	12/17/2021	23.70	
837	AQUA VIRGINIA, INC.	WATER SERVICES	197 NORTH GREEN - HCH PLUS 2 BLDGS	0552931-DEC21	12/8/2021	12/17/2021	31.02	
838	AQUA VIRGINIA, INC.	WATER SERVICES	ADMIN OFFICES	0540828-DEC21	12/8/2021	12/17/2021	101.14	
839	BFPE INTERNATIONAL	MAINTENANCE CONTRACTS	PERFORMING ART CENTER - QUARTERLY	2698141	11/30/2021	12/10/2021	103.00	
840	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G 200A	105221-	11/18/2021	12/10/2021	30.40	

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841	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G. ELEC SERVICE	105221-	11/18/2021	12/10/2021	30.40	
842	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G. ELEC SERVICE - 271 PLEASANT GROVE	105221-	11/18/2021	12/10/2021	30.40	
843	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G. ELEC SERVICE - SIGN	105221-	11/18/2021	12/10/2021	30.40	
844	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	THOMAS JEFFERSON PKW	203061-	11/18/2021	12/10/2021	30.60	
845	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	HERITAGE FARM MUSEUM	275904-	11/18/2021	12/10/2021	31.21	
846	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G. ELEC SERVICE - 271 PLEASANT GROVE	105221-	11/18/2021	12/10/2021	31.42	
847	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G. 400A	105221-	11/18/2021	12/10/2021	31.91	
848	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	PLEASANT GROVE POLE BARN	275904-	11/18/2021	12/10/2021	32.93	
849	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	DOG KENNEL	275904-	11/18/2021	12/10/2021	44.72	
850	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G. SOCCER FIELDS CONCESSIONS	105221-	11/18/2021	12/10/2021	49.31	
851	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	PUBLIC SAFETY - OUTLETS BEHIND	085473-	11/18/2021	12/10/2021	62.98	
852	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	P.G - COMPETITION PARK RD	105221-	11/18/2021	12/10/2021	103.65	
853	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	CONVENIENCE CENTER - LANDFILL	275904-	11/18/2021	12/10/2021	153.62	
854	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	REGISTRAR OFFICE SUITE 116	085473-	11/18/2021	12/10/2021	156.68	
855	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	E911 TOWER - VFW HALL 2977 RIVER ROAD	275904-	11/18/2021	12/10/2021	159.79	
856	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	REGISTRAR OFFICE SUITE 115	085473-	11/18/2021	12/10/2021	168.70	
857	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	E911 TOWER - LANDFILL	085473-	11/18/2021	12/10/2021	220.06	
858	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	E911 TOWER - COLUMBIA SCHOOL	085473-	11/18/2021	12/10/2021	225.42	
859	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	PLEASANT GROVE HOUSE	275904-	11/18/2021	12/10/2021	315.25	
860	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	E911 TOWER - PUBLIC SAFETY BLDG -	275904-	11/18/2021	12/10/2021	358.69	
861	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	LIBRARY	275906-001-	11/30/2021	12/10/2021	1,867.28	
862	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	PUBLIC SAFETY BUILDING - 160 COMMONS	085473-002-	11/30/2021	12/10/2021	1,928.70	
863	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	KENTS STORE FIRE DEPARTMENT	275907-002-	12/6/2021	12/30/2021	298.97	
864	CENTRAL VA ELECTRIC COOP	STREET LIGHTS	PUBLIC SAFETY - STREET LIGHTS NEAR	085473-	11/18/2021	12/10/2021	89.39	
865	CENTURYLINK	TELECOMMUNICATIONS	FACILITIES PW EMERG LINE	309428096NOV2	11/16/2021	12/3/2021	53.22	
866	CENTURYLINK	TELECOMMUNICATIONS	PUBLIC WORKS	310338742NOV2	11/16/2021	12/3/2021	64.65	
867	CENTURYLINK	TELECOMMUNICATIONS	FACILITIES 72 MAIN ST ALARM SYSTEM	309697981NOV2	11/16/2021	12/3/2021	67.61	
868	CENTURYLINK	TELECOMMUNICATIONS	FACILITIES - PERFORMING ARTS-MAIN &	309898636NOV2	11/16/2021	12/3/2021	142.45	
869	CENTURYLINK	TELECOMMUNICATIONS	PALMYRE RESCUE SQUAD	310110229NOV2	11/16/2021	12/3/2021	228.18	
870	CENTURYLINK	TELECOMMUNICATIONS	FACILITIES 13 LINES ELEVATORS AND	309363296NOV2	11/16/2021	12/3/2021	713.76	
871	CINTAS	MAINTENANCE CONTRACTS	ADMIN BUILDING MEDICAL SUPPLIES	8405473201	12/24/2021	12/30/2021	43.76	
872	CINTAS	MAINTENANCE CONTRACTS	LANDFILL MEDICAL SUPPLIES	5088547613	12/21/2021	12/30/2021	73.03	
873	CINTAS	MAINTENANCE CONTRACTS	PUBLIC WORKS MEDICAL SUPPLIES	5088547648	12/21/2021	12/30/2021	273.45	
874	COMPUTER CABLING & TECHNOLOGY	MAINTENANCE CONTRACTS	NOV 2021 VUPS LOCATION SERVICES - MISS	113021	11/30/2021	12/10/2021	170.00	
875	COUNTY WASTE, LLC	MAINTENANCE CONTRACTS	FLUVANNA COUNTY REACUE SQUAD	00017537DEC21	11/17/2021	12/3/2021	21.75	
876	COUNTY WASTE, LLC	MAINTENANCE CONTRACTS	JANUARY SERVICE - RESCUE SQUAD -	06-0001753-7-	12/21/2021	12/30/2021	23.75	
877	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	RESCUE SQUAD - PALMYRA - 90 RESCUE	4894115007-	11/22/2021	12/3/2021	200.93	
878	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	LARGE BALLFIELD - LIGHTS	3023889169-	11/22/2021	12/3/2021	249.34	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
879	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	PERFORMING ARTS CENTER	4144237502-	11/22/2021	12/3/2021	249.34	
880	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	FIRE STATION - PALMYRA	1005898992-	11/22/2021	12/3/2021	265.06	
881	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	HISTORIC COURTHOUSE	1144090006-	11/22/2021	12/3/2021	397.92	
882	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	TREASURER'S OFFICE	1024205005-	11/22/2021	12/3/2021	460.06	
883	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	CARYSBROOK GYM (INCLUDES PUMP	84297506-	11/22/2021	12/3/2021	464.54	
884	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	SOCIAL SERVICES BUILDING	74032509-	11/22/2021	12/3/2021	817.13	
885	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	ADMIN BUILDING	1404067504-	11/22/2021	12/3/2021	917.35	
886	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	COURTS BUILDING	8895892548-	11/22/2021	12/3/2021	2,384.92	
887	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	OLD STONE JAIL	1424085007-	11/23/2021	12/10/2021	30.98	
888	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	COMMONWEALTH'S ATTORNEY	6274752663-	11/29/2021	12/10/2021	259.77	
889	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	FIRE STATION - FORK UNION	4834680458-	11/23/2021	12/10/2021	324.41	
890	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	COMMUNITY CENTER & EXTENSION OFFICE	4331888158-	11/23/2021	12/10/2021	907.89	
891	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	REGISTRAR'S OFFICE	1284152509-	11/29/2021	12/17/2021	13.84	
892	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	IT DEPT OFFICE - 51 COURT SQUARE	1114097502-	11/29/2021	12/17/2021	17.24	
893	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	HOUSING OFFICE (2 STORY) 222 MAIN ST	1134080009-	11/29/2021	12/17/2021	18.27	
894	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	CELL TOWER @ FIRE STATION	5699060132-	11/29/2021	12/17/2021	43.96	
895	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	SMALL BALLFIELD - CONCESSIONS & LIGHTS	274195007-	11/29/2021	12/17/2021	67.32	
896	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	LARGE BALLFIELD - CONCESSIONS	692200942-	11/29/2021	12/17/2021	73.66	
897	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	PUBLIC WORKS OFFICE	1304130006-	11/29/2021	12/17/2021	86.06	
898	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	8880 JMH	7048771633-	11/29/2021	12/17/2021	90.73	
899	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	WEAVER BUILDING (NEE csa OFFICE) 196	1124090000-	11/29/2021	12/17/2021	96.33	
900	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	CELL TOWER @ 1038 BREMO RD	6260822157-	11/29/2021	12/17/2021	124.86	
901	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	PUBLIC WORKS MAINTENANCE SHOP	2554330007-	11/29/2021	12/17/2021	187.47	
902	DOMINION VIRGINIA POWER	STREET LIGHTS	COLUMBIA STREET LIGHTS	4210122349-	11/29/2021	12/10/2021	204.02	
903	DOMINION VIRGINIA POWER	STREET LIGHTS	FORK UNION STREET LIGHTS - NORTH -	7080078962-	11/29/2021	12/17/2021	71.62	
904	DOMINION VIRGINIA POWER	STREET LIGHTS	FORK UNION STREET LIGHTS - NORTH -	9609027314-	11/29/2021	12/17/2021	74.46	
905	DOMINION VIRGINIA POWER	STREET LIGHTS	PALMYRA VILLAGE - STREET LIGHTS	3595578927-	11/29/2021	12/17/2021	476.24	
906	FORK UNION SANITARY DISTRICT	SEWER SERVICES	REGISTRAR	201300-577-	11/17/2021	12/3/2021	10.77	
907	FORK UNION SANITARY DISTRICT	SEWER SERVICES	COMMONWEALTH ATTORNEY	201000-574-	11/17/2021	12/3/2021	16.12	
908	FORK UNION SANITARY DISTRICT	SEWER SERVICES	PUBLIC WORKS	201100-575-	11/17/2021	12/3/2021	19.18	
909	FORK UNION SANITARY DISTRICT	SEWER SERVICES	LIBRARY	206100-593-	11/17/2021	12/3/2021	19.18	
910	FORK UNION SANITARY DISTRICT	SEWER SERVICES	ADMIN BUILDING	200300-567-	11/17/2021	12/3/2021	26.07	
911	FORK UNION SANITARY DISTRICT	SEWER SERVICES	PUBLIC SAFETY BUILDING	206000-592-	11/17/2021	12/3/2021	29.13	
912	FORK UNION SANITARY DISTRICT	SEWER SERVICES	COURTS BUILDING	200200-565-	11/17/2021	12/3/2021	45.19	
913	FORK UNION SANITARY DISTRICT	SEWER SERVICES	REGISTRAR	201300-577-	12/16/2021	12/30/2021	10.00	
914	FORK UNION SANITARY DISTRICT	SEWER SERVICES	COMMONWEALTH ATTORNEY	201000-574-	12/16/2021	12/30/2021	14.59	
915	FORK UNION SANITARY DISTRICT	SEWER SERVICES	PUBLIC WORKS	201100-575-	12/16/2021	12/30/2021	15.36	
916	FORK UNION SANITARY DISTRICT	SEWER SERVICES	PUBLIC SAFETY BUILDING	206000-592-	12/16/2021	12/30/2021	25.30	

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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
917	FORK UNION SANITARY DISTRICT	SEWER SERVICES	LIBRARY	206100-593-	12/16/2021	12/30/2021	25.30	
918	FORK UNION SANITARY DISTRICT	SEWER SERVICES	PLEASANT GROVE HOUSE	206800-18318-	12/16/2021	12/30/2021	25.30	
919	FORK UNION SANITARY DISTRICT	SEWER SERVICES	ADMIN BUILDING	200300-567-	12/16/2021	12/30/2021	27.60	
920	FORK UNION SANITARY DISTRICT	SEWER SERVICES	COURTS BUILDING	200200-565-	12/16/2021	12/30/2021	42.13	
921	FORK UNION SANITARY DISTRICT	WATER SERVICES	CARYSBROOK BASEBALL FIELD GYM	11259-3956-	11/17/2021	12/3/2021	21.00	
922	FORK UNION SANITARY DISTRICT	WATER SERVICES	CARYSBROOK SOFTBALL FIELD	11266-3955-	11/17/2021	12/3/2021	21.00	
923	FORK UNION SANITARY DISTRICT	WATER SERVICES	PLEASANT GROVE HOUSE	206800-18318-	11/17/2021	12/3/2021	40.60	
924	FORK UNION SANITARY DISTRICT	WATER SERVICES	CARYSBROOK BUILDING	11265-131-	11/17/2021	12/3/2021	58.40	
925	FORK UNION SANITARY DISTRICT	WATER SERVICES	FORK UNION 5725 JAMES MADISON	1112-134-NOV21	11/17/2021	12/3/2021	60.60	
926	FORK UNION SANITARY DISTRICT	WATER SERVICES	FIRE HOUSE 5753 JAMES MADISON	11121-139-	11/17/2021	12/3/2021	90.30	
927	FORK UNION SANITARY DISTRICT	WATER SERVICES	FLUVANNA GYM	11260-143-	11/17/2021	12/3/2021	259.70	
928	FORK UNION SANITARY DISTRICT	WATER SERVICES	CARYSBROOK BASEBALL FIELD	11259-3956-	12/16/2021	12/30/2021	21.00	
929	FORK UNION SANITARY DISTRICT	WATER SERVICES	FLUVANNA GYM	11260-143-NOV	12/16/2021	12/30/2021	21.00	
930	FORK UNION SANITARY DISTRICT	WATER SERVICES	CARYSBROOK SOFTBALL FIELD	11266-3955-	12/16/2021	12/30/2021	21.00	
931	FORK UNION SANITARY DISTRICT	WATER SERVICES	FLUVANNA COUNTY - FORK UNION 5725	11120-134-NOV	12/16/2021	12/30/2021	41.90	
932	FORK UNION SANITARY DISTRICT	WATER SERVICES	FLUVANNA COUNTY - FIRE HOUSE 5753	11121-139-NOV	12/16/2021	12/30/2021	51.80	
933	FORK UNION SANITARY DISTRICT	WATER SERVICES	CARYSBROOK BUILDING 8880 JAMES	11265-131-NOV	12/16/2021	12/30/2021	69.40	
934	JEFFERSON CENTRE PROPERTIES	LEASE/RENT	DECEMBER FLUVANNA COUNTY RENT	12012021	12/1/2021	12/3/2021	3,596.42	
935	REPUBLIC SERVICES #410	MAINTENANCE CONTRACTS	PUBLIC SAFETY CENTER	0410-000733344	11/30/2021	12/30/2021	1,039.30	
936	SHRED-IT USA LLC	LEASE/RENT	COUNTY SHRED INVOICE	8000558906	12/3/2021	12/30/2021	333.14	
937	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	3031 W RIVER ROAD SCOTTSVILLE VA 24590	18646834	11/24/2021	12/3/2021	110.27	
938	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	1224 SALEM CHURCH ROAD PALMYRA VA	18646737	11/24/2021	12/3/2021	166.32	
939	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	CARYSBROOK GYM	17058592	12/1/2021	12/3/2021	768.01	
940	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	EMS TOWER - 14591 JAMES MADISON HWY	18791936	12/1/2021	12/10/2021	21.00	
941	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	E911 TOWER - 1700 BREMO RD	18725372	12/1/2021	12/10/2021	241.80	
942	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	KENTS STORE FIRE DEPARTMENT	18723403	12/1/2021	12/10/2021	1,856.20	
943	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	PALMYRA FIRE HOUSE	18957124	12/18/2021	12/30/2021	14.93	
944	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	621 WILMINGTON ROAD PALMYRA, VA 22963	886562	11/23/2021	12/30/2021	64.26	
945	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	W RIVER RD	17351695	12/8/2021	12/30/2021	634.01	
946	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	CARYSBROOK GYM	18907176	12/15/2021	12/30/2021	669.81	
947	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	5753 JAMES MADISON HIGHWAY FORK	18957123	12/21/2021	12/30/2021	767.50	
948	THE BLOSSMAN COMPANIES, INC.	HEATING SERVICES	PALMYRA FIRE HOUSE	18980156	12/18/2021	12/30/2021	1,728.05	
949	THE SUPPLY ROOM	LEASE/RENT	WATER DELIVERY FROM NOVEMBER 2021	5911930DEC-	12/1/2021	12/10/2021	229.77	
950	THE SUPPLY ROOM	WATER SERVICES	WATER DELIVERY FROM NOVEMBER 2021	5911930DEC-	12/1/2021	12/10/2021	274.50	
951	TIGER FUEL COMPANY	HEATING SERVICES	NEW COURTHOUSE	843045	8/30/2021	12/3/2021	991.18	
952	TIGER FUEL COMPANY	HEATING SERVICES	NEW COURTHOUSE	933808	11/29/2021	12/3/2021	1,319.81	
953	TIGER FUEL COMPANY	HEATING SERVICES	NEW COURTHOUSE	874633	9/30/2021	12/10/2021	1,022.11	
954	TIGER FUEL COMPANY	HEATING SERVICES	CARYSBROOK MT SHED	941710	12/6/2021	12/10/2021	1,047.78	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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955	TIGER FUEL COMPANY	HEATING SERVICES	CARYSBROOK MT SHED	920708	11/15/2021	12/10/2021	1,246.33	
956	TIGER FUEL COMPANY	HEATING SERVICES	NEW COURTHOUSE	902741	10/28/2021	12/10/2021	2,070.10	
957	VIRGINIA UTILITY PROTECTION	MAINTENANCE CONTRACTS	FLUVANNA COUNTY - FLU591	ZZZ210161	11/30/2021	12/10/2021	9.45	
958						Total:	\$41,534.68	
959								
960	PUBLIC WORKS							
961	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	225.86	
962	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	225.86	
963	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	225.86	
964	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	225.86	
965	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	26.94	
966	STAPLES CONTRACT & COMMERCIAL,	OFFICE SUPPLIES	MONTHLY COUNTY BILL	NOV2021	11/27/2021	12/10/2021	41.99	
967	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	121.26	
968	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	121.26	
969	VIRGINIA BUSINESS SYSTEMS	LEASE/RENT	AGREEMENT 003 STANDARD PAYMENT	30563786	11/29/2021	12/17/2021	93.04	
970						Total:	\$1,307.93	
971								
972	CONVENIENCE CENTER							
973	BFI - FLUVANNA TRANSFER STATION	CONTRACT SERVICES	OCTOBER MONTHLY BILL	4347-	9/30/2021	12/7/2021	7,170.02	
974	BFI - FLUVANNA TRANSFER STATION	CONTRACT SERVICES	SEPTEMBER MONTHLY BILL	4347-	10/31/2021	12/7/2021	7,172.69	
975	BFI - FLUVANNA TRANSFER STATION	CONTRACT SERVICES	PUBLIC WORKS NOV. CHARGES	4347-000006662	11/30/2021	12/30/2021	6,919.65	
976	CENTURYLINK	TELECOMMUNICATIONS	CONVENIENCE CENTER	310392717NOV2	11/16/2021	12/3/2021	88.47	
977	DRAPER ADEN ASSOCIATES	PROFESSIONAL SERVICES	PROJECT NO. 2100430	2021080366	8/31/2021	12/3/2021	1,275.00	
978	DRAPER ADEN ASSOCIATES	PROFESSIONAL SERVICES	PROFESSIONAL SERVICES THROUGH NOV.	2021110381	11/30/2021	12/30/2021	5,418.00	
979	HERITAGE CRYSTALCLEAN, LLC	BLDGS EQUIP REP & MAINT	LANDFILL - USED OIL PICKUP	17138843	12/7/2021	12/30/2021	477.00	
980	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	48.45	
981	LOWE'S	OFFICE SUPPLIES	PUBLIC WORKS STATEMENT - 10/25 - 11/24	99000330383	11/25/2021	12/10/2021	92.00	
982	REPUBLIC SERVICES #410	CONTRACT SERVICES	FLUVANNA COUNTY LANDFILL	0410-000732986	11/30/2021	12/30/2021	8,407.50	
983	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	80.57	
984	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	80.57	
985						Total:	\$37,229.92	
986								
987	PUBLIC UTILITIES							
988	AMAZON CAPITAL SERVICES	VEHICLES REP & MAINT	PUBLIC WORKS SUPPLIES	1GWX-4MHR-	12/13/2021	12/30/2021	46.32	
989	CENTURYLINK	TELECOMMUNICATIONS	PALMYRA - PUMP STATION ALARM CALL-OUT	310089744NOV2	11/19/2021	12/3/2021	58.15	
990	CENTURYLINK	TELECOMMUNICATIONS	PALMYRA WASTEWATER TREATMENT PLANT	309433290NOV2	11/19/2021	12/3/2021	77.11	
991	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	PUMP HOUSE - COURTS BUILDING WELL	4501632147-	11/22/2021	12/3/2021	141.06	
992	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	OWENS WELL - 4308 JAMES MADISON HWY	9004200003-	11/24/2021	12/10/2021	124.81	

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993	E.W. THOMAS	CHEMICAL SUPPLIES	FLUVANNA COUNTY ACCOUNT	120821	12/8/2021	12/10/2021	32.86	
994	E.W. THOMAS	GENERAL MATERIALS AND	FLUVANNA COUNTY ACCOUNT	120821	12/8/2021	12/10/2021	24.54	
995	FERGUSON ENTERPRISES INC	GENERAL MATERIALS AND	PUBLIC WORKS SUPPLIES	8721350	12/6/2021	12/30/2021	120.67	
996	INBODEN ENVIRONMENTAL	OUTSIDE ANALYTICAL	CARYSBROOK WWTP - WASTEWATER	74145	12/2/2021	12/10/2021	894.00	
997	INBODEN ENVIRONMENTAL	OUTSIDE ANALYTICAL	CENTRAL WWTP - WASTEWATER	74147	12/2/2021	12/10/2021	1,004.00	
998	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	771.79	
999	LOWE'S	GENERAL MATERIALS AND	PUBLIC WORKS STATEMENT - 10/25 - 11/24	99000330383	11/25/2021	12/10/2021	82.68	
1000	THE ARTINA GROUP, INC.	OFFICE SUPPLIES	PUBLIC WORKS UTILITY BILL PAPER	66342	12/5/2021	12/30/2021	872.75	
1001	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1184437	11/18/2021	12/3/2021	30.68	
1002	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1185561	11/25/2021	12/3/2021	753.24	
1003	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORMS	202 1186651	12/2/2021	12/10/2021	34.86	
1004	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORM SERVICE	202 1187772	12/16/2021	12/30/2021	30.86	
1005	UNIFIRST CORP	LAUNDRY AND DRY	PUBLIC WORKS UNIFORM SERVICE	202 1188870	12/16/2021	12/30/2021	34.86	
1006	USABBLUEBOOK	GENERAL MATERIALS AND	15704 W RIVER RD	790921	11/12/2021	12/3/2021	68.60	
1007	USABBLUEBOOK	GENERAL MATERIALS AND	BREMO WELL SUPPLIES	796004	11/17/2021	12/10/2021	67.90	
1008	USABBLUEBOOK	GENERAL MATERIALS AND	BREMO WELL - MATERIALS	795948	11/17/2021	12/10/2021	68.60	
1009	VERIZON BUSINESS/MCI COMM	TELECOMMUNICATIONS	ADMIN MONTHLY SERVICE BILL	05438115	11/25/2021	12/10/2021	17.87	
1010	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	(\$0.03)	
1011	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	276.86	
1012	VERIZON WIRELESS	TELECOMMUNICATIONS	ADMIN MACHINE TO MACHINE ACTIVITY	9893810863	11/27/2021	12/10/2021	151.77	
1013	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	286.72	
1014	VIRGINIA UTILITY PROTECTION	DUES OR ASSOCIATION	FORK UNION SANITARY DISTRICT - PBFLU1	11210215	11/30/2021	12/10/2021	36.75	
1015	W.W. GRAINGER INC	BLDGS EQUIP REP & MAINT	OHMUHUNDRO WELL SITE - EQUIPMENT	9134648477	11/30/2021	12/10/2021	1,307.28	
1016						Total:	\$7,417.56	
1017								
1018	CARES ACT							
1019	BANK OF AMERICA	GENERAL MATERIALS AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	190.00	
1020	E.W. THOMAS	OTHER OPERATING	SMORE & HAMS - MACAA	121421E.W.	12/14/2021	12/17/2021	2,726.34	
1021						Total:	\$2,916.34	
1022								
1023	VJCCCA							
1024	COMMUNITY ATTENTION CENTER	PROFESSIONAL SERVICES	PAYMENT FOR FLUVANNA YOUTH #1373044	14835	12/14/2021	12/30/2021	195.00	
1025	SATELLITE TRACKING OF PEOPLE LLC	PROFESSIONAL SERVICES	PAYMENT FOR FLUVANNA YOUTH #1373044	STPINV0009569	11/30/2021	12/30/2021	65.10	
1026	XTRA MILE, LLC	PROFESSIONAL SERVICES	20 HOURS AT \$50/HR (BISHOP Y #913648)	OCTOBER2021	11/2/2021	12/30/2021	1,000.00	
1027						Total:	\$1,260.10	
1028								
1029	CSA							
1030	AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	CHILDREN'S SERVICES ACT	1GGY-9DGY-	11/10/2021	12/10/2021	20.98	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
1031	BANK OF AMERICA	CONVENTION AND	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	50.00	
1032	BANK OF AMERICA	FOOD SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	3.58	
1033	BANK OF AMERICA	OFFICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	58.86	
1034	BANK OF AMERICA	OFFICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	21.48	
1035	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	58.95	
1036	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	58.95	
1037	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	58.95	
1038	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	58.95	
1039	STAPLES CONTRACT & COMMERCIAL,	OFFICE SUPPLIES	MONTHLY COUNTY BILL	NOV2021	11/27/2021	12/10/2021	85.02	
1040	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	30.42	
1041						Total:	\$506.14	
1042								
1043	CSA PURCHASE OF SERVICES							
1044	1VISION MENTORING LLC	COMM SVCS		P07925182377	7/31/2021	12/3/2021	480.00	
1045	1VISION MENTORING LLC	COMM SVCS		P09925182682	9/30/2021	12/3/2021	1,350.00	
1046	1VISION MENTORING LLC	COMM SVCS		P11925182046	11/30/2021	12/17/2021	550.00	
1047	AW	COMM SVCS		P11925196576	11/30/2021	12/22/2021	460.00	
1048	AMY Z. COBERT, M.A., CCC-SLP	POS MANDATED SPED-		P11925171437	11/30/2021	12/17/2021	420.00	
1049	AK	COMM SVCS		P07925189043	7/31/2021	12/17/2021	440.00	
1050	AK	COMM SVCS		P09925189252	9/30/2021	12/17/2021	632.50	
1051	AK	COMM SVCS		P07925188844	7/31/2021	12/17/2021	660.00	
1052	AK	COMM SVCS		P10925189249	10/31/2021	12/17/2021	825.00	
1053	AK	COMM SVCS		P07925187145	7/31/2021	12/17/2021	1,045.00	
1054	AK	COMM SVCS		P08925189142	8/31/2021	12/17/2021	1,100.00	
1055	AK	COMM SVCS		P09925188953	9/30/2021	12/17/2021	1,100.00	
1056	AK	COMM SVCS		P09925189154	9/30/2021	12/17/2021	1,100.00	
1057	AK	COMM SVCS		P10925188950	10/31/2021	12/17/2021	1,100.00	
1058	AK	COMM SVCS		P10925189151	10/31/2021	12/17/2021	1,100.00	
1059	AK	COMM SVCS		P10925187278	10/31/2021	12/22/2021	247.50	
1060	AK	COMM SVCS		P10925187377	10/31/2021	12/22/2021	247.50	
1061	AK	COMM SVCS		P09925187281	9/30/2021	12/22/2021	275.00	
1062	AK	COMM SVCS		P09925187380	9/30/2021	12/22/2021	275.00	
1063	AK	COMM SVCS		P08925187372	8/31/2021	12/22/2021	330.00	
1064	AK	COMM SVCS		P09925189382	9/30/2021	12/22/2021	495.00	
1065	AK	COMM SVCS		P08925187273	8/31/2021	12/22/2021	660.00	
1066	AK	COMM SVCS		P10925189379	10/31/2021	12/22/2021	825.00	
1067	AK	COMM SVCS		P08925188974	8/31/2021	12/22/2021	1,100.00	
1068	AM	POS MANDATED FFOP		P11925169160	11/30/2021	12/17/2021	735.00	

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1069	BELIEVE IN ME YOUTH & FAMILY	FF4E-COMM SVCS		P11925190356	11/30/2021	12/17/2021	500.00	
1070	BELIEVE IN ME YOUTH & FAMILY	FF4E-COMM SVCS		P11925190257	11/23/2021	12/17/2021	1,500.00	
1071	BF	POS MANDATED FFOP		P11925192223	11/30/2021	12/10/2021	432.81	
1072	BF	POS MANDATED FFOP		P11925192124	11/23/2021	12/10/2021	556.47	
1073	C.M. MENTORING SERVICES LLC	COMM SVCS		P11925191447	11/30/2021	12/17/2021	1,100.00	
1074	C.M. MENTORING SERVICES LLC	POS MANDATED WSS		P11925189833	11/30/2021	12/10/2021	1,100.00	
1075	C.M. MENTORING SERVICES LLC	POS MANDATED WSS		P11925191565	11/30/2021	12/17/2021	1,100.00	
1076	CARI COOK CHILD AND FAMILY	COMM SVCS		P08925181095	8/31/2021	12/10/2021	455.00	
1077	CARI COOK CHILD AND FAMILY	COMM SVCS		P09925181019	9/30/2021	12/10/2021	585.00	
1078	ELK HILL	POS MANDATED SPED-		P08925186871	8/31/2021	12/3/2021	1,136.10	
1079	ELK HILL	POS MANDATED SPED-		P07925186872	7/31/2021	12/3/2021	3,635.52	
1080	ELK HILL	POS MANDATED SPED-		P10925186873	10/31/2021	12/3/2021	3,862.74	
1081	ELK HILL	POS MANDATED SPED-		P09925186875	9/30/2021	12/3/2021	4,771.62	
1082	FLUVANNA DEPARTMENT OF SOCIAL	COMM SVCS		P09925197286	9/27/2021	12/30/2021	1,497.00	
1083	HARBOR POINT BEHAVIORAL HEALTH	EDUC SVCS CONG CARE		P07925195555	7/22/2021	12/17/2021	2,235.00	
1084	HEALTH CONNECT AMERICA	COMM SVCS		P07925181378	7/31/2021	12/3/2021	868.00	
1085	LIVE OAK MENTORING LLC	COMM SVCS		P09925184420	9/30/2021	12/10/2021	100.00	
1086	LIVE OAK MENTORING LLC	COMM SVCS		P11925186397	11/30/2021	12/10/2021	275.00	
1087	LIVE OAK MENTORING LLC	COMM SVCS		P10925186318	10/31/2021	12/10/2021	935.00	
1088	LIVE OAK MENTORING LLC	COMM SVCS		P11925181698	11/30/2021	12/10/2021	1,000.00	
1089	LIVE OAK MENTORING LLC	COMM SVCS		P11925181799	11/30/2021	12/10/2021	1,250.00	
1090	LIVE OAK MENTORING LLC	COMM SVCS		P11925184800	11/30/2021	12/10/2021	1,650.00	
1091	LIVE OAK MENTORING LLC	COMM SVCS		P11925192748	11/30/2021	12/17/2021	550.00	
1092	LIVE OAK MENTORING LLC	COMM SVCS		P12925184883	12/31/2021	12/30/2021	1,650.00	
1093	LIVE OAK MENTORING LLC	FF4E-COMM SVCS		P11925184985	11/30/2021	12/3/2021	825.00	
1094	LIVE OAK MENTORING LLC	FF4E-COMM SVCS		P12925184987	12/31/2021	12/30/2021	440.00	
1095	LIVE OAK MENTORING LLC	NON-MAND COMM BASED		P09925184332	9/30/2021	12/10/2021	100.00	
1096	LIVE OAK MENTORING LLC	NON-MAND COMM BASED		P11925181531	11/30/2021	12/10/2021	1,000.00	
1097	LIVE OAK MENTORING LLC	POS MANDATED WSS		P11925184734	11/30/2021	12/10/2021	1,045.00	
1098	NATIONAL COUNSELING GROUP	COMM SVCS		P09925173783	9/30/2021	12/3/2021	130.00	
1099	NATIONAL COUNSELING GROUP	COMM SVCS		P08925173796	8/31/2021	12/10/2021	300.00	
1100	NATURAL STEPS LLC	COMM SVCS		P09925186584	9/30/2021	12/3/2021	722.00	
1101	NATURAL STEPS LLC	COMM SVCS		P11925186584	11/30/2021	12/30/2021	902.50	
1102	NATURAL STEPS LLC	COMM SVCS		P11925186685	11/30/2021	12/30/2021	950.00	
1103	PARACLETE THERAPEUTICS LLC	COMM SVCS		P11925184679	11/30/2021	12/3/2021	1,500.00	
1104	PARACLETE THERAPEUTICS LLC	POS MANDATED WSS		P11925185789	11/30/2021	12/3/2021	2,400.00	
1105	PEOPLE PLACES, INC.	COMM SVCS		P11925186075	11/30/2021	12/22/2021	75.00	
1106	PEOPLE PLACES, INC.	POS MAND THER FC 4E		P11925185864	11/30/2021	12/17/2021	3,450.00	

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1107	PEOPLE PLACES, INC.	POS MANDATED WSS		P11925186135	11/30/2021	12/10/2021	1,100.00	
1108	PEOPLE PLACES, INC.	TFC LIC. RES CONG CARE		P10925194163	10/31/2021	12/17/2021	672.00	
1109	PEOPLE PLACES, INC.	TFC LIC. RES CONG CARE		P11925194161	11/30/2021	12/17/2021	672.00	
1110	PEOPLE PLACES, INC.	TFC LIC. RES CONG CARE		P11925185962	11/30/2021	12/17/2021	3,450.00	
1111	THE CHOICE GROUP INC	POS MANDATED WSS		P10925180091	10/31/2021	12/3/2021	156.84	
1112	THE CHOICE GROUP INC	POS MANDATED WSS		P11925195288	11/23/2021	12/30/2021	92.68	
1113	THE CHOICE GROUP INC	POS MANDATED WSS		P11925195389	11/30/2021	12/30/2021	178.23	
1114	THE FAISON CENTER, INC	POS MANDATED SPED-		P09925176776	9/30/2021	12/3/2021	10,478.75	
1115	THE FAISON CENTER, INC	POS MANDATED SPED-		P09925190194	9/27/2021	12/10/2021	328.00	
1116	THE FAISON CENTER, INC	POS MANDATED SPED-		P11925177092	11/30/2021	12/10/2021	5,500.00	
1117	THE FAISON CENTER, INC	POS MANDATED SPED-		P11925176793	11/30/2021	12/10/2021	9,433.25	
1118	THE LAFAYETTE SCHOOL	POS MANDATED SPED-		P10925177774	10/31/2021	12/3/2021	6,000.00	
1119	THE LAFAYETTE SCHOOL	POS MANDATED SPED-		P11925177768	11/30/2021	12/22/2021	5,100.00	
1120	TH	POS MANDATED FFOP		P11925183586	11/30/2021	12/3/2021	1,120.00	
1121	TH	POS MANDATED FFOP		P11925192325	11/30/2021	12/10/2021	224.00	
1122	TH	POS MANDATED FFOP		P11925183426	11/30/2021	12/10/2021	735.00	
1123	UNITED METHODIST FAMILY	POS MAND THER FC 4E		P10925175787	10/31/2021	12/3/2021	3,112.40	
1124	VM	POS MANDATED FFOP		P11925191927	11/30/2021	12/10/2021	672.00	
1125	VM	POS MANDATED FFOP		P11925169328	11/30/2021	12/10/2021	735.00	
1126	VM	POS MANDATED FFOP		P11925169229	11/30/2021	12/10/2021	1,407.00	
1127	VM	POS MANDATED FFOP		P11925191730	11/30/2021	12/10/2021	2,016.00	
1128	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P11925177438	11/30/2021	12/17/2021	9,044.00	
1129	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P11925177339	11/30/2021	12/17/2021	9,277.75	
1130	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P11925177140	11/30/2021	12/17/2021	10,212.75	
1131	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P11925177241	11/30/2021	12/17/2021	10,353.00	
1132	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P08925177166	8/31/2021	12/22/2021	8,597.75	
1133	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P10925177469	10/31/2021	12/22/2021	9,996.00	
1134	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P09925177171	9/30/2021	12/22/2021	10,782.25	
1135	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P07925177167	7/31/2021	12/22/2021	11,118.00	
1136	VIRGINIA INSTITUTE OF AUTISM	POS MANDATED SPED-		P10925177170	10/31/2021	12/22/2021	11,164.75	
1137	XTRA MILE, LLC	COMM SVCS		P10925189980	10/31/2021	12/3/2021	1,000.00	
1138	XTRA MILE, LLC	COMM SVCS		P10925190081	10/31/2021	12/3/2021	1,000.00	
1139	XTRA MILE, LLC	COMM SVCS		P11925191301	11/30/2021	12/10/2021	312.50	
1140	XTRA MILE, LLC	COMM SVCS		P11925190502	11/30/2021	12/10/2021	375.00	
1141	XTRA MILE, LLC	COMM SVCS		P11925190703	11/30/2021	12/10/2021	375.00	
1142	XTRA MILE, LLC	COMM SVCS		P11925179604	11/30/2021	12/10/2021	750.00	
1143	XTRA MILE, LLC	COMM SVCS		P11925183905	11/30/2021	12/10/2021	750.00	
1144	XTRA MILE, LLC	COMM SVCS		P11925191206	11/23/2021	12/10/2021	937.50	

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1145	XTRA MILE, LLC	COMM SVCS		P11925179508	11/30/2021	12/10/2021	1,000.00	
1146	XTRA MILE, LLC	COMM SVCS		P11925189909	11/30/2021	12/10/2021	1,000.00	
1147	XTRA MILE, LLC	COMM SVCS		P11925190010	11/30/2021	12/10/2021	1,000.00	
1148	XTRA MILE, LLC	COMM SVCS		P11925190807	11/30/2021	12/10/2021	1,000.00	
1149	XTRA MILE, LLC	COMM SVCS		P11925179211	11/30/2021	12/10/2021	1,100.00	
1150	XTRA MILE, LLC	COMM SVCS		P11925190412	11/23/2021	12/10/2021	1,125.00	
1151	XTRA MILE, LLC	COMM SVCS		P11925190613	11/23/2021	12/10/2021	1,125.00	
1152	XTRA MILE, LLC	COMM SVCS		P11925179317	11/30/2021	12/10/2021	1,250.00	
1153	XTRA MILE, LLC	COMM SVCS		P11925183616	11/30/2021	12/10/2021	1,250.00	
1154	XTRA MILE, LLC	COMM SVCS		P11925183714	11/30/2021	12/10/2021	1,250.00	
1155	XTRA MILE, LLC	COMM SVCS		P11925183815	11/30/2021	12/10/2021	1,250.00	
1156	XTRA MILE, LLC	FF4E-COMM SVCS		P11925191121	11/30/2021	12/10/2021	187.50	
1157	XTRA MILE, LLC	FF4E-COMM SVCS		P11925191022	11/23/2021	12/10/2021	562.50	
1158	XTRA MILE, LLC	FF4E-COMM SVCS		P11925192658	11/30/2021	12/17/2021	250.00	
1159	XTRA MILE, LLC	FF4E-COMM SVCS		P11925190959	11/30/2021	12/17/2021	1,000.00	
1160	XTRA MILE, LLC	NON-MAND COMM BASED		P11925184288	11/30/2021	12/3/2021	1,000.00	
1161	XTRA MILE, LLC	POS MANDATED WSS		P11925184090	11/30/2021	12/3/2021	1,150.00	
1162	XTRA MILE, LLC	POS MANDATED WSS		P11925184136	11/30/2021	12/10/2021	1,250.00	
1163						Total:	\$231,116.66	
1164								
1165	PARKS & RECREATION							
1166	ATWOOD REPROGRAPHICS, INC	PRINTING AND BINDING	PARKS & REC - MAP PRINTING-REVISED	161013	11/3/2021	12/10/2021	1,048.40	
1167	AUTOMATED OFFICE SYSTEMS	LEASE/RENT	FORK UNION COMMUNITY CENTER 9/30 -	097929	11/28/2021	12/3/2021	28.50	
1168	AUTOMATED OFFICE SYSTEMS	LEASE/RENT	FORK UNION COMMUNITY CENTER 10/31/21 -	098092	11/30/2021	12/3/2021	29.33	
1169	AUTOMATED OFFICE SYSTEMS	LEASE/RENT	FORK UNION COMMUNITY CENTER 10/30 -	097930	11/30/2021	12/3/2021	129.00	
1170	BANK OF AMERICA	RECREATIONAL SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	117.34	
1171	BANK OF AMERICA	RECREATIONAL SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	8.72	
1172	BANK OF AMERICA	RECREATIONAL SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	56.85	
1173	BANK OF AMERICA	RECREATIONAL SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	134.45	
1174	BANK OF AMERICA	RECREATIONAL SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	285.55	
1175	BANK OF AMERICA	RECREATIONAL SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	287.21	
1176	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	0.33	
1177	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	451.11	
1178	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	451.44	
1179	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	34.46	
1180	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	34.46	
1181	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	241.21	
1182	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	312.22	

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2								
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
1183	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	34.46	
1184	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	34.46	
1185	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	138.25	
1186	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	138.25	
1187	CENTURYLINK	TELECOMMUNICATIONS	PARKS & REC	309373828NOV2	11/16/2021	12/3/2021	58.30	
1188	CINTAS	CONTRACT SERVICES	PARKS & REC - MEDICAL SUPPLIES	5088547653	12/21/2021	12/30/2021	157.40	
1189	E.W. THOMAS	RECREATIONAL SUPPLIES	MERCHANDISE PURCHASE OCT & DEC	121621EW	12/16/2021	12/30/2021	485.55	
1190	HAROLD BOYD	PROFESSIONAL SERVICES	LITTLE TYKES & MIGHTY MITES	006	12/6/2021	12/10/2021	1,120.00	
1191	HEATHER ANTONACCI	PROFESSIONAL SERVICES	HORSEBACK RIDING CLASS	005	12/6/2021	12/10/2021	980.00	
1192	IMAGE DESIGNERS, INC.	UNIFORM/WEARING APPAREL	PARKS & REC UNIFORM	082720	11/17/2021	12/3/2021	133.35	
1193	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	165.64	
1194	MOJOHNS, INC.	CONTRACT SERVICES	EQUESTRIAN FIELD 11/1 - 11/30	137440	12/1/2021	12/10/2021	80.00	
1195	MOJOHNS, INC.	CONTRACT SERVICES	POLE BARN PLEASANT GROVE - 11/1 - 11/30	137441	12/1/2021	12/10/2021	80.00	
1196	RANGELAND GLO-WRAP	RECREATIONAL SUPPLIES	PARKS & REC - MIGHTY MITES & LITTLE	4663	12/8/2021	12/30/2021	67.66	
1197	SAM'S CLUB	RECREATIONAL SUPPLIES	PARKS AND REC SUPPLIES	09254	12/6/2021	12/10/2021	107.40	
1198	SAM'S CLUB	RECREATIONAL SUPPLIES	SENIOR & PG SUPPLIES	120821- SENIOR	12/7/2021	12/10/2021	303.73	
1199	SAM'S CLUB	RECREATIONAL SUPPLIES	12/14/21 WALMART PURCHASE 134900685139	122121SAMS	12/14/2021	12/30/2021	46.73	
1200	SAM'S CLUB	RECREATIONAL SUPPLIES	12/16/21 SAM'S CLUB PURCHASE	122021SAMS	12/16/2021	12/30/2021	56.98	
1201	STAPLES CONTRACT & COMMERCIAL,	OFFICE SUPPLIES	MONTHLY COUNTY BILL	NOV2021	11/27/2021	12/10/2021	163.53	
1202	SUSAN VICKERS	PROFESSIONAL SERVICES	BOOT CAMP - 11/10/21 - 12/22/21	7	12/21/2021	12/30/2021	171.50	
1203	THE SUPPLY ROOM	RECREATIONAL SUPPLIES	WATER DELIVERY NOV '21	4452646-0	12/3/2021	12/30/2021	65.88	
1204	UPS	POSTAL SERVICES	WEEKLY SERVICE CHARGE	0000Y7646Y491	12/4/2021	12/17/2021	15.45	
1205	UPS	POSTAL SERVICES	WEEKLY SERVICE CHARGE	0000Y7646Y501	12/11/2021	12/30/2021	15.45	
1206	VERIZON BUSINESS/MCI COMM	TELECOMMUNICATIONS	ADMIN MONTHLY SERVICE BILL	05438115	11/25/2021	12/10/2021	17.86	
1207	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	202.10	
1208	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	202.10	
1209						Total:	\$8,692.61	
1210								
1211	LIBRARY							
1212	AMAZON.COM	BOOKS/PUBLICATIONS	LIBRARY MONTHLY STATEMENT	012190 1-NOV21	11/10/2021	12/3/2021	9,089.65	
1213	AMAZON.COM	FURNITURE & FIXTURES	LIBRARY MONTHLY STATEMENT	012190 1-NOV21	11/10/2021	12/3/2021	887.02	
1214	AMAZON.COM	OFFICE SUPPLIES	LIBRARY MONTHLY STATEMENT	012190 1-NOV21	11/10/2021	12/3/2021	444.73	
1215	BANK OF AMERICA	BOOKS/PUBLICATIONS	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	10.00	
1216	BANK OF AMERICA	MAINTENANCE CONTRACTS	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	157.40	
1217	CENTURYLINK	TELECOMMUNICATIONS	LIBRARY STATEMENT - INTERNET SERVICES	254362692	12/1/2021	12/17/2021	558.07	
1218	EPSON	OFFICE SUPPLIES	LIBRARY LABELS	SINV0020263	12/3/2021	12/30/2021	248.50	
1219	GALE	BOOKS/PUBLICATIONS	LIBRARY - COME BACK TO ME	76182625	11/15/2021	12/3/2021	26.34	
1220	GALE	BOOKS/PUBLICATIONS	LIBRARY - MERCY	76204072	11/19/2021	12/3/2021	52.69	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021					
2			To Date: 12/31/2021					
4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
1221	GALE	BOOKS/PUBLICATIONS	PUBLIC LIBRARY - THE CHRISTMAS BOOK	76193837	11/17/2021	12/3/2021	53.53	
1222	GALE	BOOKS/PUBLICATIONS	LIBRARY - A LITTLE CHRISTMAS	76198208	11/18/2021	12/3/2021	55.23	
1223	GALE	BOOKS/PUBLICATIONS	LIBRARY ADD - AN AMISH SCHOOL ROOM	76246186	11/30/2021	12/10/2021	27.19	
1224	GALE	BOOKS/PUBLICATIONS	LIBRARY BOOK PURCHASE	76267514	12/6/2021	12/17/2021	93.47	
1225	GALE	BOOKS/PUBLICATIONS	LIBRARY BOOK ORDER	76282334	12/9/2021	12/17/2021	123.22	
1226	MICROMARKETING LLC	BOOKS/PUBLICATIONS	LIBRARY - SPANISH EDITIONS	859636	8/17/2021	12/3/2021	163.73	
1227	MICROMARKETING LLC	BOOKS/PUBLICATIONS	LIBRARY BOOK ORDER	871900	12/9/2021	12/17/2021	79.97	
1228	OVERDRIVE	BOOKS/PUBLICATIONS	ACCT; 3100-0005 - LIBRARY EBOOK	03100DA214711	11/29/2021	12/3/2021	12.99	
1229	OVERDRIVE	BOOKS/PUBLICATIONS	ACCT 3100-1001 LIBRARY EBOOK	03100DA214672	11/23/2021	12/3/2021	87.50	
1230	OVERDRIVE	BOOKS/PUBLICATIONS	ACCT 3100-1001 - LIBRARY EBOOK & AUDIO	03100DA214596	11/16/2021	12/3/2021	130.00	
1231	OVERDRIVE	BOOKS/PUBLICATIONS	ACCT 3100-0005 LIBRARY EBOOK & AUDIO	03100DA214596	11/16/2021	12/3/2021	349.25	
1232	OVERDRIVE	BOOKS/PUBLICATIONS	CUSTOMER: 3100-1001 - EBOOK	03100DA214733	11/30/2021	12/10/2021	27.50	
1233	OVERDRIVE	BOOKS/PUBLICATIONS	ACCT: 3100-0005 LIBRARY ADDITIONS	03100CO218792	12/7/2021	12/17/2021	390.75	
1234						Total:	\$13,068.73	
1235								
1236	COUNTY PLANNER							
1237	BANK OF AMERICA	DUES OR ASSOCIATION	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	100.00	
1238	BANK OF AMERICA	OFFICE SUPPLIES	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	1,196.00	
1239	BANK OF AMERICA	OTHER OPERATING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	24.35	
1240	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	202.10	
1241	BANK OF AMERICA	SUBSISTENCE & LODGING	P CARD PURCHASES FOR 10/1/21 - 10/31/21	0987-OCT21	11/1/2021	12/1/2021	404.20	
1242	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	325.86	
1243	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	332.11	
1244	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	325.86	
1245	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	325.86	
1246	FLUVANNA REVIEW	ADVERTISING	FKUVANNA CO. PLANNING	2021F47-16	11/25/2021	12/10/2021	149.50	
1247	FLUVANNA REVIEW	ADVERTISING	FLUVANNA CO. PLANNING COMMISSION	2021F48-14	12/2/2021	12/10/2021	149.50	
1248	JAMES RIVER SOLUTIONS	VEHICLE FUEL	ADMIN & PARKS & REC. NOVEMBER 2021	113021	12/1/2021	12/10/2021	96.43	
1249	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	80.84	
1250	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	80.84	
1251	VIRGINIA BUSINESS SYSTEMS	LEASE/RENT	AGREEMENT 003 STANDARD PAYMENT	30563785	11/29/2021	12/17/2021	93.04	
1252						Total:	\$3,886.49	
1253								
1254	ECONOMIC DEVELOPMENT							
1255	BANK OF AMERICA	CONVENTION AND	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	50.00	
1256	BANK OF AMERICA	OFFICE SUPPLIES	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	25.04	
1257	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	35.18	
1258	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	57.89	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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1259	BANK OF AMERICA	OTHER OPERATING	P-CARD PURCHASES NOVEMBER 2021	NOV2021	11/30/2021	12/30/2021	75.00	
1260	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	METER USAGE 6/1-8/31 & CONTRACT	27344852	9/12/2021	12/30/2021	58.95	
1261	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	contract charge 12/01/21 - 12/31/21	27800265	12/12/2021	12/30/2021	58.95	
1262	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 10/01/21 - 10/31/21	27499943	10/12/2021	12/30/2021	58.95	
1263	CANON FINANCIAL SERVICES, INC.	LEASE/RENT	CONTRACT CHARGE 11/01/21 - 11/30/21	27652243	11/11/2021	12/30/2021	58.95	
1264	DIRECTIONAL SIGNING PROGRAM, LLC	MARKETING	P.G. PARK & MUSEUM. CONTRACT 10/01/21 -	C-160490	10/1/2021	12/3/2021	900.00	
1265	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY WIDE ZERIZON BILL	112921VZ	11/29/2021	12/3/2021	40.42	
1266	VERIZON WIRELESS	TELECOMMUNICATIONS	COUNTY BILL DEC 21	9895445431	12/22/2021	12/30/2021	40.42	
1267						Total:	\$1,459.75	
1268								
1269	VA COOPERATIVE EXTENSION							
1270	KIMBERLY MAYO	OTHER OPERATING	LASERWORKS - ACHEIVEMENT NIGHT	113021	11/30/2021	12/3/2021	150.00	
1271	KIMBERLY MAYO	OTHER OPERATING	VSI & EW THOMAS	122121KM	12/20/2021	12/30/2021	87.39	
1272	RICK HERNANDEZ	AGRICULTURAL SUPPLIES	REIMBURSMENT FIR LOWES BAT BOX	120121RH	12/1/2021	12/10/2021	17.06	
1273	RICK HERNANDEZ	AGRICULTURAL SUPPLIES	REIMBURSMENT FOR BAT BOX PROGRAM	120621RH	12/1/2021	12/30/2021	23.10	
1274	U.S. POSTAL SERVICE	LEASE/RENT	USPS 12 MONTH BOX RENTAL	120121USPS	12/1/2021	12/3/2021	130.00	
1275						Total:	\$407.55	
1276								
1277						100 GENERAL FUND	Fund Total:	\$703,918.14
1278	Fund # - 302 CAPITAL IMPROVEMENT							
1279	FACILITIES CAP PROJ							
1280	NOLAND	CONTRACT SERVICES	AQUASTATS - PUBLIC WORKS	555611 01	11/30/2021	12/30/2021	85.03	
1281	RAINGUARD ROOFING LLC	CONTRACT SERVICES	LIBRARY- REPAIRS	3491	11/30/2021	12/3/2021	825.00	
1282						Total:	\$910.03	
1283								
1284	PUBLIC WORKS CAPITAL PROJECT							
1285	DEWBERRY ENGINEERS INC.	PROFESSIONAL SERVICES	PA4-ASSET MANAG. PLAN & BILLING RATE	1961942	5/28/2021	12/30/2021	1,914.00	
1286	DEWBERRY ENGINEERS INC.	PROFESSIONAL SERVICES	PA4-ASSET MANAG. PLAN & BILLING RATE	2020522	9/13/2021	12/30/2021	2,000.00	
1287	DEWBERRY ENGINEERS INC.	PROFESSIONAL SERVICES	PA5- WATER & WASTE MASTER PLAN	1961943	5/28/2021	12/30/2021	2,630.00	
1288	DEWBERRY ENGINEERS INC.	PROFESSIONAL SERVICES	PA4-ASSET MANAG. PLAN & BILLING RATE	2007877	8/23/2021	12/30/2021	4,782.50	
1289						Total:	\$11,326.50	
1290								
1291	SCHOOL OPS & MAINT CAP PROJ							
1292	MARSHALL CONTRACTING &	CONTRACT SERVICES	FY2022 CIP - ABRAMS UPGRADES - 21ABR	100721FCPS	12/16/2021	12/17/2021	32,850.00	
1293						Total:	\$32,850.00	
1294								
1295	ECONOMIC DEV CAP PROJ							
1296	DRAPER ADEN ASSOCIATES	CONTRACT SERVICES	FORK UNION DUE DILIGECE 11/30/21	2021110218	11/30/2021	12/30/2021	3,630.00	

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1	County of Fluvanna Accounts Payable List		From Date: 12/1/2021 To Date: 12/31/2021					
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4	Vendor Name	Charge To	Description	Invoice Number	Invoice Date	Check Date	Amount	
1297						Total:	\$3,630.00	
1298								
1299				302 CAPITAL IMPROVEMENT		Fund Total:	\$48,716.53	
1300	Fund # - 401 DEBT SERVICE							
1301	DEBT SERVICE - COUNTY							
1302	U.S. BANK	ADMINISTRATIVE FEES	VIRGINIA OBLIGATION SCHOOL BOND	6309933	11/4/2021	12/3/2021	1,250.00	
1303	US BANK, NA	ADMINISTRATIVE FEES	PAYING AGENT/REGIST/TRSFR AGNT	6333375	11/24/2021	12/17/2021	775.00	
1304						Total:	\$2,025.00	
1305								
1306				401 DEBT SERVICE		Fund Total:	\$2,025.00	
1307	Fund # - 502 SEWER							
1308	PALMYRA SEWER OPER EXPENSES							
1309	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	PALMYRA AREA WWTP	7129524547-	11/22/2021	12/3/2021	1,085.06	
1310	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	PALMYRA SEWAGE PUMP STATION	7712348080-	11/29/2021	12/10/2021	55.78	
1311	INBODEN ENVIRONMENTAL	OUTSIDE ANALYTICAL	PALMYRA WWTP - WASTEWATER	74146	12/2/2021	12/10/2021	894.00	
1312						Total:	\$2,034.84	
1313								
1314				502 SEWER		Fund Total:	\$2,034.84	
1315	Fund # - 505 FORK UNION SANITARY DISTRICT							
1316	FORK UNION SANITARY DISTRICT							
1317	ALEXANDER WOOD YARD	WATER RECEIVABLES	UB 11100 5603 JAMES MADISON	91767	12/13/2021	12/17/2021	42.00	
1318	FUMA- CAREBY HALL	WATER RECEIVABLES	UB 10485 96 CAREBY	91766	12/13/2021	12/17/2021	21.00	
1319	FUMA	WATER RECEIVABLES	UB 10285 3456 JAMES MADISON	91768	12/13/2021	12/17/2021	21.00	
1320	USDA RURAL DEVELOPMENT	RDA BOND PAYABLE	FUSD DEBT SERVICE	122521	12/25/2021	12/25/2021	3,965.44	
1321						Total:	\$4,049.44	
1322								
1323	FUSD OPERATIONAL EXPENSES							
1324	BUDGET ELECTRICAL & MECHANICAL,	BLDGS EQUIP REP & MAINT	PUBLIC WORKS WELL PUMP MOTOR	2768	9/17/2021	12/30/2021	5,276.00	
1325	CENTURYLINK	TELECOMMUNICATIONS	FUSD - SANITARY DISTRICT - OFFICE - FAX	309719161NOV2	11/16/2021	12/3/2021	255.16	
1326	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	WEST BOTTOM WELL - 2622 BREMO RD	7224360003-	11/15/2021	12/3/2021	8.46	
1327	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	WEST BOTTOM WELL - 2622 BEMO RD	7224360003-	11/29/2021	12/10/2021	9.51	
1328	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	MELTON WELL - RT15	9594215007-	11/23/2021	12/10/2021	158.08	
1329	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	BREMO WELL - RT 666	8434345008-	11/23/2021	12/10/2021	164.05	
1330	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	OMUHUNDRO WELL - WTP - TANK - 14349 W.	9346182505-	11/23/2021	12/10/2021	669.97	
1331	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	MORRIS WELL / WTP - 41 EMERALD RD	9501772108-	11/23/2021	12/10/2021	1,198.69	
1332	DOMINION VIRGINIA POWER	ELECTRICAL SERVICES	FUSD OFFICE - 15704 W RIVER RD	886630000-	11/29/2021	12/17/2021	366.90	
1333	E.W. OWEN	LEASE/RENT	PUBLIC WORKS - WELL RENT	12012021	12/1/2021	12/3/2021	150.00	
1334	MOJOHNS, INC.	PURCHASE OF SERVICES	FLUVANNA COUNTY WASTE WATER	136967	12/1/2021	12/10/2021	60.00	

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1335	MOJOHNS, INC.	PURCHASE OF SERVICES	LANDFILL - 10/1/21 - 11/30/21 + DELIVERY FEE	137131	12/1/2021	12/10/2021	187.67	
1336	PAYNE & HODOUS, LLC.	PROFESSIONAL SERVICES	FUSD	150922	12/1/2021	12/30/2021	690.00	
1337	RAFALY ELECTRICAL CONTRACTORS,	PURCHASE OF SERVICES	BREMO WATER SYSTEM	9472	12/3/2021	12/10/2021	1,250.00	
1338	REPUBLIC SERVICES #410	BLDGS EQUIP REP & MAINT	FORK UNION SANITARY DISTRICT	0410-000732740	11/30/2021	12/30/2021	212.98	
1339	SYDNOR HYDRO, INC.	BLDGS EQUIP REP & MAINT	FORK UNION SANITARY DISTRICT - PARTIAL	46481	10/31/2021	12/3/2021	81,679.40	
1340	SYDNOR HYDRO, INC.	PROFESSIONAL SERVICES	FORK UNION SANITARY DISTRICT	46643	11/30/2021	12/30/2021	77,642.00	
1341	USABBLUEBOOK	GENERAL MATERIALS AND	BREMO WELL - SUPPLIES	800168	11/22/2021	12/10/2021	142.70	
1342	USABBLUEBOOK	GENERAL MATERIALS AND	BREMO WELL SUPPLIES	796004	11/17/2021	12/10/2021	149.94	
1343	USDA RURAL DEVELOPMENT	REDEMPTION OF INTEREST	FUSD DEBT SERVICE	122521	12/25/2021	12/25/2021	994.56	
1344	VA INFORMATION TECHNOLOGIES	TELECOMMUNICATIONS	VA INFORMATION ECHNOLOGY AGENCY -	T445099	12/1/2021	12/10/2021	86.62	
1345						Total:	\$171,352.69	
1346								
1347				505 FORK UNION SANITARY		Fund Total:	\$175,402.13	
1348	Fund # - 510 ZION XR WATER & SEWER							
1349	ZION XR W&S EXPENSES							
1350	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	WWPS- JAMES MADISON HWY	275904-015-	11/30/2021	12/10/2021	395.00	
1351	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	WWPS - RICHMOND (PRISON BOOSTER	275904-017-	11/30/2021	12/10/2021	569.36	
1352	CENTRAL VA ELECTRIC COOP	ELECTRICAL SERVICES	WATER TANK-JAMES MADISON HWY	275904-013-	11/30/2021	12/10/2021	584.35	
1353	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50132452 PA 10-ZXR WL ADDL	2035917	11/26/2021	12/17/2021	350.00	
1354	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50128075 PA 7-ZION CROSSROADS	2035915	11/26/2021	12/17/2021	1,710.00	
1355	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50132450 - WATER/SEWET CONA/INSP	2022609	10/29/2021	12/17/2021	2,189.75	
1356	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50132452 PA 10-ZXR WL ADDL	2022610	10/29/2021	12/17/2021	3,667.50	
1357	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB:50128075 PA 7-ZION CROSSROADS	2022608	10/29/2021	12/17/2021	3,785.00	
1358	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB 50110557 - TASK 15 WWPS & WBPS -	2027101	10/29/2021	12/17/2021	4,981.50	
1359	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50128075 PA 7-ZION CROSSROADS	2009646	9/24/2021	12/17/2021	4,985.00	
1360	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50132450 - WATER/SEWER CONA/INSP	2035916	11/26/2021	12/17/2021	6,253.73	
1361	DEWBERRY ENGINEERS INC.	CONSTRUCTION	JOB: 50132450 WATER/SEWER CONA/INSP	2009648	9/24/2021	12/17/2021	11,416.20	
1362	DEWBERRY ENGINEERS INC.	PROFESSIONAL SERVICES	WATER & WASTE MASTER PLAN - ZION	2009635	9/13/2021	12/30/2021	1,516.60	
1363	DEWBERRY ENGINEERS INC.	PROFESSIONAL SERVICES	WATER & WASTE MASTER PLAN - ZION	1996480	8/27/2021	12/30/2021	3,232.50	
1364	FORESIGHT SURVEY P.C.	CONSTRUCTION	21.267 - 3941 RICHMOND RD	1400	9/13/2021	12/10/2021	1,300.00	
1365	PAYNE & HODOUS, LLC.	COUNTY ATTY LEGAL- REAL	GENERAL , PROCURMENT, SPECIAL, REAL	150920	12/1/2021	12/30/2021	2,633.00	
1366	VIRGINIA DEPT OF CORRECTIONS	CONSTRUCTION	WATER & WASTEWATER 9/1/21 - 9/30/21	50WR2274304	10/7/2021	12/10/2021	353.80	
1367	VIRGINIA DEPT OF CORRECTIONS	CONSTRUCTION	OCT 1- 31, 2021 - WATER & WASTEWATER	50WR2274305	11/4/2021	12/30/2021	190.17	
1368						Total:	\$50,113.46	
1369								
1370				510 ZION XR WATER & SEWER		Fund Total:	\$50,113.46	
1371				Total Expenditures by Fund:			\$982,210.10	

FLUVANNA COUNTY BOARD OF SUPERVISORS

AGENDA ITEM STAFF REPORT

TAB F

MEETING DATE:	January 19, 2022				
AGENDA TITLE:	ZXR Construction Services Project Agreement #14				
MOTION(s):	I move the Board of Supervisors approve Project Agreement #14 between Fluvanna County and Dewberry Engineers Inc. for additional services associated with Zion Crossroads Water & Sewer lines– Construction Administration and Inspection Services year 3 Part 2 totaling \$20,360.00, and further authorize the County Administrator to execute the agreement subject to approval as to form by the County Attorney.				
STRATEGIC INITIATIVE?	Yes X	No	If yes, list initiative(s):		C9
AGENDA CATEGORY:	Public Hearing	Action Matter	Presentation	Consent Agenda X	Other
STAFF CONTACT(S):	Cyndi Toler, Purchasing Officer				
PRESENTER(S):	Cyndi Toler, Purchasing Officer				
RECOMMENDATION:	Approve				
TIMING:	Routine				
DISCUSSION:	<ul style="list-style-type: none"> Due to delays in construction, there is an additional requirement for construction administration services This proposal covers services through March 31, 2022. Should the duration of the construction contract change, Dewberry's fee for construction administration and inspection will be modified accordingly. Project Agreement #14 with Dewberry Engineers Inc. is required to complete Construction Administration for the Zion Crossroads Water & Sewer Lines Construction Administration <ul style="list-style-type: none"> Review and approve all shop drawings, equipment drawings, and material standards submitted by the CONTRACTOR and provide copies of each to the OWNER. Furnish consulting services during construction to answer any construction or contractual problems and determine that the work is proceeding in accordance with contract documents. Visit the site during construction, once per month after the monthly progress meeting, reviewing the work in detail with the CONTRACTOR and inspector. Review and approve monthly and final payments to the CONTRACTOR. Attend monthly progress/pay request meetings to discuss the status of the work. 				
FISCAL IMPACT:	Budgeted in the ZXR Project				
POLICY IMPACT:	N/A				
LEGISLATIVE HISTORY:	N/A				
ENCLOSURES:	Project Agreement #14				
REVIEWS COMPLETED:	Legal X	Finance X	Purchasing X	HR	Other

This Project Agreement #14 and Agreement Amendment (the Project Agreement”) made this ____ day of _____, 202__, between Fluvanna County, Virginia (the “County”), a political subdivision of the Commonwealth of Virginia, and Dewberry Engineers Inc. (the “Consultant”), a New York corporation authorized to transact business in Virginia, is an addendum to that TERM CONTRACT BETWEEN COUNTY AND ARCHITECT/ENGINEER FOR PROFESSIONAL SERVICES dated the 31st day of October, 2018 (including all exhibits, and as modified by any amendments or addendums thereto the “Agreement”). All defined terms in the Agreement shall have the same meaning in this Project Agreement unless the context used herein requires otherwise.

Whereas, pursuant to the Agreement the County shall issue written task orders to the Consultant as services are needed;

Whereas, the County and Consultant previously entered into that Project Agreement 8 (“PA8”) and this Project Agreement is necessary to further extend the construction administration services;

Whereas, PA8 was to cover a period of construction administration services through July 31, 2021, however fees were based on hourly work subject to certain not to exceed limits set forth in PA8, and the fees allocated to construction administration were sufficient to cover more time than anticipated and covered approximately through and including December 15, 2021; and in addition the inspection services fees were also based on hourly work subject to certain not to exceed limits set forth in PA8, and due to delays, such fees have not been exhausted and the parties wish to extend the deadline for completion of inspection services under PA8 to March 31, 2022;

Whereas, the Consultant submitted a detailed Summary of its proposals “RE: Zion Crossroads Water and Sewer System, RFP#2015-03; and RFP 2019-01 (as to Construction Phase Year 3 Part 2 services only), Professional Engineering Services Scope of Work and Fee Proposal Summary” for the Construction Phase Year 1, Construction Phase Year 2 and Construction Year Phase 3 services based on revised designs and a revised Project schedule in a letter to the County dated December 13, 2018, revised by that letter dated March 5, 2020, further revised by that letter dated August 18, 2020, further revised by that letter dated April 12, 2021 and which was further revised by that letter dated December 21, 2021 attached hereto as **Exhibit 1 (the “Summary Letter”)** and made a material part hereof;

Whereas, the County desires that the Consultant complete the work set forth in the Summary Letter as “Construction Phase Year 3 Part 2 (28 months to 36 months)”, as more specifically detailed in a letter dated December 21, 2021 “RE: Zion Crossroads Water and Sewer System, Construction Services Scope of Work and Fee Proposal – Year 3 Part 2” based on delays in construction and a revised Project schedule attached hereto as **Exhibit 2 (the “Services Letter”)** and made a material part hereof, and as described in the Agreement (the services described in the Summary Letter, Services Letter, and Agreement described in this paragraph are collectively referred to as the “Task Order”); and

Whereas, the Consultant desires to accept the Task Order and complete all work and

services necessary and related thereto.

For good and valuable consideration, the parties hereby agree as follows:

ARTICLE I: THE AGREEMENT

The foregoing recitations are incorporated by reference into this Project Agreement.

This Project Agreement is an addendum to and made a material part of the Agreement. The parties hereto agree that except as specifically and expressly modified hereby that Agreement remains in full force and effect and the provisions of the Agreement are incorporated herein and are a material part hereof.

ARTICLE II: TASK ORDER

Consultant shall provide all work and services as needed and necessary or desired to complete Services on the Task Order consistent with all provisions of this Project Agreement, Exhibit 1 and the Agreement.

The County's project manager for technical inquiries relating to this Project Agreement shall be:

Mr. Eric Dahl
County Administrator/Director of Finance
132 Main Street
Palmyra, VA 22963
Phone: (434) 591-1912
E-mail: edahl@fluvannacounty.org

Billing inquiries should be directed to Cyndi Toler, Purchasing Officer, whose contact information appears below in Article VI.

ARTICLE III: EXHIBITS AND RESOLVING CONFLICTS

The rights and duties of the County and Consultant applicable to the County's projects under this Project Agreement are set forth in the following Agreement Documents:

- (i) This Project Agreement;
- (ii) Exhibit 1 hereto;
- (iii) The Agreement including exhibits thereto; and
- (iv) The County of Fluvanna General Terms Conditions and Instructions to Bidders and Contractors, being a portion of Attachment 1 which is attached to and a part of the Agreement.

In addition, this Task Order is related to the Zion Crossroads Water and Sewer Line System and the work provided by Consultant under that TERM AGREEMENT FOR PROFESSIONAL

SERVICES dated the 12th day of November, 2015 between the County and Consultant (the “RFP 2015-03 Contract”). The terms, requirements and provisions of that RFP 2015-03 Contract are incorporated herein by reference as a material part of this Project Agreement and the work on the Task Order shall in all respects consistent with the terms, requirements, and provisions of the RFP 2015-03 Contract, except that the pricing as set forth in the Agreement shall control.

Whenever possible, the terms of the above Agreement Documents shall be read together, however in the event of a conflict, the order of preference above shall govern which Agreement Document will control. In other words, (i) shall control over (ii) to (iii) above, and (ii) shall control over (iii). For purposes of a conflict, RFP 2015-03 Contract shall be item “(v)” and shall be treated as one of the “Agreement Documents”.

ARTICLE IV: FEES

The Consultant shall receive up to a not to exceed total of TWENTY THOUSAND THREE HUNDRED SIXTY AND NO/100 (\$20,360.00) for that portion of the Services described as the construction administration services and set forth in Exhibit 2 hereto; based on actual time worked; and which shall be payable by the County MONTHLY based on actual time worked upon proper invoice by the Consultant as described herein.

The flat fees are not-to exceed amounts. The hourly fees up to the not-to-exceed total per task shall be payable by the County upon proper invoice by the Consultant as described herein. The Consultant shall submit invoices to the County monthly for services actually rendered on each subtask and upon final completion. The invoice shall describe the services rendered to date with specificity. The Consultant will be paid within forty-five (45) days of receipt of a valid invoice following final acceptance of all work by the County. No invoice may be provided by the Consultant to the County until the items or services purchased have been delivered to, inspected by and accepted by the County. In no event shall the fees invoiced or due under this Project Agreement exceed \$20,360.00 total. In no event shall the final payments be made until the Project and Task Order are fully completed to the sole satisfaction of the County. Notwithstanding anything to the contrary contained in Exhibit 1 or 2 hereto, the Consultant shall be paid the lower of the hourly rate for the title/type of person actually performing the work set forth in Exhibit 2 hereto or the hourly rate set forth in Exhibit 3 to the Term Contract between County and Architect/Engineer for Professional Services dated October 31, 2018; up to the not-to-exceed flat fees for the Task Order Services. The actual hourly fees charged by the Contactor for the Services will be based on the rates set forth on Exhibit 3 to the Agreement and will vary based upon the person completing the Services (for example, \$60 per hour for “Surveyor I”, etc.). No subcontractors are authorized to complete Services on this Task Order.

The County shall be billed for increments of an hour based on Consultant’s standard procedure except as otherwise required by the Agreement.

The fee includes all fees, costs and charges of any kind to perform all the services and work, including supplying at its own cost and expense any necessary tools, equipment or materials, necessary or desirable for completion of the task specified.

ARTICLE V: TERM

Consultant shall with due diligence and dispatch assiduously pursue this Task Order to completion, and the services on the Task Order shall continue the 3rd year of construction of the water and sewer line defined as follows: beginning on that date the not to exceed fees for construction administration services were exhausted under PA8 being on or about December 15, 2021, and continuing until March 31, 2022 or when all work on the Task Order is complete and accepted by the County. Notwithstanding the foregoing, the Consultant must complete all work on this Task Order to the sole satisfaction of the County by June 30, 2022.

ARTICLE VI: MISCELLANEOUS

As appropriate to the context, the singular will include the plural and vice versa, and reference to one gender will include the others. This Project Agreement may be executed in one or more counterparts, each of which will be considered the Project Agreement for all purposes of proof. In addition to allowing electronic signatures upon an electronic copy of this Project Agreement, as provided by Virginia law, facsimile signatures upon any signature page will be considered to be original signatures. This Project Agreement contains the entire understanding of the parties with respect to the subject matter hereof and is to be modified only by a writing signed by the parties to this Project Agreement. This Project Agreement will be binding upon and inure to the benefit of the respective parties and their successors. This Project Agreement is not assignable by either party, except by operation of law. The legal address for the County and for the Consultant and the addresses for delivery of Notices and other documents related to the administration of this Project Agreement are as follows:

County:

ATTN: Cyndi Toler, Purchasing Officer
Fluvanna County
P.O. Box 540
Palmyra, VA 22963
Telephone (434) 591-1930
FAX (434) 591-1911

Consultant:

Dewberry Engineers Inc.
ATTN: Richard Kincheloe
4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060
Telephone: (804) 290-7957
Facsimile: (804) 290-7928

Any party may substitute another address for the one set forth above by giving a notice in the manner required. Any notice given by mail will be deemed to be received on the fifth (5th) day after deposit in the United States mail. Any notice given by hand will be deemed to be received when delivered. Notice by courier will be deemed to have been received on the date shown on any

certificate of delivery.

In witness whereof the undersigned duly authorized representatives have executed this Project Agreement on the dates set forth beside their respective signatures.

Consultant:
Dewberry Engineers Inc.

County:
Fluvanna County

By: _____	Date: _____	By: _____	Date: _____
Name: _____		Name: _____	
Title: _____		Title: _____	

Approved as to form:

By: _____
Fluvanna County Attorney, by Kristina M. Hofmann, Deputy Fluvanna County Attorney



Dewberry Engineers Inc.
4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060

804.290.7957
804.290.7928 fax
www.dewberry.com

December 21, 2021

Mr. Eric Dahl
County Administrator
County of Fluvanna
132 Main Street
Palmyra, Virginia 22963

VIA E-MAIL

**RE: Zion Crossroads Water and Sewer System
RFP 2015-03; and RFP 2019-01 (as to Construction Phase Year 3 Part 2 services only)
Professional Engineering Services Scope of Work and Fee Proposal Summary**

Dear Mr. Dahl:

The following is a summary of the proposals that were submitted to you for approval that include Engineering, Design, Bidding, Construction Administration, and Construction Inspection Services for the following projects:

- Zion Crossroads Water and Sewer System
- Zion Crossroads Elevated Water Storage Tank
- Zion Crossroads Water Booster Pump Station & Waste Water Pump Station

Engineering, Design, Bidding

1. PER Validation	\$22,550
2. Geotechnical Engineering for Water and Sewer Lines	\$49,800
3. Environmental Investigation and Permitting Services – Entire Project	\$25,210
4. Utility Designation along Route 250 and at the Women’s Prison	\$57,530
5. Water and Sewer Lines – Preliminary Design (through 65%)	\$64,380
6. Water and Sewer Lines – Final Design	\$47,870
7. Water and Sewer Lines – Bidding Services	\$6,640
8. Elevated Water Storage Tank - Design	\$86,865
9. Elevated Water Storage Tank – Bidding Services	\$6,640
10. Water Booster Station - Design	\$54,475
11. Water Booster Station – Bidding Services	\$3,020
12. Sewage Pump Station - Design	\$69,885
13. Sewage Pump Station – Bidding Services	\$3,020
SUBTOTAL – Engineering, Design, Bidding (Lump Sum).....	\$497,885

Construction Phase Year 1 (0 to 12 months)

14. Water and Sewer Lines – Construction Administration (Lump Sum) (PA 12).....	\$62,510
15. Water and Sewer Lines – Construction Inspection (Time and Materials) (PA 13).....	\$99,125
15a. Change Order #1 to PA 13.....	\$32,500
16. Elevated Water Storage Tank – Const. Admin. (LS) & Inspection (T&M) (PA 14).....	\$98,440
16a. Change Order #1 to PA 14.....	(\$13,000)
17. WBPS and WWPS – Construction Administration (Lump Sum) (PA 15)	\$99,630
17a. WBPS and WWPS – Construction Administration (Lump Sum) (Special PA16A).....	\$43,860
(moved Year 2 construction administration services to Year 1 because project ahead of sch.)	

Mr. Eric Dahl
 Zion Crossroads Water and Sewer System
 Construction Administration and Inspection Services Proposal Summary
 December 21, 2021
 Page 2 of 3

18. WBPS and WWPS – Construction Inspection (Time and Materials) (PA 16)	\$99,450
18a. Change Order #1 to PA 16.....	(\$19,500)
SUBTOTAL – Construction Phase Year 1 (Lump Sum and Time and Materials)	\$503,015

Construction Phase Year 2 (12 to 18 months)

19. Water and Sewer Lines – Construction Administration (Lump Sum)	\$41,860
*no change from December 13, 2018 quote	
20. Water and Sewer Lines – Construction Inspection (TM) Change Order #2.....	\$62,400
*decrease in cost of \$15,600 from December 13, 2018 quote of \$78,000	
21. Elevated Water Storage Tank – Const. Admin. (LS) & Inspection (TM) Change Order #2....	\$17,460
*additional cost not reflected in December 13, 2018 quote	
22. WBPS and WWPS – Construction Administration (Lump Sum) Change Order #2.....	\$11,950
*NOTE: In the December 13, 2018 quote the Cost of Year 2 PA16A WBPS and WWPS – Construction Administration was \$68,520.00. Per PA16A construction administration services for year 2 totaling \$43,860.00 were moved into year 1 as the project was ahead of schedule and no construction administration services were anticipated to be needed in year 2. Per PA16 if construction administration services were needed in Year 2 they could not exceed a total cost of \$24,660.00; this complies with that not-to-exceed amount. The total is still less than the original quote from December 13, 2018, but more than anticipated by PA16A.	
23. WBPS and WWPS – Construction Inspection (Time and Materials) Change Order #2.....	\$20,800
*additional cost not reflected in December 13, 2018 quote	
SUBTOTAL – Construction Phase Year 2 (Lump Sum and Time and Materials)	\$154,470***

***NOTE: Shows a savings from the December 13, 2018 quote of \$33,910 (total for Year 2 Construction Services was \$188,380 under the December 13, 2018 quote). However, \$43,860 in costs were moved to year 1 (see note under #22 above). **The new total cost if you add back in the services moved to Year 1 by PA16A is \$198,330.00; an increase of \$9,950.** This increase is due to delays in construction of the elevated water storage tank and water booster pump station beyond the anticipated construction timeframe.

Construction Phase Year 2 Part 2 (18 to 24 months)

24. Water and Sewer Lines – Const. Admin. & Inspection (Hourly Not to Exceed).....	\$112,280
--	-----------

Construction Phase Year 3 (24 months to 28 months) - under Term Contract pursuant to RFP 2019-01 dated 10-31-2018

25. Water and Sewer Lines – Const. Admin. & Inspection (Hourly Not to Exceed).....	\$69,250
--	----------

Construction Phase Year 3 Part 2 (28 months to 36 months) - under Term Contract pursuant to RFP 2019-01 dated 10-31-2018

26. Water and Sewer Lines – Const. Admin. (Hourly Not to Exceed)	\$20,360
--	----------

GRAND TOTAL FOR ALL SERVICES**\$1,357,260**

Mr. Eric Dahl
Zion Crossroads Water and Sewer System
Construction Administration and Inspection Services Proposal Summary
December 21, 2021
Page 3 of 3

If you have any questions regarding this letter, or if you require any additional information, please feel free to contact us.

Sincerely,

Dewberry Engineers Inc.



Danylo A. Villhauer, PE
Associate Vice President

Q:\PROPOSAL\2021\Fluvanna County\Zion W&S Cona and Inspection Year 3 - Part 2\2021.12.21 Zion xroads ConA and Inspection Summary
Year 3 Part 2.docx



Dewberry Engineers Inc.
4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060

804.290.7957
804.290.7928 fax
www.dewberry.com

December 21, 2021

Mr. Eric Dahl
County Administrator
County of Fluvanna
132 Main Street
Palmyra, Virginia 22963

VIA E-MAIL

**RE: Zion Crossroads Water and Sewer System
Construction Services Scope of Work and Fee Proposal – Year 3 Part 2**

Dear Mr. Dahl:

Dewberry Engineers Inc. (Dewberry) is pleased to submit our proposal to provide professional engineering services for construction administration services required for the Zion Crossroads Water and Sewer project for the next three (3) months of construction through the end of March 2022. Dewberry's Project Understanding, Scope of Services, and Fee have been developed based on our discussions with the County. The Work will be performed in accordance with the Term Agreement for Professional Engineering Services, executed October 31, 2018.

PROJECT UNDERSTANDING

Dewberry understands that Fluvanna County (OWNER) is seeking construction administration services for the Zion Crossroads Water and Sewer System Project. Due to continued construction delays from the contractor, this proposal includes services through the end of March 2022. Construction inspection services are to be provided under the previous Construction Services Scope of Work and Fee Proposal – Year 3 due to the amount of budget remaining under that task. If additional delays in construction occur beyond this anticipated timeframe, or additional construction inspection services are needed beyond the remaining budget of the previous Year 3 proposal, then additional construction administration and inspection may be provided under a separate proposal.

SCOPE OF SERVICES

1. Construction Administration

- 1.1 Furnish consulting services during construction to answer any construction or contractual problems and determine that the work is proceeding in accordance with contract documents.
- 1.2 Visit the site during construction, once per month after the monthly progress meeting, reviewing the work in detail with the CONTRACTOR and inspector.
- 1.3 Review and approve monthly and final payments to the CONTRACTOR. Attend monthly progress/pay request meetings to discuss the status of the work.

Mr. Eric Dahl
Zion Crossroads Water and Sewer System
Construction Services Scope of Work and Fee Proposal – Year 3 Part 2
December 21, 2021
Page 2 of 3

FEE

Dewberry’s not to exceed fee for these services is broken out by task as follows. A copy of our man-hour breakout estimate is included as Attachment A.

Construction Phase Services:	
1. Construction Administration.....	\$20,360
TOTAL FOR ALL SERVICES – Year 3 Part 2.....	\$20,360

CLARIFICATIONS

This proposal covers services through an additional three (3) months of construction (end of March 2022). Should the duration of the construction contract change, Dewberry’s fee for construction administration and inspection will be modified accordingly.

EXCLUSIONS

The following services are specifically excluded from the scope of services, but could be provided by Dewberry as additional services if authorized in writing by the OWNER.

1. Services resulting from significant changes in the general scope, extent or character of the project or its design including, changes in size, complexity, schedule, character of construction or method of financing; and revising previously accepted studies, reports, design documents or Contract Documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to their preparation, or are due to any other causes beyond Dewberry’s control.
2. Preparing to serve or serving as a consultant or witness for OWNER in any litigation, arbitration or other legal or administrative proceeding involving the Project.
3. Additional or extended services during construction resulting from significant delays, changes or price increases occurring as a direct or indirect result of the CONTRACTOR’s material, equipment, labor or energy shortages, work damaged by fire or other causes during construction, a significant amount of defective or neglected work of any CONTRACTOR, acceleration of the schedule involving services beyond normal working hours, and default by any CONTRACTOR.
4. Preparation of bid documents, bidding services, construction administration services, or construction inspection services if the completion of the project is no longer completed by the CONTRACTOR under current contract with the OWNER. Should the OWNER elect to pursue alternate contractors to complete remaining work, Dewberry may provide these services under separate proposal.

Mr. Eric Dahl
Zion Crossroads Water and Sewer System
Construction Services Scope of Work and Fee Proposal – Year 3 Part 2
December 21, 2021
Page 3 of 3

TERMS AND CONDITIONS

If this proposal meets with your approval, please provide an executed purchase order in accordance with the Term Agreement for Professional Engineering Services, executed October 31, 2018. Receipt of the executed purchase order will serve as our authorization to proceed.

We look forward to the opportunity to serve Fluvanna County on this project. If you have any questions regarding our proposal, or if you require any additional information, please feel free to contact us.

Sincerely,

Dewberry Engineers Inc.

A handwritten signature in blue ink, appearing to read 'Danylo A. Villhauer', followed by a long horizontal line.

Danylo A. Villhauer, PE
Associate Vice President

Attachment A: Manpower and Fee Estimate Breakout

Q:\PROPOSAL\2021\Fluvanna County\Zion W&S Cona and Inspection Year 3 - Part 2\2021.12.21 Zion xroads ConA and Inspection scope and fee proposal.docx

FLUVANNA COUNTY ZION CROSSROADS WATER AND SEWERY SYSTEM CONSTRUCTION SERVICES FEE ESTIMATE FOR CONSTRUCTION SERVICES - YEAR 3 PART 2 DECEMBER 21, 2021												BOS 2022-01-19 p.1287/1306
PROJECT TASKS	HOURS DEDICATED TO SUBTASK											TOTAL COST
	CONTRACT MANAGER	PROJECT MANAGER	PROJECT ENGINEER	STAFF ENGINEER	DESIGNER	CADD TECHNICIAN	ADMIN PROF	SURVEYOR	SURVEY PARTY	CONST INSPECTOR	REIMBURSABLE	
	205.00	160.00	140.00	110.00	100.00	85.00	60.00	120.00	150.00	65.00		
1. Construction Administration												
Consulting during construction - 3 month duration (1.1)	6	96										
Monthly site visits (1 per month) - 3 month duration (1.2)	1	12										
Monthly progress meetings (1 per month) - 3 month duration (1.3)	1	9										
Subtotal (Item 1)	8	117	0	0	0	0	0	0	0	0	\$0	\$20,360
GRAND TOTAL FOR ALL SERVICES	8	117	0	0	0	0	0	0	0	0	0	\$20,360

FLUVANNA COUNTY BOARD OF SUPERVISORS
AGENDA ITEM STAFF REPORT

TAB G

MEETING DATE:	January 19, 2022																																												
AGENDA TITLE:	Advertisement of a Public Hearing for the Issuance of Lease Purchase Debt																																												
MOTION(s):	I move the Board of Supervisors approve the advertisement of a Notice of Public Hearing to be held on February 2, 2022, for the purpose of financing not to exceed \$5,231,500 Lease Purchase Debt issued to JPMorgan Chase Bank for the purpose of financing the leasing and acquisition of certain assets, including athletic field lighting, fire trucks and ambulances, public works equipment and a storage facility for such equipment, and vehicles for use by County staff and the Sheriff's Office, and to pay costs of issuance of the Lease Purchase Debt.																																												
STRATEGIC INITIATIVE?	Yes	No	If yes, list initiative(s):																																										
		X																																											
AGENDA CATEGORY:	Public Hearing	Action Matter	Presentation	Consent Agenda	Other																																								
					X																																								
STAFF CONTACT(S):	Eric Dahl, County Administrator																																												
PRESENTER(S):	Eric Dahl, County Administrator																																												
RECOMMENDATION:	Approve																																												
TIMING:	Immediate																																												
DISCUSSION:	<ul style="list-style-type: none"> In the FY22 budget, \$4,760,000 was budgeted for athletic field lighting, fire trucks and ambulances, public works equipment and a storage facility for such equipment, and vehicles for use by County staff and the Sheriff's Office, and to pay costs of issuance. In September 2021, the board increased the amount for fire and rescue apparatus by \$471,500 due to price increases from Manufacturers. The new total of approved funding is \$5,231,500. An RFP was issued on November 12 for \$5,231,500 in financing for the following items: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Department</th> <th style="text-align: left;">Purchase</th> <th style="text-align: right;">Amount</th> <th style="text-align: right;">Years</th> </tr> </thead> <tbody> <tr> <td>Parks & Rec – Pleasant Grove Park</td> <td>14-15 Athletic Field Lighting</td> <td style="text-align: right;">\$685,000</td> <td style="text-align: right;">10</td> </tr> <tr> <td>Fire & Rescue</td> <td>1 Engine 1 Tanker 1 Ladder Truck 1 Brush Truck 1 Ambulance 1 Ambulance</td> <td style="text-align: right;">\$3,443,500</td> <td style="text-align: right;">10</td> </tr> <tr> <td>Public Works Equipment Building</td> <td>Major Equip. Storage Building</td> <td style="text-align: right;">\$93,000</td> <td style="text-align: right;">10</td> </tr> <tr> <td>Public Works - Major Equipment</td> <td>1 Tractor 1 Skidsteer 1 Backhoe 1 Trailer</td> <td style="text-align: right;">\$320,000</td> <td style="text-align: right;">10</td> </tr> <tr> <td>Public Works - Major Equipment</td> <td>3 Mowers</td> <td style="text-align: right;">\$35,000</td> <td style="text-align: right;">7</td> </tr> <tr> <td>Sheriff's Vehicles</td> <td>7 Patrol Vehicles</td> <td style="text-align: right;">\$300,000</td> <td style="text-align: right;">7</td> </tr> <tr> <td>County Vehicles</td> <td>7-8 Trucks/Vehicles</td> <td style="text-align: right;">\$325,000</td> <td style="text-align: right;">7</td> </tr> <tr> <td>Cost of Issuance</td> <td>Estimate</td> <td style="text-align: right;">\$30,000</td> <td></td> </tr> <tr> <td>Total</td> <td></td> <td style="text-align: right;">\$5,231,500</td> <td></td> </tr> </tbody> </table>					Department	Purchase	Amount	Years	Parks & Rec – Pleasant Grove Park	14-15 Athletic Field Lighting	\$685,000	10	Fire & Rescue	1 Engine 1 Tanker 1 Ladder Truck 1 Brush Truck 1 Ambulance 1 Ambulance	\$3,443,500	10	Public Works Equipment Building	Major Equip. Storage Building	\$93,000	10	Public Works - Major Equipment	1 Tractor 1 Skidsteer 1 Backhoe 1 Trailer	\$320,000	10	Public Works - Major Equipment	3 Mowers	\$35,000	7	Sheriff's Vehicles	7 Patrol Vehicles	\$300,000	7	County Vehicles	7-8 Trucks/Vehicles	\$325,000	7	Cost of Issuance	Estimate	\$30,000		Total		\$5,231,500	
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	<ul style="list-style-type: none"> • The RFP Closed on December 8, 2021 with a total of 11 Responses, one of those being disqualified. • On December 15, 2022 all proposals were presented to the Board and the Board determined JPMorgan Chase Bank was the best proposal with an interest rate of 1.37% for 10 years. • The public hearing will occur on February 2, 2022. 				
FISCAL IMPACT:	N/A				
POLICY IMPACT:	N/A				
LEGISLATIVE HISTORY:	N/A				
ENCLOSURES:	Notice of Public Hearing				
REVIEWS COMPLETED:	Legal	Finance	Purchasing	HR	Other
	X	X			



PUBLIC HEARING
Fluvanna County Board of Supervisors
Wednesday, February 2, 2022 at 7:00 PM

Notice is hereby given that, the Board of Supervisors of Fluvanna County, Virginia (the "County"), will hold a public hearing on Wednesday, February 2, 2022, at 7:00 p.m. at the Carysbrook Performing Arts Center, 8880 James Madison Highway, Fork Union, VA 23055, to receive public comment and input regarding the proposed incurrence of debt, without a referendum, in the form of a lease-purchase agreement, in the maximum principal amount of \$5,231,500 (the "Lease Purchase Debt"), which is expected to be issued to JPMorgan Chase Bank, N.A. Proceeds of the Lease Purchase Debt will be used for the purpose of financing the leasing and acquisition of certain assets, including athletic field lighting, fire trucks and ambulances, public works equipment and a storage facility for such equipment, and vehicles for use by County staff and the Sheriff's Office, and to pay costs of issuance of the Lease Purchase Debt.

The public hearing, which may be continued or adjourned, will be conducted at 7:00 p.m. at the Carysbrook Performing Arts Center, 8880 James Madison Highway, Fork Union, Virginia, 23055. For additional information please contact Caitlin Solis, Clerk to the Board, at 434-591-1910 or csolis@fluvannacounty.org.

Interested persons may appear at such time and place and present their views.

Clerk, Board of Supervisors of
Fluvanna County, Virginia

TO BE PUBLISHED IN THE FLUVANNA REVIEW NO LATER THAN JANUARY 20th
and JANUARY 27th, 2022

**FLUVANNA COUNTY BOARD OF SUPERVISORS
MEETING PACKAGE ATTACHMENTS**

Incl?	Item
<input checked="" type="checkbox"/>	BOS Contingency Balance Report
<input type="checkbox"/>	Building Inspections Report
<input checked="" type="checkbox"/>	Capital Reserve Balances Memo
<input type="checkbox"/>	CARES Fund Balance Memo
<input type="checkbox"/>	Fluvanna County Bank Balance and Investment Report
<input checked="" type="checkbox"/>	Unassigned Fund Balance Report
<input checked="" type="checkbox"/>	VDOT Monthly Report & 2020 Resurfacing List
<input checked="" type="checkbox"/>	ARPA Fund Balance Memo
<input type="checkbox"/>	American Rescue Plan Act - Fact Sheet
<input type="checkbox"/>	American Rescue Plan Act - FAQs
<input type="checkbox"/>	

MEMORANDUM

Date: January 19, 2022
From: Tori Melton – Management Analyst
To: Board of Supervisors
Subject: FY22 BOS Contingency Balance

The FY22 BOS Contingency line balance is as follows:

Beginning Original Budget:	\$163,898
Less: Compensation Study – 11.17.21	-\$37,000
Less: Blue Ridge Cigarette Tax Board Startup Cost – 11.17.21	-\$17,218
Less: Tyler Technologies, Inc. Merchant Services Contract – 01.12.22	-1,368
Available:	\$108,312

MEMORANDUM

Date: January 19, 2022
From: Tori Melton – Management Analyst
To: Board of Supervisors
Subject: FY22 Capital Reserve Balances

The FY22 Capital Reserve account balances are as follows:

County Capital Reserve:

FY21 Carryover	\$387,085
FY22 Budget Allocation:	\$200,000
Total FY22 Budget:	\$587,085
Add: Closed CRM Project – 06/30/2021	\$155
Less: Courts Building Sally Port Door – 08.04.21	-\$7,185
Less: Courts Building Replacement of Leaking Water Lines 09.01.21	-17,418
Less: Pleasant Grove House HVAC Replacement 09.01.21	-6,975
Less: Bobcat Skid Steer Repairs 10.20.21	-6,443
FY22 Available:	\$549,219

Schools Capital Reserve:

FY21 Carryover	\$330,159
FY22 Budget Allocation:	\$200,000
Total FY22 Budget:	\$530,159
Add: Closed CRM Project – 06/30/2021	\$1,096
Less: FCHS HVAC Chiller Descaling and Cleaning 09.15.21	-27,700
Less: FMS Repair Leaking Flush Panels 11.03.21	-64,700

Less: Central and West Central Elementary Sidewalk Repair 11.03.21	-15,000
FY22 Available:	\$423,855

MEMORANDUM

Date: January 19, 2022
From: Tori Melton – Management Analyst
To: Board of Supervisors
Subject: ARPA Fund Balance

ARPA Fund Total Appropriation: \$5,296,878 – 50% received	\$2,648,439
Less: FUMA Wastewater Treatment Plant Evaluation 08.04.21	-\$39,870
Less: FUSD Morris and Omohundro Well Rehabilitation 09.01.21	-290,250
Less: Sheriff's Office Hazard Pay One-Time Bonus 10.06.21	-48,443
Less: E911 – Hazard Pay One-Time Bonus 10.06.21	-16,995
Less: Premium Pay – Staff One-Time Bonus 12.15.21	-162,750
Current ARPA Fund Balance	\$2,090,131

MEMORANDUM

Date: January 19, 2022
From: Tori Melton – Management Analyst
To: Board of Supervisors
Subject: Unassigned Fund Balance

FY21 Year End Audited Total Unassigned Fund Balance:	\$24,035,309
Unassigned Fund Balance – 12% Target Per Policy:	\$9,959,654
Unassigned Fund Balance – Excess Above Policy Target:	\$14,075,655
Less: FY22 Sheriff's Office Recruitment, Retention, and Compression Wage Adjustment - 10.06.21	-\$240,000
Less: FY21-22 County Carryover Request – 12.01.21	-\$87,074
Current Unassigned Fund Balance – Excess Above Policy Target:	\$13,835,655

Culpeper District, Louisa Residency
Fluvanna County Monthly Report: January 2022

Fluvanna Mileage, Structures

PRIMARY MILES	SECONDARY MILES	STRUCTURES	TOTAL MILES
102.34	598.62	75	700.96

Fatal Accidents

DATE	LOCATION	ALCOHOL	RESTRAINT
8/1/2021	Route 250, 0.4 Mile West of Route 1030	No	Yes
9/2/2021	Route 612, 0.1 Miles West of 671	No	Bicyclist
10/9/2021	Route 601, 0.5 Miles East of Route 625	Unknown	No
10/23/2021	Route 53, 1 Mile East of Route 618	No	No

*Of the 819 fatalities in VA in 2018, 126 were related to distracted driving and 298 were motor vehicle occupants not wearing a seatbelt.

**10% of all drivers do not wear a seatbelt. Of all driver fatalities, 50% are from the 10% that do not wear a seatbelt if the option was available.

[Link to Smart Scale Information](#)

[Link to Smart Scale Projects \(Filter for Fluvanna Co. Projects\)](#)

Smart Scale Round 5 Key Dates:

- Fall 2021, Project Review with Fluvanna County
- March - April, 2022, Pre-application Deadline
- August 11, 2022, Application Deadline
- June 2023, CTB approval of Six Year Improvement Plan

Fluvanna County Smart Scale Round 5 Application Recommendations:

- Rte. 53/1015 Turkeysag Trail (Roundabout)
- Rte. 53/618 Martin Kings Rd (LTL)
- Rt. 15/631 Troy Rd (TBD)



Projects:

BOS 2022-01-19 p.1304/1306

PROJECT	LAST MILESTONE	NEXT MILESTONE	AD DATE
Rt. 656 Bridge Rehabilitations (0656-032-6070, SR01)	CN Completed		
Rt. 600/618 Intersection Improvements (UPC 111739)	Scoping Meeting	Preliminary Design	FEB 2023/4
Rt. 250/631 Roundabout (UPC 118863)		Authorize PE	2028

Additional Road Projects:

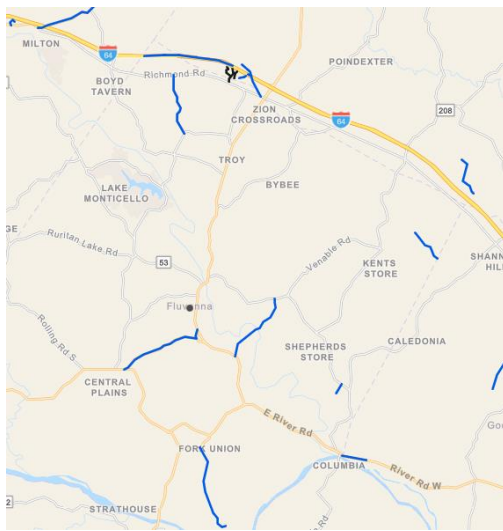
- **On-Call Pipe Replacements** PR07-967-255, (UPC 106020)
- **District Wide Guardrail Repair and/or Replacement** GR07-967-269, (UPC 106849)
- **District Wide ADA Compliance** ADA7-967-317, (UPC 108027)
- **On-Call District Wide Pavement Marking** TS07-967-325 (UPC 108282)
- **District Wide Bridge Deck Cleaning and Washing** BRDG-967-241, (UPC 105980);
- **District Wide Bridge Maintenance** BRDG-967-240, (UPC 105979);
- **Route 623 over Venable Creek, Completed;**
- **Route 53, .5 miles S of Lake Monticello Rd - Emergency Pipe Replacement; Completed;**
- **Route 616 Soil Nailing Slope Repair; Completed;**
- **Rt. 15 N and S of CVEC – Pipe Replacements; Completed;**
- **Rt. 250 W of Correctional Center – Pipe Replacement; Completed;**
- **Rt. 15 Entrance Pipe over Raccoon Creek; Completed;**
- **Rt. 6 E of Rt. 624 – Pipe Replacement; Completed;**
- **Rt. 6, Columbia – Sinkhole Investigation; Completed, Replacement Under Design;**
- **Rt. 6 E of Scottsville – Pipe Replacements; Completed;**

Resurfacing Projects:

VDOT's Contractor is preparing to begin resurfacing roads in Fluvanna County. Customers can view VDOT's resurfacing schedule and route status on VDOT's public website via the following link:

<http://www.virginiaroads.org/> (Select "Web Maps" and "Statewide Paving Status")

Fluvanna County Resurfacing					
Plant Mix			Surface Treatment		
Schedule	Miles	Cost/Estimate	Schedule	Miles	Cost/Estimate
2019	4.94	\$863,675	2019	43.65	\$590,849
2020	---	---	2020	55.52	\$421,558
2021	---	---	2021	16.07	\$229,394
2022	6.28	\$1,488,905	2022	14.21	\$246,885



Statewide Paving Status Map (Public View) 2021

- Scheduled
- In Progress
- Completed
- Rescheduled

Traffic Engineering

Study Request:

- Route 250, Richmond Road
 - Speed study, from Route 631 to Route 15
- Route 1040, Broken Island Road
 - Centerline Removal due to installment issues
- Route 616, Union Mills Road
 - Corridor Safety Study
- Route 676, Diamond Road
 - Speed Study
 - Study complete
 - 40 MPH speed limit recommended
 - Sign installation scheduled.
- Route 612, Winnsville Drive
 - Reviewing options to reduce truck traffic
- Route 659, Stage Junction
 - Speed Study & Curve Warning sign review
- Route 6, West River Road
 - School Bus Stop Ahead sign requested at 6176 W. River Road
 - Sent to Traffic Engineering
- Route 618, Lake Monticello Road
 - Curve Sign review
 - Sent to Traffic Engineering
- Route 639, Long Acre Road
 - Speed Study Request
 - Sent to Traffic Engineering

Studies Pending/Completed:

- Route 53, High School
 - Speed Limit Reduction
 - Pursuing study agreements from School Board

County Safety and Operational Improvements:

- Route 53 at Route 660 (Cunningham): VDOT continues to evaluate this intersection for interim and long-term safety improvements
- Route 656/624: Request for curve warning signage and improvements to visibility
 - o Unable to reach property owner
- Rt. 53/660 & Rt. 600/618 Stop Bar installed
- Radar Feedback Signs (ongoing)
 - o Previously on Rt. 15, 6 in Columbia
- Rt. 6/659 Sight Distance Review; in progress
- Rt. 6 Pothole and Pipe review in Columbia in progress

Local Assistance Programs

- Transportation Alternatives Program
 - o Palmyra Sidewalk, Parking, and Traffic Improvements
 - o Application Submitted

Area Land Use

Residency Area Land Use Staff have issued **72** permits in 2021.

Fluvanna County Plan/Plat Reviews Received Dec-Jan 2022							
Project Name	Routes/Address	Submission Type	VDOT Contact	VDOT Received Date	Locality Due Date	VDOT Comment Date	Status
Dominion Substation RL Road	619-3439 RURITAN LAKE RD	Conditional Use, Special Exception,	John Wilson	12/2/2021	1/14/2022	12/22/2021	Review Complete - Acceptable
Village Oaks Senior Living SUP	618-Village Oaks Development , 1110-Manor Blvd (ADT unknown)	Exception, Pre-Application Plan,	John Wilson	12/3/2021	12/9/2021	12/9/2021	Review Complete - Revision Required
Newsome Family Subdivision	640-1366 HADEN MARTIN RD PALMYRA VA 22963	Final Plat Review,	John Wilson	12/16/2021	1/30/2022	12/22/2021	Review Complete - Acceptable

- [Zion Crossroads Corridor Improvement Study \(link\)](#) – The webpage is live for the Zion Crossroads Corridor Improvement Study (Routes 15 and 250), Fluvanna & Louisa Counties. This small area study, which is supported by stakeholders from VDOT, Fluvanna and Louisa counties and the Thomas Jefferson Planning District Commission. The study is evaluating vehicle, transit, bicycle, and pedestrian accommodations along Route 15 (James Madison Highway) between the intersections of Sommerfield Drive and Starlite Park as well as along Route 250 (Three Notch Road/Richmond Road) between Route 631 (Troy Road) and Route 613 (Poindexter Road). The purpose of the study is to develop short-, mid-, and long-term community-supported transportation solutions to provide safe travel for all uses and users of the roadway. The results from this study will be reviewed and potential transportation projects will be developed and presented for feedback in early 2021. The study is scheduled for completion in mid-2021.

Maintenance Activities

VDOT crews in Palmyra and Zions Crossroads Area Headquarters have responded to **301** Work Orders in FY22. Top activities have been dead animal removal and fall tree/limb clearing.

BOS Manual:

http://www.virginiadot.org/business/resources/local_assistance/BOSmanual.pdf

E. Alan Saunders, P.E., CCM
Resident Engineer
VDOT Louisa Residency
540-967-3710