

# COUNTY OF FLUVANNA, VIRGINIA Invitation for Bid (IFB) #2021-01 FLUVANNA COUNTY – BASEMENT RENOVATION

Issue Date: September 3, 2020 Due Date: September 23, 2020 at 2 p.m. EST

# **Procurement & Technical Contact:**

County of Fluvanna Cyndi Toler, Purchasing Officer 132 Main Street P.O. Box 540 Palmyra, VA 22963

Ph: (434) 591-1930 ext. 1124

Email: <a href="mailto:ctoler@fluvannacounty.org">ctoler@fluvannacounty.org</a>

# All sealed bids shall be turned in no later than September 23, 2020, at 2:00 p.m. EST.

- All Bids that are delivered via mail or are hand delivered must be addressed to the "Procurement Contact" listed above.
- Any Proposals sent in via facsimile, telephone, or email shall not be considered.
- Any Proposals that are turned in late will be rejected and returned unopened.

Bid documents may be picked up at the Fluvanna County Department of Finance located at 132 Main Street, 2<sup>nd</sup> floor, Palmyra, VA 22963 or by clicking on the following link: <a href="https://www.fluvannacounty.org/rfps">https://www.fluvannacounty.org/rfps</a>.

#### 1. GENERAL INFORMATION

- A. By this Invitation for Bids ("IFB"), the Fluvanna County Board of Supervisors (hereinafter the "County") is seeking competitive sealed bids from qualified licensed contractors (herein referred to interchangeably as "Contractor" or "Bidder") to establish a firm fixed price contract with Contractor to furnish, deliver, supply and install all necessary labor and materials associated with the remodel and renovation of the Administration Building Basement (the "Basement") and complete any and all necessary or appropriate associated work at the site ("Site Work") or other work in accordance with the specifications, Plans (as defined below), or terms and conditions stated herein. Collectively, the work on the Basement, Site Work and any other work required by the Plans or this IFB is referred to herein as the "Project" or the "Renovation" interchangeably.
- B. The Renovation and Site Work will be completed at the Fluvanna County Administration Building addressed as 132 Main Street, Palmyra, Virginia 22963 (the "Property") in strict conformance to the Plans (as defined below). The Renovation must be constructed and completed in strict conformance with those plans of Crabtree, Rohrbaugh & Associates, dated August 28, 2020, entitled "ADDITION AND RENOVATIONS— MULTIPURPOSE ROOM" which are attached hereto as **Exhibit 1** and incorporated herein as a material part of this IFB (referred to herein interchangeably as the "Plans" or "Exhibit 1").
- C. The County intends to issue an amendment to this IFB to address additional Work required for the Renovation generally related to the exterior of the building. Such additional Work will be set out in plans which when issued will become a material part of the "Plans" and "Exhibit 1" as defined herein; and such additional Work will be part of the "Renovation" or "Project" as defined herein.
- D. The County received certain CARES Act funds and the CARES Act requires that the payments from the Coronavirus Relief Fund only be used to cover expenses that: (i) are necessary expenditures incurred due to the public health emergency with respect to COVID-19; (ii) were not accounted for in the budget most recently approved as of March 27, 2020 (the date of enactment of the CARES Act) for the State or government; (iii) were incurred during the period that begins on March 1, 2020, and ends on December 30, 2020; and (iv) meet all other requirements of the CARES Act and applicable law related thereto (the "CARES Act Requirements"). The Renovation is being completed for purposes of holding Board and other meetings to allow for a larger meeting space suitable for social distancing, to improve air flow and for other safety considerations particular to the public health emergency known as COVID-19 (the "Safety Considerations"), and the County will be using CARES Act funds the County received to pay the winning Contractor for the work on the Renovation. Therefore, the **Project** MUST be finally substantially complete on or before November 30, 2020 (the "Substantial Completion Date") and finally completed and acceptable to the reasonable satisfaction of the County on or before December 11,, 2020 (the "Final Completion Date"); as all funds under the CARES Act MUST be used not later than December 30, 2020. All Project deadlines and milestones under any Contract resulting from this IFB shall be time of the essence.

#### 2. PRE-BID CONFERENCE

- A. A mandatory pre-bid conference will be held on Wednesday, the 9<sup>th</sup> day of September, 2020 at 3 p.m. at the Fluvanna County Administration Building Basement, 132 Main Street, Palmyra, VA 22963.
- B. At the pre-bid conference Bidders will be allowed to inspect and analyze the Basement, current environment, site, and collect further data in determination of their ability to perform the work required on the Project. The Bidder shall be presumed to have made a reasonable inspection of the Basement, Property and site before the time of Bid submission and shall be held responsible for all information available through such inspections; and submission of a Bid will be a confirmation that the Bidder did make a site inspection and is aware of all conditions affecting performance and price(s) submitted. The County may determine in its sole discretion that a second pre-bid conference is necessary. The date and time of any such second pre-bid conference will be disclosed in an amendment to this IFB.
- C. Any inquiries or requests for clarification or additional information must be delivered in writing (via email) to the County no later than September 11, 2020 by 10:00am to the following email address: ctoler@fluvannacounty.org. All inquiries will be answered via an addendum, posted to eVA and the County website. Should a Bidder find discrepancies in the Plans, plans and/or specifications or be in doubt as to the meaning or intent of any part thereof, the Bidder must request clarification from the County in writing by the deadline started herein. Failure to request such a clarification is a waiver of any claim by the Bidder for additional expenses because its interpretation was different than the County's interpretation.
- **3. SCOPE OF WORK:** Contractor shall provide, furnish, deliver, supply and install, all necessary or appropriate labor, services, parts, tools, materials, equipment, items and resources as may be required to complete the work on the Project (the "Scope of Work" or the "work"), in accordance with the Plans, specifications and terms and conditions stated herein, which Scope of Work, shall include at minimum, but is not limited to, all of the following:
  - A. **Contractor Minimum Requirements:** The Contractor must meet the following performance standards.
    - i. The Contractor should have, at a minimum, a current Class "A" Contractor's license as issued by the Commonwealth of Virginia Board of Contractors, Department of Professional and Occupational Regulation, and a copy of the license must be attached to the Bidder's Bid.
    - ii. The Contractor shall possess the appropriate contractor's license(s) with the specific specialty services as recognized by the Virginia Board for Contractors, Department of Professional and Occupational Regulation to perform electrical, roofing and any other services required for the work on the Project, and copies of the license(s) must be attached to the Bidder's Bid.
    - iii. The Contractor's firm should have been in business providing similar services promulgated in this solicitation for a minimum of five (5) consecutive years.
    - iv. The Contractor shall be responsible for providing quality contractor, HAVC, electrical and other services required for the performance of any work on the Project in accordance with best industry standards, Plans, directions and instruction as provided hereunder and in any resulting Contract.
    - v. All equipment, materials and installation work provided as a part of the Project shall conform to the Virginia Uniform Statewide Building Codes, National Electrical Code, OSHA, and the specifications of this IFB.

- vi. Contractor(s) shall report any safety concerns, near misses, accidents and injuries related to the work area to the County immediately.
- vii. Contractor(s) shall warrant, replace, or repair any defective product, materials, installation or services on the Project for a minimum of five (5) years from County's acceptance of any work or services hereunder on the Project at no additional cost. County shall be deemed to have accepted services hereunder only after receipt of a proper and detailed invoice from Contractor for all of the work on the Project and payment by the County to Contractor in full on such invoice.
- viii. Contractor(s) shall respond to emergency warranty repairs within one (1) day and shall respond to routine warranty repairs within three (3) business days.
- ix. In addition to all other warranties required hereunder, the Contractor shall transfer and assign to the County any and all warranties or similar guarantees for any materials or products provided by Contractor to the County hereunder.

# x. Personnel for Electric Services:

- 1. Contractor(s) shall perform all electrical work on the Project under the supervision of a qualified master electrician. A qualified master electrician shall be a licensed electrician graduated from an accredited school or program and shall have five (5) years plus of practical experience in planning, laying out, and supervising the installation and repair of wiring, apparatus, or equipment for electrical components regulated by the Virginia Uniform Statewide Building Code and any other applicable electrical regulations. Contractors shall provide a copy of their Class A Electrical Contractor certification and a copy of their Master Electrician license. Contractor(s) shall assure that all employees who will be performing work receive any required training necessary to perform the work. All helpers, assistants, and apprentices shall operate under the supervision of a journeyman or master electrician. The County reserves the right to review any Contractor(s) training documentation.
- 2. Journeyman Electricians provided by the Contractor should have a minimum of three (3) years of experience performing electrical services in accordance with manufacturer's best practices and must be supervised by a Master Electrician.
- xi. **Performance and payment Bond Required:** Consistent with Virginia Code Section 2.2-4337, prior to execution of any contract the County will require the winning bidder to deliver a performance and payment bond in an amount equal to the contract price from an insurer licensed in Virginia.
  - 1. **Bond Forms**. The form of bonds which will be required of a Contractor awarded work on the Project are attached hereto as **Exhibit 3**.
  - 2. **Verification of Bonding Capability**. Bidder shall include in their bid a letter from a surety or insurance company (with a Best's Financial Strength Rating A or better and Financial Size Category VII or higher by A.M. Best Co.) stating that the Bidder is capable of obtaining a performance and payment bond based on the Bidder's estimated contract value for the construction of the Project, which bonds will cover the Project and any warranty periods. The letter of surety shall clearly state the rating categorization noted above and reference the estimated contract value as identified herein, in a manner similar to the notation provided below: "As surety for [the above named Contractor], [XYZ Company] with A.M. Best Financial Strength Rating [rating] and Financial Size Category [Size Category] is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into

a contract for this Project." This letter shall also state the Bidder's per project and total bonding program limits and that the Surety is authorized/licensed to do business in the Commonwealth of Virginia. The surety providing a winning Contractor's bonds must meet all the requirements stated herein (including, without limitation, financial strength rating, size category, and licensure in Virginia).

- xii. Bidders must demonstrate that they have the resources and capability to provide the materials and services as described herein.
- xiii. **Debarment Certification:** By signing the Pricing Page (Attachment E) contained in the IFB, bidders are certifying that bidder is not currently debarred by any local or state government or the Federal Government. Bidders shall provide in their bid, documentation related to all debarments that occurred within the last ten (10) years.
- xiv. Project Specific References: Contractor submitting a bid must demonstrate extensive successful experience in the construction of public safety facilities similar in scope to the Project and the specifications contained herein. To demonstrate this experience, provide a minimum of four (4) project references that have been completed within (15) fifteen years from the date of this IFB. Project references that are for the construction of renovations of public spaces are preferred, however, all project references provided must demonstrate successful experience in the type of construction required for this Project. Preferably, at minimum two (2) of the references should be for the construction of renovations of meeting spaces for government bodies similar to this Project. The other references may be for the similar renovations of buildings that includes some or all of the characteristics of the Project. All client references for renovations of meeting spaces or similar projects completed for the Commonwealth of Virginia or a public body of the Commonwealth of Virginia, or any of its agencies or departments, must be disclosed. Each project reference is to include the name and location of the project, project description of sufficient detail to allow determination of projects size and scope, contract costs, contract schedule milestones, photographs of sufficient quality to demonstrate the scope of the facility, and name, address, current phone number, and e-mail addresses of architects and owners.
- xv. Bidders shall include in their bids the resumes of the Project Manager, Quality Control Manager, and Superintendent as applicable. Resumes must demonstrate at minimum five (5) years' experience in similar size and type of Projects and any other relevant information.
- xvi. All Bidders must submit the documentation/information requested in this IFB with their bid. Failure to provide any of the required documentation or information may be cause for the bid to be deemed non-responsive and/or non-responsible and rejected.
- B. **Building Specifications:** At minimum, the Renovation and Site Work for the Project must meet the following requirements:
  - i. Be in all respects consistent with and meet any and all provisions, notes, requirements or specifications shown on the Plans. Site work is required to the extent necessary to produce a finished Project that meets or exceeds all the requirements and specifications provided in this IFB, including without limitation the Plans. The Contractor shall not take advantage of any obvious or apparent ambiguity, conflict, error, or omission in the Plans, this IFB or the Contract. If in reviewing this IFB or after beginning work the Contractor discovers an ambiguity, conflict, error, or omission, it shall immediately notify the County and before proceeding further with the affected work. The County will then make such corrections and interpretations as may be

- deemed necessary for fulfilling the intent of the Contract and completing the Project as intended.
- ii. The Renovation and all work on the Project shall be compliant with all Applicable Law, as defined in 3(H) below.

# C. ADDITIONAL REQUIREMENTS OF CONTRACTOR:

- i. On-Site Management. The Contractor shall provide on-site management and supervision of the Project during all working hours and provide daily inspections, quality control, monitoring, and coordination of various trades, record drawings, and daily work log for the Project. Contractor must assign a Supervisor to the Project that shall be the main point of contact for the Project.
- ii. Site Safety Generally and Disruptions. The Contractor shall provide a safe and efficient site, with controlled access. As part of this obligation, the Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Project. The Bidder understands and acknowledges that the Basement is in the Fluvanna County Administration Building (the "Building") and that important and critical public functions and activities of the County occur at the Building. The Bidder acknowledges and understands that the Building is open to the public. All Work on the Project shall be performed so as maximize the safety of, and to minimize disruptions to, officers, employees, guests, invitees, and constituents of the County and other members of the public. All Work on the Project shall be performed so as to minimize disruptions to the activities and work performed at the Building. No entrances or exits to the Building may be affected or blocked by the Work on the Project. All staging and materials must be stored in a safe manner in a location approved by the County in advance. Bidders must submit with their Bid a plan for storage and staging of supplies during the Renovation. Any utility disruptions (including without limitation, electrical, water, internet, telephone) or other service interruptions, must be nominal and must be pre-scheduled in advance with the County at a time convenient for the County. The Bidder must be prepared to complete any portions of the Work on the Renovation which could disrupt any such services after hours or on weekends at times convenient for the County.
- iii. Quality Control Generally. The Contractor shall be responsible for all activities necessary to manage, control, and document work to ensure compliance with the Contract Documents, Plans and Project specifications. The Contractor's responsibility includes ensuring adequate quality control services are provided by the Contractor's employees and its subcontractors at all levels. The work activities shall include safety, submittal management, document reviews, reporting, and all other functions related to quality of construction. Notwithstanding the foregoing, the County may use an engineer to assist its Project Manager in inspecting and/or managing the Project.
- iv. Weekly Reports. The Contractor shall provide written reports to the Project Manager and Engineer, on the progress of the Project at least weekly from Construction Notice to Proceed until Final Completion of the Project. The weekly reports shall include: (i) an updated schedule analysis, including any plans to correct defective or deficient work or recover delays; (ii) an updated cost analysis; (iii) a quality control report; and (iv) progress photos. The County's designated Project Manager will be Benjamin Powell, the County may modify the Project Manager from time to time upon notice to the Contractor.

- v. Examine the work areas and site conditions under which work stated herein shall be performed. Contractor shall notify County of any condition(s) which may affect installation.
- vi. **Coordinate with Engineer.** The County may designate a Project Engineer to work with the Project Manager to oversee/inspect/manage the construction of the Project and coordinate with Contractor. Contractor will work with, coordinate, and communicate with any Engineer identified by the County as the Engineer on the Project to the extent required under the Contract. The County may require the Engineer to confirm that the Project as constructed strictly conforms to the Plans and meets or exceeds all Contract requirements, including the requirements of this IFB.
- vii. Contractor shall provide all Site Preparation.
- viii. Provide final approval/inspection and acceptance of Renovation.
- ix. Verify site preparation work with a County designated Project Manager and the Engineer, if applicable.
- x. Deliver building materials to site location as designated by the Project Manager.
- xi. Furnish and install all supplementary or miscellaneous items, appurtenances, and devices incidental to or necessary for a sound, secure and complete installation.
- xii. In addition to any other warranties required by the Contract or this IFB, the Contractor shall provide and assign to the County any and all related manufacturer's warranties for the Project, Renovation, Site Work, materials, equipment, or any portion(s) thereof. A copy of these shall be provided with your bid response.
- xiii. Agree to all of the provisions of the County of Fluvanna's General Terms, Conditions and Instructions to Bidders and Contractors attached to this IFB as Appendix I and further shall agree that any resulting contract awarded pursuant to this IFB shall incorporate by reference as material provisions of such Contract the County of Fluvanna's General Terms, Conditions and Instructions to Bidders and Contractors. Any resulting Contract shall be in form acceptable to the County in its sole discretion.
- xiv. The Bidder agrees and understands that Cares Act funds will be used to pay for the Work on the Project and that the purpose of the Renovation is for the Safety Considerations and all Services on the Task Order must be performed (i) to conform to the CARES Act funding Cares Act Requirements; (ii) to allow for a larger meeting space suitable for social distancing; (iii) to improve air flow; and (iv) taking into account safety considerations particular to the public health emergency known as COVID-19.
- D. **PROJECT SUCCESS:** A successfully completed Project shall mean: 1) that the Project was completed on or prior to December 11, 2020; 2) that the Project was completed at or below the contract award amount, including any subsequent owner-approved cost change orders; and 3) that the Project was completed in strict conformance and in accordance with the Contract documents.

# **E. PROTECTION OF PERSON AND PROPERTY:**

- i. All materials shall be protected from damage during delivery, storage, and installation.
- ii. Work can be done on the property 24 hours a day, 7 days a week.
- iii. The Contractor shall not remove any excess (unused) construction material from the site without the County's approval. The County shall be reimbursed for the unused construction material or keep the material onsite.
- iv. The Contractor is responsible to keep a clean and safe construction area.
- v. Contractor shall be responsible for initiating, maintaining and supervision of all safety precautions in connection with the work on the Project. Any damage to existing

Property, site, buildings, real property (land), or personal property, resulting from the work on the Project or the performance of a Contract awarded pursuant to this IFB shall be repaired or replaced at the sole cost and expense of the Contractor to the satisfaction of the County. The Contractor shall repair and/or replace any damage done to any County property by their employees or resulting from Contractor's services as soon as practicable, but in any event, no more than ten (10) calendar days after notification by the County. All such repairs or replacements shall be completed to the County's sole satisfaction. To protect the Contractor, the Contactor shall document any damages in the project area prior to commencing work including photographs. This written record shall be provided to the County prior to commencing work.

#### F. BUILDING PERMITS & INSPECTIONS:

- i. The Contractor shall notify Miss Utility to locate all underground utilities and their depth and location prior to starting any work on the Project, if applicable.
- ii. The Contractor shall apply for all required building permits before starting the work on this Project.
- iii. Contractor shall notify the county to arrange for inspections at agreed milestones and shall notify for final inspection.

# **G. INSURANCE REQUIREMENTS:**

- i. The firm shall agree to carry the required liability insurances that are listed under item number 39 of the "GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS" attached hereto as Appendix I.
- ii. By signing and submitting a proposal under this solicitation, the Contractor certifies that if awarded the contract, it will have the insurance coverage required at the time the work commences. The Contractor further certifies that the contractor will maintain the specified coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.
- iii. During the period of the contract the County reserves the right to require the Contractor to furnish certificates of insurance for the coverage from time to time.
- iv. A Certificate of Insurance shall be submitted with the Contractor's Bid evidencing the insurance required hereunder.
- H. **APPLICABLE LAW:** The Contractor and all equipment, materials, and installation related to the work on the Project shall comply with applicable federal, State and local laws, ordinances, rules and regulations in performance of the Contract ("Applicable Law"), including without limitation:
  - i. The Americans with Disabilities Act, as this Project is a new construction Project for a unit of government;
  - ii. OHSA requirements; and
  - iii. The Virginia Uniform Statewide Building Code.
- I. TIME FOR COMPLETION: THE RENOVATION MUST BE SUBSTANTIALLY COMPLETED TO THE COMPLETE REASONABLE SATISFACTION OF THE COUNTY IN ACCORDANCE WITH THE CONTRACT AND THIS IFB ON OR BEFORE NOVEMBER 30, 2020, AT 5 P.M. EST, TIME OF THE ESSENCE. THE RENOVATION MUST BE FINALLY COMPLETED TO THE COMPLETE REASONABLE SATISFACTION OF THE COUNTY IN ACCORDANCE WITH THE CONTRACT AND THIS IFB ON OR BEFORE December 11, 2020, AT 5 P.M. EST, TIME OF

THE ESSENCE. A detailed proposed Project schedule must be submitted with any Bid and the County may prefer earlier Project competition dates in the event of a tie. Any resulting Contract from the IFB will contain the following Liquidated damages provision: "The Contractor understands and acknowledges that the County is using CARES Act Funds to pay for entire cost of the Renovation and therefore, the Renovation Project must be completed on or before December 30, 2020 or the CARES Act funding for the Project will be unavailable for use. Contractor and County recognize that time is of the essence with respect to the Project schedule and that County will suffer financial loss if the Renovation is not fully and finally completed on or before December 11, 2020 (the "Final Completion Date"). The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by County if the Work is not completed on time. Accordingly, instead of requiring any such proof, County and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay the County \$500.00 for each day that expires after the Substantial Completion Date until the Renovation is substantially complete; and Contractor shall pay the County \$500.00 for each day that expires after the Final Completion Date until the Renovation is finally complete. However if the Renovation is not finally complete to the reasonable satisfaction of the County in accordance with the terms of the Contract on or before December 30, 2020, then the County and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay the County the entire Contract Price (and in such event no amounts of any kind shall be due or owing to the Contractor for the work on the Renovation; and any payments made to the Contractor by the County toward the Contract Price shall be repaid to the County on or before January 30, 2021).

# 4. SUBMITTAL INSTRUCTIONS

# A. GENERAL INSTRUCTIONS

- i. **IFB Response**: In order to be considered for selection, interested parties must submit a complete response to this IFB, including all requested documentation. Failure to comply with all criteria listed herein may be cause to reject a Bid.
- ii. IFB Questions: Address questions concerning this IFB to:

Cyndi Toler, Purchasing Officer P.O. Box 540 132 Main Street

Palmyra, VA 22963 Ph: (434) 591-1937

# ctoler@fluvannacounty.org

Bidders shall submit any questions in writing. Written responses, including the questions, will be posted with the IFB. Questions will not be accepted after September 11, 2020, at 10 a.m. eastern standard time.

iii. Ownership of Proposals: Ownership of all data, materials, and documentation originated and prepared for the County pursuant to the IFB shall belong exclusively to the County and be subject to public inspection in accordance with the Freedom of Information Act. Any proprietary or trade secrets material submitted must be identified as such, and must indicate the specific words, figures, or paragraphs specifically, and with a reason why such material is proprietary or a trade secret under

- Virginia law. The classification of an entire proposal document, individual pricing or total proposal prices is not acceptable and will result in rejection and return of the proposal.
- iv. **Due Date:** Sealed Bids must be received by the Purchasing Officer no later than 2:00 p.m. EST on September 23, 2020. Proposals must be addressed to:
- v. Any Proposals that are turned in late will be rejected and returned unopened. Any Proposals sent in via facsimile, telephone, or email shall not be considered.
- B. All Bids shall provide a straight-forward, concise delineation of the firm's capabilities to satisfy the requirements of this IFB. Emphasis should be on completeness and clarity of content. The contents of the Bid submitted by the successful Bidder and this IFB, and any amendments thereto, will become part of any contract awarded as a result of this IFB.
- C. The format of each bid must contain the following elements organized into separate chapters and sections, as the Bidder may deem appropriate. The following paragraphs provide guidelines to each Bidder for information to include in the bid document:
  - i. **Cover Letter** Provide a cover letter that confirms the Bidder's understanding of this IFB and a general understanding of the Project.
  - **ii. Overview** The purpose of this section is to provide Fluvanna County with an overview of the history, qualifications and abilities of the Contractor's firm and for the Contractor to demonstrate the specific qualifications of the staff the Contractor will assign to this Project if selected. At a minimum, the proposal should: (i) Designate a Project Manager and indicate office location; and (ii) Include the organization chart, functional discipline, and responsibilities of Project team members.
  - **Resumes/Qualifications** Provide a concise resume or description of each principal team member's education, relevant professional experience, length of time employed by the Contractor and/or sub-consultant, and professional licenses. Each firm submitting a proposal shall provide an updated statement of qualifications highlighting the expertise and experience of the firm and its personnel related to the Project.
    - **a.** Licenses to conduct services or work on the Project required by the Code of Virginia
    - **b.** Certificate of Insurance
    - c. Certification of Insurer regarding Performance and Payment Bonds
  - iv. Demonstrated History of Successful Projects Discuss recent project information of similar type to the Project completed by the firm including the project name, location, brief description of the project, description of the scope of services provided, and principal contact person. List all work of a similar nature to the Project completed for any department or agency of the Commonwealth of Virginia and any Virginia public body or locality.
  - v. Proposed Sub-Consultants The Contractor shall clearly state whether it is proposing to subcontract any of the work herein. The names of all proposed sub-contractors shall be provided. By proposing such firm(s) or individuals, the Contractor assumes full liability for the sub-consultant's performance. The Contractor shall state the amount of previous work experience with the sub-consultant(s).
  - vi. References: In addition to any specific references required under this IFB, Provide the current name, address, and telephone number of at least four (4) references the Contractor has served either currently or in the past three (3) years; preferably those where one or more of the Project team members provided the same or similar services as requested herein. Indicate the Scope of Services provided to each reference.

- vii. **Pricing** Please provide flat lump sum pricing. The lump sum price shall include all labor, materials, services, equipment, tools, consumables, parts, supervision, permitting, overhead, administrative, overhead, delivery, shipping, handling, travel and other costs, fees or charges of any kind related to or required for the work on the Project.
  - a. Bids will only be accepted where pricing is submitted on this Pricing Schedule, Attachment E. Vendor quotations and other supporting documentation can be included with the bid.
  - b. The method of payment for this contract will be by lump sum fixed price or not to exceed payment including all reimbursable administrative or other expenses of any kind.
  - c. Bidders acknowledge and understands that: The County is using CARES Act Funds to pay for the Renovation and therefore Project deadlines and milestones under any Contract resulting from this IFB shall be time of the essence.
  - d. Bidder has read and understands the provisions of Section 3(I) of this IFB and agrees to such provision.
- viii. **Project Approach** The purpose of this section is to provide the County with the Bidder's understanding and proposed approach to the project. The Bidder should discuss in detail the proposed management and project approach, the staffing of the Bidder's firm and firm's approach to ensure quality control and completion Project in a timely manner.
  - ix. **Project Full Specifications** Please provide full specifications and features of Renovation, ducting, lighting, materials, concrete, flooring, tile, insulation, ceiling, HVAC equipment, and all materials and a detailed listing of all Site Work; and include the applicable warranty information for each portion thereof. Please provide pictures, pamphlets and materials related to the materials (such as windows, locks, doors, skylights, fans, concrete, finishes, paints, tiles, floors, HVAC grills, trim, etc.) that will be used.
  - x. Forms: All forms required to be submitted under this IFB must be included in the Bid.
    - a. Vendor Data Sheet (Attachment A)
    - b. Proof of Authority to Transact Business in Virginia (Attachment B)
    - c. Certificate of No Collusion (Attachment C)
    - d. Bidder Statement (Attachment D)
    - e. Pricing (Attachment E)
- xi. Any information thought to be relevant, but not applicable to the enumerated scope of work, should be provided as an appendix to the bid. If publications are supplied by the Bidder to respond to a requirement, the response should include reference to the document number and page number. Bids not providing this reference may be considered to have no reference material included in the additional documents.

#### D. Other Requirements:

- Expertise and experience of the firm related to the scope of services contained in this IFB. This section shall include recent project information of similar type completed by the firm along with the name and telephone number of the point of contact for each project.
- ii. The IFB document with any addenda acknowledgements filled out and signed as required (see attachments hereto).
- iii. A detailed response to all requirements, general, specific, functional, and technical required under this IFB.

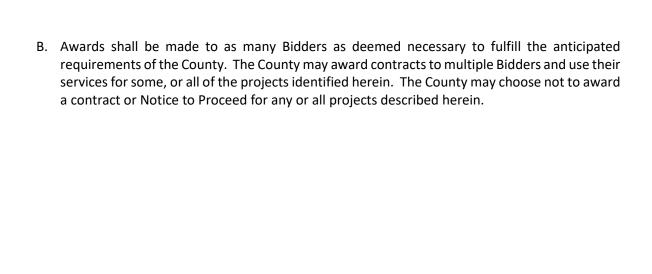
- iv. A statement of how long the Bidder has provided services similar to the Work requested herein;
- v. Financial responsibility of the firm. Include most recent financial statement (audited is preferred).
- vi. The firm should include a street address of the office proposed to handle the work.
- vii. Identification and statement of qualifications of the construction project team who will be assigned to the Project for actual "hands on" work, as well as the principal assigned the Project for oversight responsibilities.
- viii. Provide your proposed Project timeline/completion schedule. Time shall be of the essence with respect to all project deadlines and Project completion.
- ix. Disclose all past and pending litigation.
- 5. The County is not responsible for failure to locate, consider and evaluate qualification factors presented outside this format.
- 6. **Incurred Expenses**: The County will not be liable for any cost incurred by Bidders in preparing and submitting proposals. Bidders may not collect proposal preparation charges from the County of Fluvanna as a result of cancellation of this IFB.

#### 7. SUBMITTAL INSTRUCTIONS

- A. Each Bidder must submit one (1) original and One (1) copy along with one (1) electronic copy of its bid documents on CD ROM, DVD, or USB flash drive/memory stick.
- B. An authorized representative of the Bidder shall sign bid documents. All information requested should be submitted. Failure to submit all information requested may result in the bid being rejected by the County.
- C. All forms attached to this IFB must be fully completed, executed by the Bidder and returned as a part of Offer's Bid.
- D. Each bid shall be in writing and received in hard copy by the deadline. Oral bids, bids received by telephone, fax, telegraph, or email shall be rejected.
- 8. CONTRACT AWARD: The contract will be awarded to the lowest responsible and responsive bidder whose bid, conforming to this IFB, is most advantageous to the County, considering price and any other evaluation criteria set forth in the bid documents and consistent with the Virginia Procurement Act, the County's Code, the County's Procurement Policies and Procedures and other applicable law. Nothing herein requires that the County complete this work and the County may determine not to award any Contract pursuant to this IFB in its sole discretion for any reason or no reason at all.

# 9. TERMS

A. The County's General Terms, Conditions, and Instructions to Bidders and Contractors are attached hereto and incorporated herein by reference as Appendix I. These provisions bind all Bidders. Further, the conditions and requirements of this IFB, including, but not limited to, County's General Terms, Conditions, and Instructions to Bidders and Contractors, are a material part of any contract awarded between the County and the successful Bidder(s).



# **VENDOR DATA SHEET**

1. Qualification: The vendor must have the capability and capacity in all respects to satisfy fully all of the

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.

contractual requirements.

Signature

2. Vendor's Primary Contact: Name:	Phone:		
3. Years in Business: Indicate the length of tir service: Years Months		ess providing this type of good or	
4. Vendor Information:			
FIN or FEI Number:	If Com	pany, Corporation, or Partnership	
	(If Vendor is a sole proprietor)		
5. Indicate below a listing of at least four (4) of governmental, that your company is servicing length of service and the name, address, and to	, has serviced, or has provi	ded similar goods. Include the	
Company:	Contact:		
Phone:	Email:		
Dates of Service:	\$\$ Value:		
Company:	Contact:		
Phone:	Email:		
Dates of Service:	\$\$ Value:		
Company:	Contact:		
Phone:	Email:		
Dates of Service:	\$\$ Value:		
Company:	Contact:		
Phone:	Email:		
Dates of Service:	\$\$ Value:		
By my signature below, I, as a duly authorized rep foregoing information:			
Legal Name of Entity if Applicable			
By:(SEAL)	Print Name:		
Signature of Authorized Representative	Print Title:		
<b>Vendor Certification (for a Sole Proprietor):</b>			
(SEAL)	Print Name:	Date:	

# 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 Section 2.2-4311.2 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
·
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):
Legal Name of Offeror/Bidder:
Date:
Authorized Signature:
Print or Type Name and Title:

PLEASE RETURN THIS PAGE WITH PROPOSAL SUBMISSION – [REQUIRED]

# **CERTIFICATE OF NO COLLUSION:**

		, does hereby certify in connection ficate of No Collusion is attached that:
with the procurement and proposal	to which this Certi	neate of two Condition is attached that.
same line of business or commerce	e; nor is this propos	ct of collusion with another person engaged in the al the result of, or affected by, any act of fraud .1 of the Code of Virginia, 1950, as amended (18.2-
		gning this proposal is/are fully authorized to sign the the firm listed to all conditions and provisions
Respectfully submitted this	day of	, 2015.
Legal Name of Entity		
By:	,	(SFAL)
Signature of Authorized Represent	ative	
Print Name:		
Print Title:		
Date:		
	ACKNOWLI	
State of In the County/City of		40 vvita
in the County/City of	,	to-wit:
The foregoing Certification of No by(l	Print Name),	(Print Title) on behalf of
(Pri	nt Name of Entity)	on this day of
(month), (year).		
	_	Notary Public
My commission expires:		,
wiy commission expires.		_
Registration Number:		

PLEASE RETURN THIS PAGE WITH PROPOSAL SUBMISSION – [REQUIRED]

# **BIDDER/OFFEROR STATEMENT**

The undersigned Bidder/Offeror (hereinafter "Bidder") hereby certifies that the Bidder has carefully examined all instructions, plans, conditions, specifications and other documents or items of this Invitation for Bid or Request for Proposals and hereby submits this bid/proposal pursuant to such instructions, plans, conditions, specifications and other documents or items. By submitting a bid/proposal, the Bidder covenants and agrees that he has satisfied himself, from his own investigation of conditions to be met, that he fully understands his obligation and that he will not make any claim for, or have right to cancellation or relief from the resulting contract because of any misunderstanding or lack of information; Certifies and warrants that the Bidder is properly licensed to provide the goods/services specified in the Request for Proposal and has the appropriate License or Certificate and classification(s) required to perform the work included in the scope of the proposal documents, prior to submitting the proposal, in accordance with Title 54.1, Chapter 11 of the Code of Virginia. If an Bidder shall fail to obtain the required license prior to submission of his proposal, he shall be deemed to be in violation of § 54.1-1115 of the Code of Virginia (1950), as amended, and his proposal will not be considered; Bidder further agrees that conditions herein have been carefully read and this proposal is submitted subject to all requirements stated herein. The undersigned hereby acknowledges and agrees, if this proposal is accepted, to furnish all services agreed upon in strict accordance with the contract.

<u>Complete if Bidder is an Entity:</u> WITNESS the following duly authorized signature and seal:

Name of Entity:			
By:	(SEAL)		
Signature			
Print Name:	Print		
Title:			
STATE OF			
COUNTY/CITY OF	, to-wit:		
The foregoing instrument was acknow(year) by			_(Print Name),
(Print Title) on beha	If of		(Name of
Entity).			FOR A X 3
	N - ( D-1.1' -		[SEAL]
My commission against	Notary Public	;	
My commission expires:  Notary registration number:	-		
Complete if Bidder is a Sole Proprietor: W	itness the following signa	ature and seal:	
	(SEAL)		
Signature			
Print Name:			
STATE OF			
COUNTY/CITY OF	, to-wit:		
The foregoing instrument was acknown		day of	(month),
(year) by		(Print Name)	, a sole proprietor.
			[SEAL]
	Notary Public	;	
My commission expires:			
Notary registration number:			

PLEASE RETURN THIS PAGE WITH BID SUBMISSION - [REQUIRED]

# 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. <u>Bid/Proposal:</u> 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. <u>Bidder/Offeror/Vendor:</u> 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. <u>Contractor:</u> 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. <u>County:</u> 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. <u>Purchasing Agent:</u> 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.
- 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.

- 1. <u>Purchasing Officer:</u> 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. <u>Solicitation:</u> 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.

- **& 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, 2<sup>nd</sup> 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)

The Contract may specifically require the Contractor to carry higher minimum amounts of insurance.

Amount required by Virginia law

Worker's Compensation

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 Architect, County and their 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.
- **SREFERENCES 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.

- 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, site, 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;
  - 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.
- MOTICES: 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.
- **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.

- (A) 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.



### COUNTY OF FLUVANNA

"Responsive & Responsible Government"

132 Main Street P.O. Box 540 Palmyra, VA 22963 (434) 591-1910 Fax (434) 591-1911 www.fluvannacounty.org

**Price** 

	INVITATION TO BID: Fluvanna County – Basement Renovation	BID OPENING: September 23, 2020 AT 2:00 p.m.
NOTICE TO ALL BIDDERS: All equal shall conform to the specifications a		
Have all Specifications included in th	is Invitation for Bid been met?	
If no, please list all exceptions in deta	ail on separate sheet.	
Person to Contact regarding this Bid:		
Title:	Phone:	
Email Address:		
Name of person Authorized to bind the	bidding firm:	
Name of person Authorized to bind the Signature: Name of Bidder:	Date:	

thereto (including without limitation the County's General Terms, Conditions and Instructions

to Bidders and Contractors), and their Bid.

**LUMP SUM COST FOR BASEMENT RENOVATION** 

**Work Description** 

# ADDITION AND RENOVATIONS

# MULTIPURPOSE ROOM

FLUVANNA COUNTY AUGUST 28, 2020



# CRABTREE, ROHRBAUGH & ASSOCIATES - ARCHITECTS

IMAGE FOR GRAPHIC REPRESENTATION ONLY. IMAGE

250 WEST MAIN STREET, SUITE 200 CHARLOTTESVILLE VA 22902 Phone: (434) 975-7262 www.cra-architects.com



# **STRUCTURAL**

# MEP ENGINEER CMTA

315 West Broad Street ADDRESS LINE 2 Richmond, VA 23220 804-495-8461 www.cmta.com

# ENGINEER

DMWPV

110 Third Street

ADDRESS LINE 2

Charlottesville, VA 22902

434-293-5171

www.dmwpv.com

# **CIVIL ENGINEER**

TIMMONS GROUP

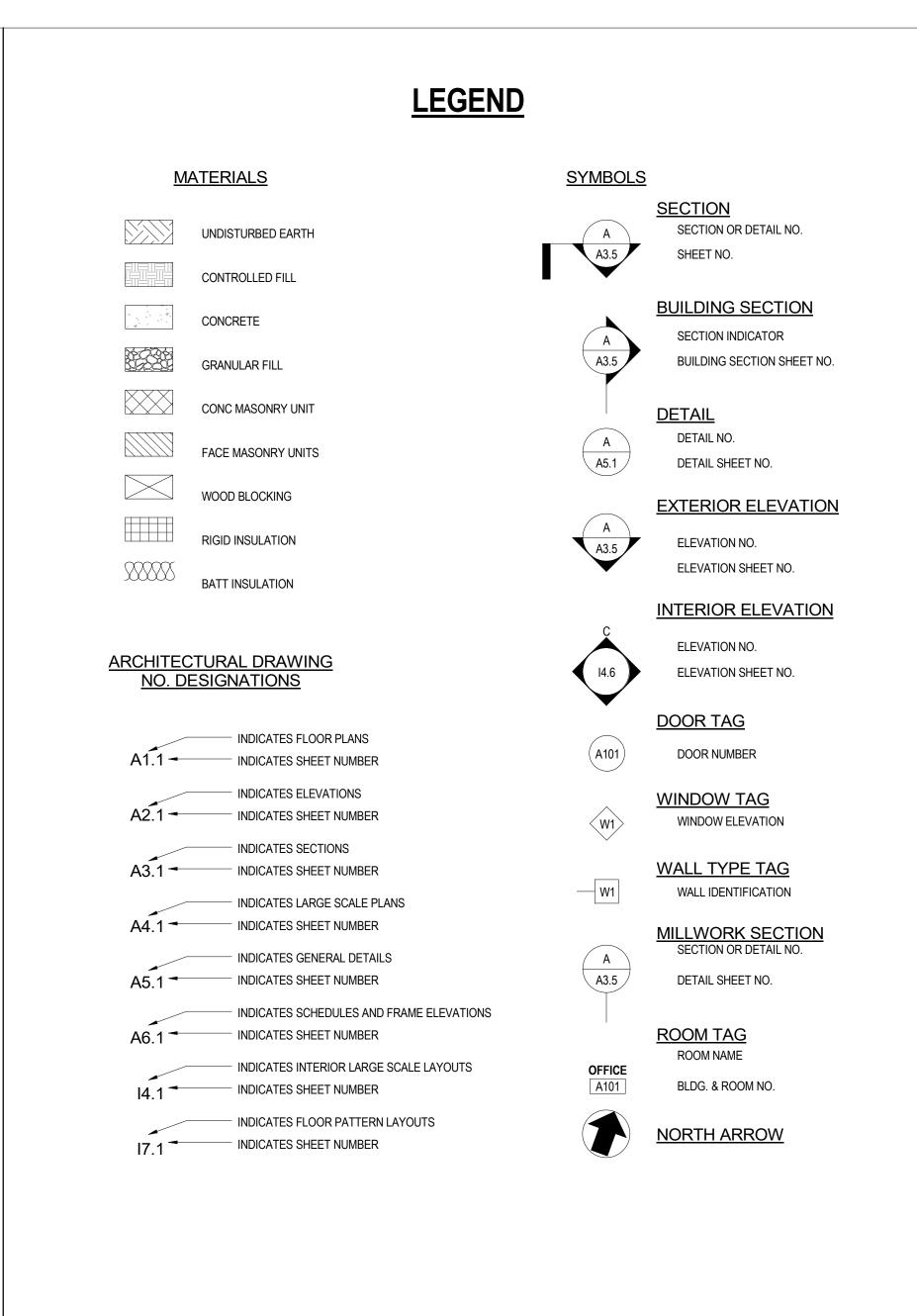
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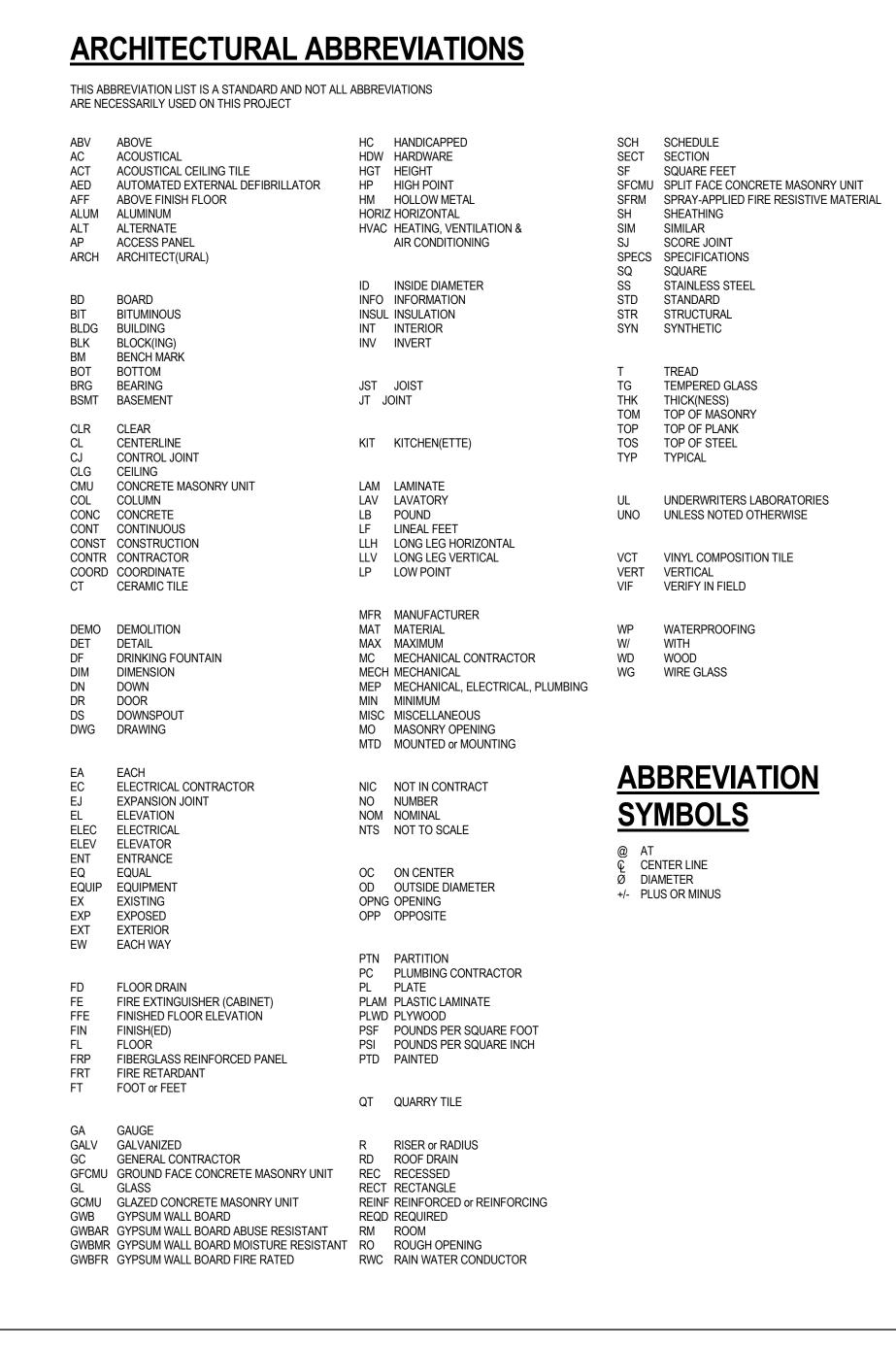
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Charlottesville, VA 22903

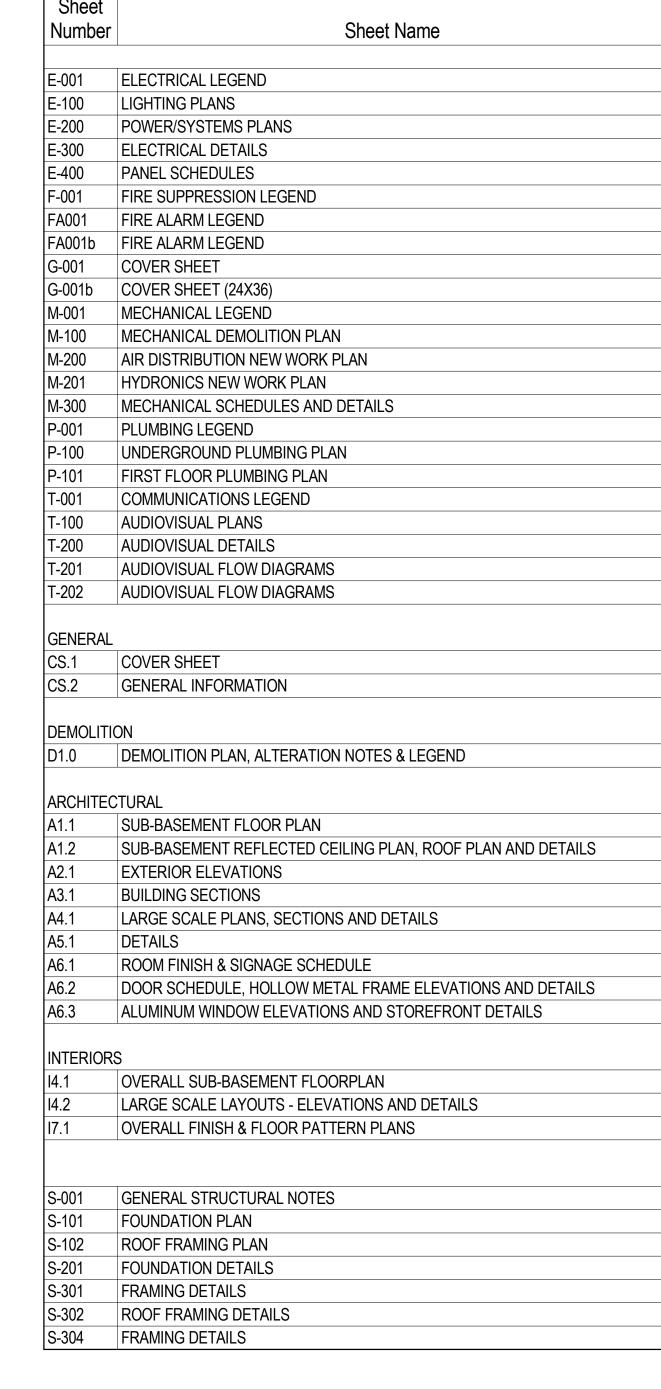
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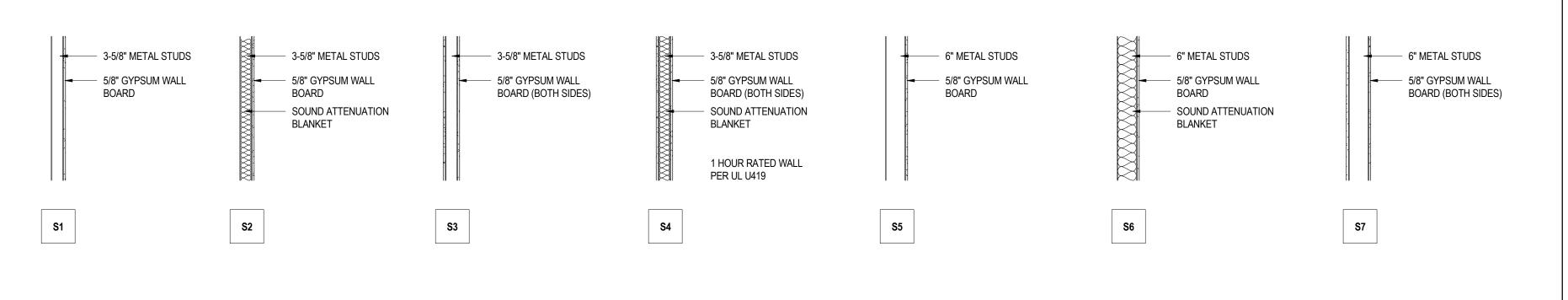
www.timmons.com

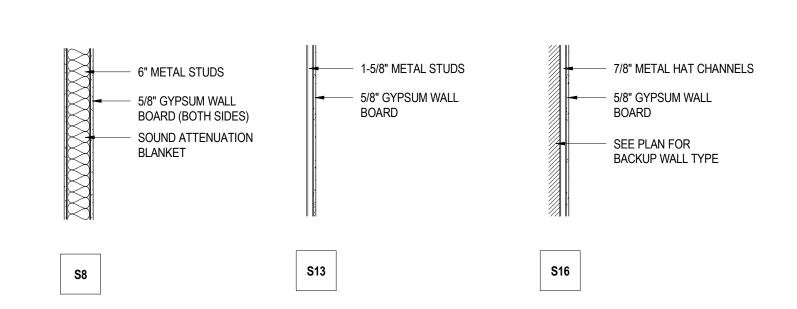




### DRAWING LIST Sheet Number Sheet Name ELECTRICAL LEGEND LIGHTING PLANS POWER/SYSTEMS PLANS ELECTRICAL DETAILS PANEL SCHEDULES FIRE SUPPRESSION LEGEND FIRE ALARM LEGEND FA001b FIRE ALARM LEGEND COVER SHEET COVER SHEET (24X36) MECHANICAL LEGEND MECHANICAL DEMOLITION PLAN AIR DISTRIBUTION NEW WORK PLAN HYDRONICS NEW WORK PLAN MECHANICAL SCHEDULES AND DETAILS PLUMBING LEGEND UNDERGROUND PLUMBING PLAN FIRST FLOOR PLUMBING PLAN COMMUNICATIONS LEGEND AUDIOVISUAL PLANS AUDIOVISUAL DETAILS AUDIOVISUAL FLOW DIAGRAMS AUDIOVISUAL FLOW DIAGRAMS GENERAL COVER SHEET GENERAL INFORMATION DEMOLITION DEMOLITION PLAN, ALTERATION NOTES & LEGEND ARCHITECTURAL SUB-BASEMENT FLOOR PLAN SUB-BASEMENT REFLECTED CEILING PLAN, ROOF PLAN AND DETAILS EXTERIOR ELEVATIONS BUILDING SECTIONS LARGE SCALE PLANS, SECTIONS AND DETAILS DETAILS ROOM FINISH & SIGNAGE SCHEDULE DOOR SCHEDULE, HOLLOW METAL FRAME ELEVATIONS AND DETAILS ALUMINUM WINDOW ELEVATIONS AND STOREFRONT DETAILS OVERALL SUB-BASEMENT FLOORPLAN LARGE SCALE LAYOUTS - ELEVATIONS AND DETAILS OVERALL FINISH & FLOOR PATTERN PLANS GENERAL STRUCTURAL NOTES FOUNDATION PLAN ROOF FRAMING PLAN FOUNDATION DETAILS FRAMING DETAILS ROOF FRAMING DETAILS







**INTERIOR STUD WALL TYPES** 

GYPSUM WALL BOARD LOCATION SCHEDULE						
ABUSE RESISTANT GYPSUM BOARD	ALL CLASSROOMS AND OFFICES     ALL LOCATIONS SCHEDULED TO RECEIVE GYPSUM WALL BOARD UNLESS NOTED OTHERWISE     EXPOSED LAYER AT MULTIPLE LAYERS OF GYPSUM WALL BOARD					
GYPSUM WALL BOARD	ALL APPLICATIONS ABOVE 8'-0" FINISH FLOOR     ALL MULTIPLE LAYER WALLS, EXCEPT THE EXPOSED LAYER					
MOLD & MOISTURE RESISTANT GYPSUM BOARD	PAINTED WALLS & CEILINGS IN TOILET ROOMS, LOCKER ROOMS & SHOWERS					
CEMENTITIOUS BACKER UNIT	AT WALLS SURROUNDING SHOWERS AND TUBS SCHEDULED TO RECEIVE CERAMIC TILE					

**GENERAL NOTES: WALL TYPES** 1. ALL INTERIOR WALLS WHICH ARE NOT TAGGED OR OTHERWISE DETAILED SHALL BE TYPE M1. 2. ALL WALLS SHALL EXTEND TO WITHIN 2" OF UNDERSIDE OF FLOOR, ROOF OR ROOF STRUCTURE. AT ALL NON-RATED WALLS, INSTALL COMPRESSIBLE FILLER IN JOINT BETWEEN TOP OF PARTITION AND UNDERSIDE OF STRUCTURE ABOVE. AT ALL FIRE-RATED WALLS, INSTALL FIRESTOPPING IN JOINT BETWEEN TOP OF PARTITION AND UNDERSIDE OF STRUCTURE ABOVE. 3. PROVIDE THROUGH-PENETRATION FIRE STOP SYSTEMS FOR ALL BUILDING UTILITIES PENETRATING FIRE-RESISTANCE RATED WALL ASSEMBLIES. RATED AT THE SAME FIRE-RESISTANCE RATING AS THE ASSEMBLIES IN WHICH IT IS PENETRATING. OPENINGS IN FIRE-RATED ASSEMBLIES SHALL BE LIMITED TO MINIMUM SIZES TO ACCOMMODATE PENETRATIONS TO ENSURE MAXIMUM INTEGRITY OF THE ASSEMBLIES FIRE-RATING. 4. AT STUD WALLS WITH GYPSUM WALL BOARD, PANELS TO EXTEND TO UNDERSIDE OF DECK ABOVE UNLESS NOTED OTHERWISE. 5. REFER TO CODE ANALYSIS DRAWINGS FOR LOCATION AND EXTENT OF FIRE-RESISTANCE-RATED 6. SEE SECTIONS, STRUCTURAL DRAWINGS AND ELEVATIONS FOR FURTHER DETAIL OF WALL CONSTRUCTION.



GENERAL INFORMATION

AUGUST 28, 2020

1/2" = 1'-0"

**PROJECT** 

ALL REPORTS. PLANS SPECIFICATIONS AND COMPUTER FILES RELATING TO THIS

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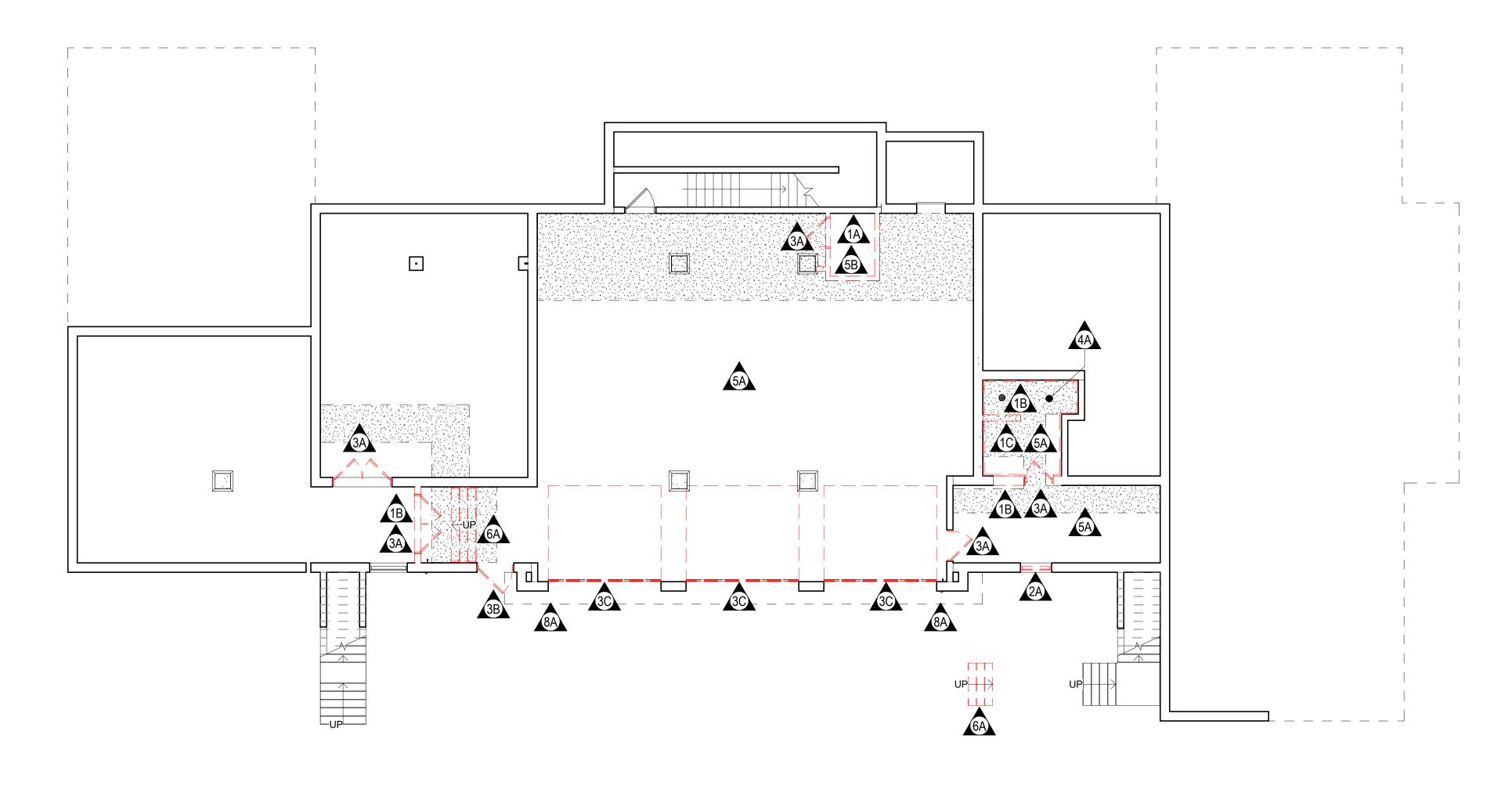
REVISIONS

01 MM-DD-YR NAME DESCRIPTION OF CHANGES

ARCI

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REMOVE EXISTING CONCRETE SLAB IN ITS ENTIRETY. PREPARE SUB-BASE TO RECIEVE NEW GRANULAR FILL. VAPOR BARRIER AND REINFORCED CONCRETE. REFER TO MEP DRAWINGS FOR FULL EXTENT OF REQUIRED REMOVAL AND REPLACEMENT.

# **GENERAL DEMOLITION NOTES:**

- D1. DASHED LINES INDICATE GENERAL EXISTING CONSTRUCTION TO BE REMOVED. GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS RELATING TO THE DEMOLITION REQUIRED FOR INSTALLATION OF NEW CONSTRUCTION SHOWN ELSEWHERE.
- D2. SEE STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FOOD SERVICE DRAWINGS FOR OTHER DEMOLITION WORK REQUIRED. ANY DEMOLITION OF MECHANICAL, ELECTRICAL, OR PLUMBING EQUIPMENT SHOWN ON THESE DRAWINGS, IS FOR COORDINATION ONLY. COORDINATE ALL WORK BY OTHER CONTRACTORS INCLUDING CAPPING AND DISCONNECTING OF BUILDING SERVICES SUCH AS WATER, WASTE, ELECTRIC, DUCTWORK, ETC.
- D3. BEFORE DEMOLITION AND THROUGHOUT CONSTRUCTION, GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW WITH OWNER'S REPRESENTATIVE ALL ITEMS BEING REMOVED BY THEIR TRADES. ALL ITEMS DESIGNATED DURING THIS REVIEW TO REMAIN OWNER'S PROPERTY, SHALL BE MAINTAINED IN GOOD CONDITION AND TURNED OVER TO OWNER. ALL ITEMS DESIGNATED TO BE REUSED AS PART OF NEW CONSTRUCTION SHALL BE MAINTAINED IN A REUSABLE CONDITION AND STORED ON SITE BY CONTRACTOR IN A CLEAN, DRY LOCATION UNTIL INSTALLATION. ALL REMAINING ITEMS AND MATERIALS DEEMED TO BE TRASH SHALL BE DISPOSED
- D4. EXISTING CONDITIONS AS THEY APPEAR IN THESE CONTRACT DOCUMENTS MAY VARY WITH ACTUAL CONDITIONS BECAUSE OF WORK PERFORMED WITH OWNER'S STAFF AND BY OTHER CONTRACTORS (I.E. ASBESTOS ABATEMENT CONTRACTOR) PRIOR TO CONTRACT. PORTIONS OF DEMOLITION WORK MAY BE INCLUDED IN THE SCOPE OF WORK OF ANOTHER CONTRACT AND NOT PART OF THIS PROJECT. GENERAL CONTRACTOR SHALL VERIFY THE ACTUAL SCOPE OF DEMOLITION IN THEIR CONTRACT PRIOR TO SUBMITTING A BID.

OF PROPERLY BY LAW, OFF SITE BY THE RESPONSIBLE CONTRACTOR.

- D5. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING BUILDING DIMENSIONS AND CONDITIONS, INCLUDING FINISHES AND MATERIALS, SYSTEMS SHOWN AND DESIGNATED AS EXISTING ON CONTRACT DRAWINGS PRIOR TO STARTING DEMOLITION AND CONSTRUCTION. ANY DISCREPANCIES IN INFORMATION INDICATED ON CONTRACT DRAWINGS SHALL BE DIRECTED IN WRITING TO THE ATTENTION OF THE ARCHITECT PRIOR TO STARTING OF DEMOLITION AND CONSTRUCTION. VERIFICATION OF CLEARANCES REQUIRED FOR ALL NEW EQUIPMENT, PIPING, DUCTWORK AND RELATED COMPONENTS SHALL BE THE CONTRACTORS RESPONSIBILITY.
- D6. DEMOLITION WORK SHOWN ON THE DEMOLITION CONTRACT DRAWINGS SHALL BE FOR THE BUILDING RECEIVING MAJOR DEMOLITION WORK, AND DOES NOT REPRESENT THE DEMOLITION FOR THE PROJECT IN ITS ENTIRETY. REFER TO CONTRACT DRAWINGS FOR ADDITIONAL DEMOLITION WORK, IF, ANY, FOR EACH ROOM OR BUILDING COMPONENT.
- D7. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DEMOLITION CONDITIONS RELATED TO ACCEPTED ALTERNATE BIDS. INCLUDING FINISHES AND MATERIALS, SYSTEMS SHOWN AND DESIGNATED AS EXISTING OR NEW ON THE CONTRACT DRAWINGS PRIOR TO STARTING OF DEMOLITION AND CONSTRUCTION. ANY DISCREPANCIES IN INFORMATION INDICATED ON CONTRACT DRAWINGS SHALL BE DIRECTED IN WRITING TO THE ATTENTION OF THE ARCHITECT PRIOR TO STARTING OF DEMOLITION AND
- D8. OWNER RESERVES THE RIGHT TO SALVAGE AND REMOVE ANY EXISTING ITEMS BEFORE START OF DEMOLITION WORK.
- D9. DEMOLITION DRAWINGS INDICATE EXISTING SLABS TO BE REMOVED IN THEIR ENTIRETY. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ANY SAWCUTTING AND PATCHING OF CONCRETE SLABS THAT NEEDS TO OCCUR AS PART OF THEIR WORK. IN ADDITON, REFER TO STRUCTURAL DRAWINGS FOR SAWCUTTING AND PATCHING THAT NEEDS TO OCCUR TO ACCOMODATE INSTALLATION OF NEW FOOTINGS, PIERS ETC.
- D10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY EXISTING LOAD BEARING WALLS AND PROVIDE TEMPORARY SHORING AND SUPPORT UNTILL
- NEW STRUCTURE CAN BE INSTALLED.
- D11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ASBESTOS CONTAINING MATERIALS AND DISPOSING OF THEM OFF SITE IN ACCORDANCE WITH STATE LOCAL AND LAWS.
- D12. WHERE EXTERIOR WALLS ARE SCHEDULED TO BE REMOVED, THEY ARE TO BE REMOVED DOWN TO TOPS OF EXISTING FOOTINGS. REMOVE EXISTING FOOTINGS WHERE THEY INTERFERE WITH NEW CONSTRUCTION.

# **GENERAL ALTERATION NOTES:**

- ALL EXISTING BUILDING DIMENSIONS AND CONDITIONS RELATED TO THE WORK, INCLUDING BUT NOT LIMITED TO FINISHES, MATERIALS AND SYSTEMS SHOWN AND DESIGNATED AS EXISTING IN CONTRACT DOCUMENTS. ANY DISCREPANCIES FROM INFORMATION INDICATED ON CONTRACT DOCUMENTS SHALL BE DIRECTED TO THE ATTENTION OF THE ARCHITECT. VERIFICATION OF CLEARANCES REQUIRED FOR ALL NEW EQUIPMENT, PIPING, DUCTWORK, AND RELATED COMPONENTS SHALL BE THE CONTRACTORS RESPONSIBILITY.
- R2. GENERAL CONTRACTORS RESPONSIBILITY TO REVIEW WITH THE OWNERS REPRESENTATIVE. ALL ITEMS REQUIRING REMOVAL BEFORE THE START OF WORK. OWNER RESERVES THE RIGHT TO SALVAGE ANY ITEM. ALL REMAINING ITEMS SHALL BE DISPOSED OF OFF SITE.
- R3. WHERE EXISTING WALL OPENINGS ARE INDICATED TO BE CLOSED, USE MATERIALS AND FINISHES TO MATCH ADJACENT EXISTING FINISHES. MASONRY SHALL BE TOOTHED INTO THE EXISTING COURSING TO ACHIEVE A UNIFORM JOINT PATTERN TO MATCH THE EXISTING.
- R4. ALL NEW MASONRY WALLS AND INFILLS THAT ARE IN CONTINUANCE WITH EXISTING MASONRY WALLS SHALL BE TOOTHED INTO THE EXISTING COURSING TO ACHIEVE A UNIFORM JOINT PATTERN TO MATCH THE EXISTING, FIELD VERIFY WALL THICKNESS.
- R5. IN ALL RENOVATED AREAS OF THE WORK, THE INTENT OF THESE CONTRACT DOCUMENTS IS TO PROVIDE A LEVEL OF QUALITY FOR ALL PATCHED SURFACES EQUAL TO THAT OF NEW SURFACES, INCLUDING BUT NOT LIMITED TO PLASTER, GYPSUM WALL BOARD AND MASONRY.
- R1. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND RECORDING OF R6. ALL EXISTING MATERIALS AND FINISHES DISTURBED OR INTERRUPTED BY THE WORK SHALL BE REPLACED OR "FILLED IN" TO ACHIEVE UNIFORM COLOR, TEXTURE, PATTERN AND APPEARANCE TO MATCHING ADJACENT MATERIALS AND FINISHES. TRANSITIONS BETWEEN EXISTING TO EXISTING AND NEW TO EXISTING MATERIALS AND FINISHES SHALL BE ACHIEVED IN STRAIGHT HORIZONTAL AND OR VERTICAL LINES BETWEEN DIFFERENT AND OR NEW MATERIALS AND FINISHES.
  - R7. PATCH ALL HOLES IN FLOORS, WALLS AND CEILINGS, LEVEL WITH EXISTING ADJACENT SURFACES TO RECEIVE NEW FINISHES AND/OR CONSTRUCTION TO COMPLETE THE WORK. MATCH THE EXISTING ADJACENT MATERIALS, PATTERNS AND FINISHES.
  - R8. PATCH, REPAIR OR REPLACE ALL EXISTING FINISHES AND MATERIALS DISTURBED DURING CONSTRUCTION OR AS A RESULT OF DEMOLITION OR REMOVAL OF AN ITEM. ALL REPAIR OR REPLACEMENT SHALL MATCH ADJACENT EXISTING AND/OR NEW FINISHES, PATTERNS AND MATERIALS. SEE ROOM FINISH SCHEDULE FOR NEW FINISHES.
  - R9. PREPARE EXISTING REMAINING WORK SUBSTRATES TO RECEIVE NEW FINISHES AS INDICATED ON THE ROOM FINISH SCHEDULE. SUBSTRATE PREPARATION SHALL BE IN CONFORMANCE WITH THE INSTALLATION REQUIREMENTS OF EACH NEW FINISH.
  - R10. ALL WALLS SHOWN WITH MASONRY HATCHING WITHIN THE EXISTING BUILDING SHALL BE NEW AND TOOTHED INTO EXISTING MASONRY. MATCH EXISTING COURSING, JOINT PATTERN AND THICKNESS UNLESS NOTED
  - R11. MASONRY WALLS AND INFILLS THAT ARE IN CONTINUANCE WITH EXISTING MASONRY WALLS SHALL BE TOOTHED INTO THE EXISTING COURSING TO ACHIEVE A UNIFORM JOINT PATTERN TO MATCH THE EXISTING WORK. MATCH EXISTING WALL THICKNESS.

- R12. AT THE DEMOLITION OF AN EXISTING ITEM, REMOVE ALL TRACES OF THE DEMOLISHED ITEMS COMPONENTS FROM THE SURFACE OF THE REMAINING FLOOR, WALLS AND CEILING. AT THE REMOVED FASTENERS IN ALL EXISTING MASONRY WALLS AND FLOORS, PATCH HOLE WITH GROUT LEVEL WITH EXISTING ADJACENT SURFACES IN ORDER TO RECEIVE NEW FINISHES.
- R13. AT EXISTING FLOORS: CUT IN PLACE CONSTRUCTION TO RECEIVE NEW WORK. REPLACE WITH MATERIALS TO MATCH EXISTING REMAINING CEMENTITIOUS UNDERLAYMENT TO PRODUCE A UNIFORM SURFACE IN ALL AREAS RECEIVING NEW FINISHES AS INDICATED ON THE ROOM FINISH SCHEDULE. PATCHED JOINTS SHALL NOT TELEGRAPH THRU THE NEW FINISH. SEE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND OTHER FINISHES.
- R14. AT EXISTING FLOORS: WHERE WALLS ARE SCHEDULED FOR DEMOLITION AND EXTEND TO BELOW THE CONTINUOUS CONCRETE FLOOR SLAB, THE WALL SHALL BE DEMOLISHED TO BELOW THE FLOOR THICKNESS. THE FLOOR SHALL BE PATCHED WITH CONCRETE AND GRANULAR FILL TO MATCH THE EXISTING THICKNESS, PROVIDE NEW VAPOR BARRIER TO THE PATCHED AREA. PATCH FLUSH TO ADJACENT EXISTING ELEVATIONS. APPLY CEMENTITIOUS UNDERLAYMENT TO PRODUCE A UNIFORM SURFACE IN ALL AREAS RECEIVING NEW FINISH AS INDICATED ON ROOM FINISH SCHEDULE. PATCHED JOINTS SHALL NOT TELEGRAPH THRU THE NEW FINISH.
- R15. PAINT EXISTING METALS: AT EXISTING DOOR FRAMES TO REMAIN AND OTHER PAINTED METAL COMPONENTS INDICATED. REMOVE ALL DIRT, LOOSE PAINT AND RUST, SAND ENTIRE FRAME, PRIME AND PAINT. COLOR SELECTION BY ARCHITECT. WHERE THE EXISTING PAINT IS INCOMPATIBLE WITH NEW PAINT COATINGS, THE EXISTING PAINT SHALL BE COMPLETELY REMOVED.
- R16. PAINT SURFACES: WHERE PATCHING OCCURS IN THE WORK OF AN EXISTING PAINTED SURFACE, THE PATCHED AREA SHALL BE SPACKLED, PRIMED AND INTERMEDIATE PAINT COATS APPLIED OVER THE PATCH. APPLY FINAL PAINT COAT OVER ENTIRE UNBROKEN SURFACE CONTAINING THE PATCH. THE UNBROKEN SURFACE SHALL BE FROM THE INTERSECTION OF THE WALL TO FLOOR TO THE INTERSECTION OF THE WALL TO CEILING AND FROM THE RIGHT SIDE WALL TO WALL INTERSECTION TO THE LEFT SIDE WALL TO WALL INTERSECTION. PROVIDE ADDITIONAL SPACKLING AND/OR PAINT COATS UNTIL THE PATCH AREAS BLEND INVISIBLY INTO THE ADJACENT EXISTING SURFACE. UNBROKEN CEILING SURFACES SHALL BE FROM CEILING TO WALL INTERSECTION AND OR NEW BULKHEAD CEILING ELEVATION CHANGE FOR THE ENTIRE PERIMETER OF THE CEILING AREA. APPLY PAINT COATS AS DESCRIBED FOR THE WALLS.
- R17. AT EXISTING CERAMIC TILE: AT DEMOLISHED ITEMS AND DAMAGED AREAS. FILL ALL HOLES IN EXISTING CERAMIC WALL AND FLOOR TILE THAT ARE UP TO 1" WITH A COLOR EPOXY GROUT TO MATCH THE EXISTING CERAMIC TILE COLOR. REMOVE AND REPLACE EXISTING TILES AT HOLES THAT ARE OVER 1" AND AT ALL BROKEN AND MISSING WALL AND FLOOR TILES WITH A NEW TILE TO MATCH EXISTING COLOR AND SIZE.

	ALTERATION LEGEND
TAG	REMARK
0 - ROOF	
0A	Demolition Note 1
1 - WALL	
1A	REMOVE EXISTING PARTITION AND ALL RELATED COMPONENTS IN ITS ENTIRETY. PATCH AND REPAIR ALL EXISTING SUBSTRATES AND SURFACES TO REMAIN. PREPARE SURFACES TO RECEIVE NEW SCHEDULED WORK AND FINISHES.
1B	REMOVE EXISTING MASONRY PARTITION AND ALL RELATED COMPONENTS IN ITS ENTIRETY. PATCH AND REPAIR ALL EXISTING SUBSTRATES AND SURFACES TO REMAIN. PREPARE SURFACES TO RECEIVE NEW SCHEDULED WORK AND FINISHES.
1C	REMOVE EXISTING THICK SET CERAMIC TILE WAINSCOT IN ITS ENTIRETY. GRIND ALL MORTAR RESIDUE OFF DOWN TO FACE OF EXISTING CMU. PROVIDE SMOOTH CLEAN FINISH TO RECEIVE NEW CONSTRUCTION AND FINISHES. PATCH AND REPAIR ALL EXISTING SUBSTRATES AND SURFACES TO REMAIN. PREPARE SURFACES TO RECEIVE NEW SCHEDULED WORK AND FINISHES.
2 - WINDOV	V
2A	REMOVE EXISTING WINDOW, HARDWARE, FRAME AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY. PREPARALL SURFACES TO RECIEVE NEW CONSTRUCTION.
3 - DOOR	
3A	REMOVE EXISTING DOOR, HARDWARE, FRAME AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY. PREPARE ALL SURFACES TO RECIEVE NEW CONSTRUCTION.
3B	REMOVE EXISTING DOOR, TRANSOM WINDOW, HARDWARE, FRAME AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY. PREPARE ALL SURFACES TO RECIEVE NEW CONSTRUCTION.
3C	
4 - FLOOR	
4A	REMOVE EXISTING RESILIENT FLOORING IN ITS ENTIRETY, PATCH AND PREPARE EXISTING FLOOR SURFACE TO RECEIVE NEW CONSTRUCTION
5 - CEILING	
4A	REMOVE EXISTING SUSPENDED ACOUSTICAL TILE CEILING, GRID, HANGERS AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY
5A	REMOVE EXISTING SUSPENDED ACOUSTICAL TILE CEILING, GRID, HANGERS AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY
5B	REMOVE EXISTING GYPSUM BOARD CEILING, FRAMING, HANGERS AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY
6 - STAIR	
6A	
7 - EQUIPM	ENT/CASEWORK
7A	NOT USED
8 - MISCELI	ANEOUS
8A	REMOVE EXISTING CORNICE, TRIM, FRAMING, FLASHING AND ALL RELATED COMPONENTS. PATCH AND PREPARE EXISTING MANSORY WALL TO RECEIVE NEW CONSTRUCTION.
9 - MEP	
9A	NOT USED

### **ALTERATION NOTES**

SITE IMPROVEMENTS.

BEFORE START OF ALTERATION WORK.

1. EXISTING CONDITIONS AS INDICATED ON THE ALTERATION DRAWING(S) MAY VARY WITH ACTUAL CONDITIONS. BEFORE START OF WORK, VERIFY EXISTING CONDITIONS AS RELATED TO COMPLETION OF NEW PROJECT AND/OR SITE

2. REFER TO CIVIL AND MEP DRAWINGS FOR ADDITIONAL ALTERATION WORK INCLUDING REMOVAL, DISCONNECT AND/OR CAPPING OF EXISTING SERVICES SUCH AS WATER, GAS, SEWER, ELECTRIC, ETC.

3. BEFORE START OF ALTERATION WORK, REVIEW AND PREPARE AN OWNER APPROVED LIST OF EXISTING ITEMS TO REMAIN AS OWNER'S PROPERTY. DESIGNATED ITEMS TO BE REMOVED AND STORED IN SECURE, CLEAN, DRY ON-SITE LOCATION. ITEMS TO BE MAINTAINED AS EXISTING AND IN REUSABLE

4. REMAINING DISTURBED CONSTRUCTION, MATERIALS OR FINISHES SHALL BE PATCHED, REPAIRED OR REPLACED AS REQUIRED TO MATCH THE ORIGINAL CONDITION AND AS IT IS RELATED TO COMPLETION OF NEW PROJECT AND/OR

5. OWNER RESERVES THE RIGHT TO SALVAGE AND REMOVE ANY EXISTING ITEMS

01 MM-DD-YR NAME DESCRIPTION OF CHANGES

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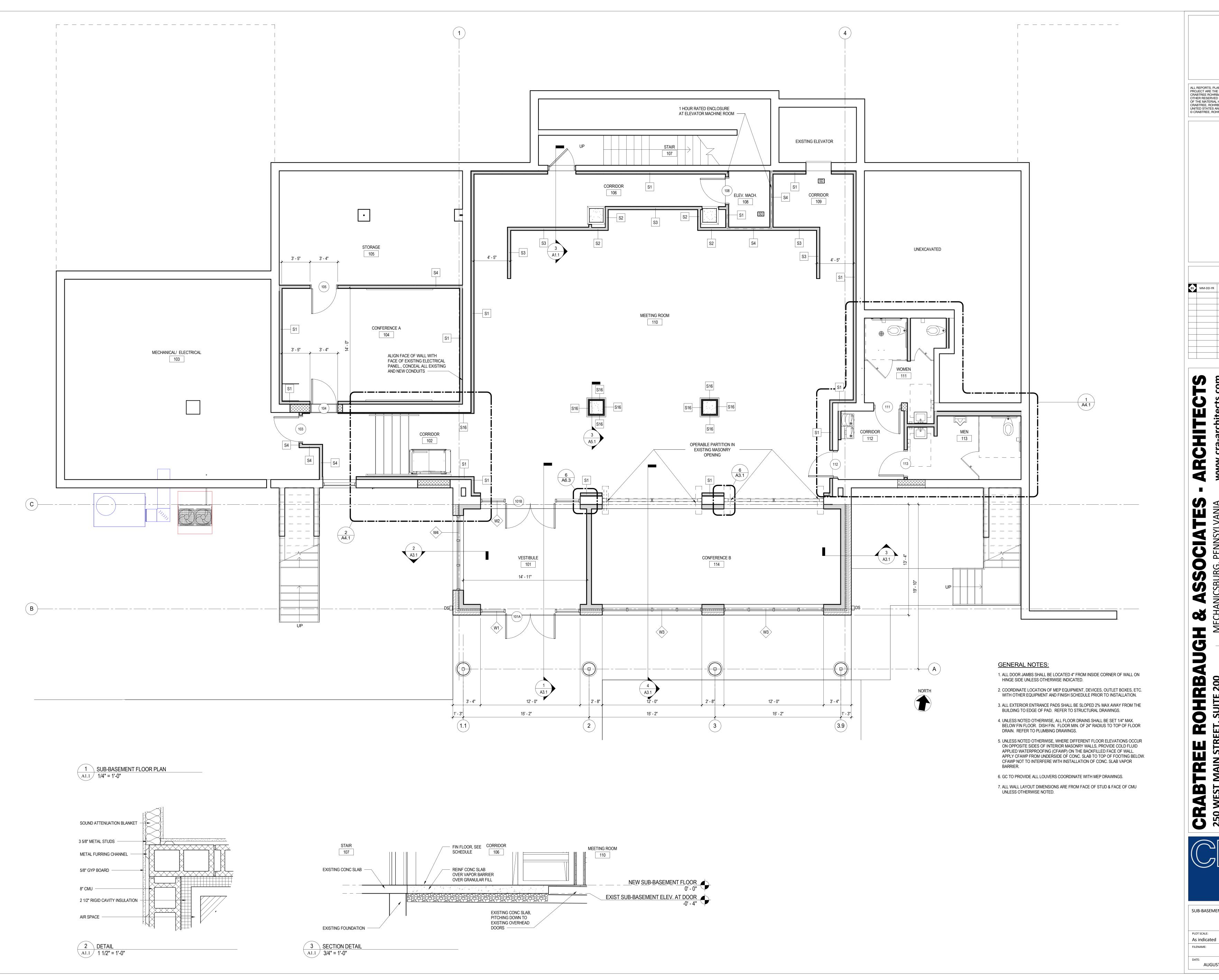
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DEMOLITION PLAN, **ALTERATION NOTES &** LEGEND

1/8" = 1'-0"

**PROJECT** 

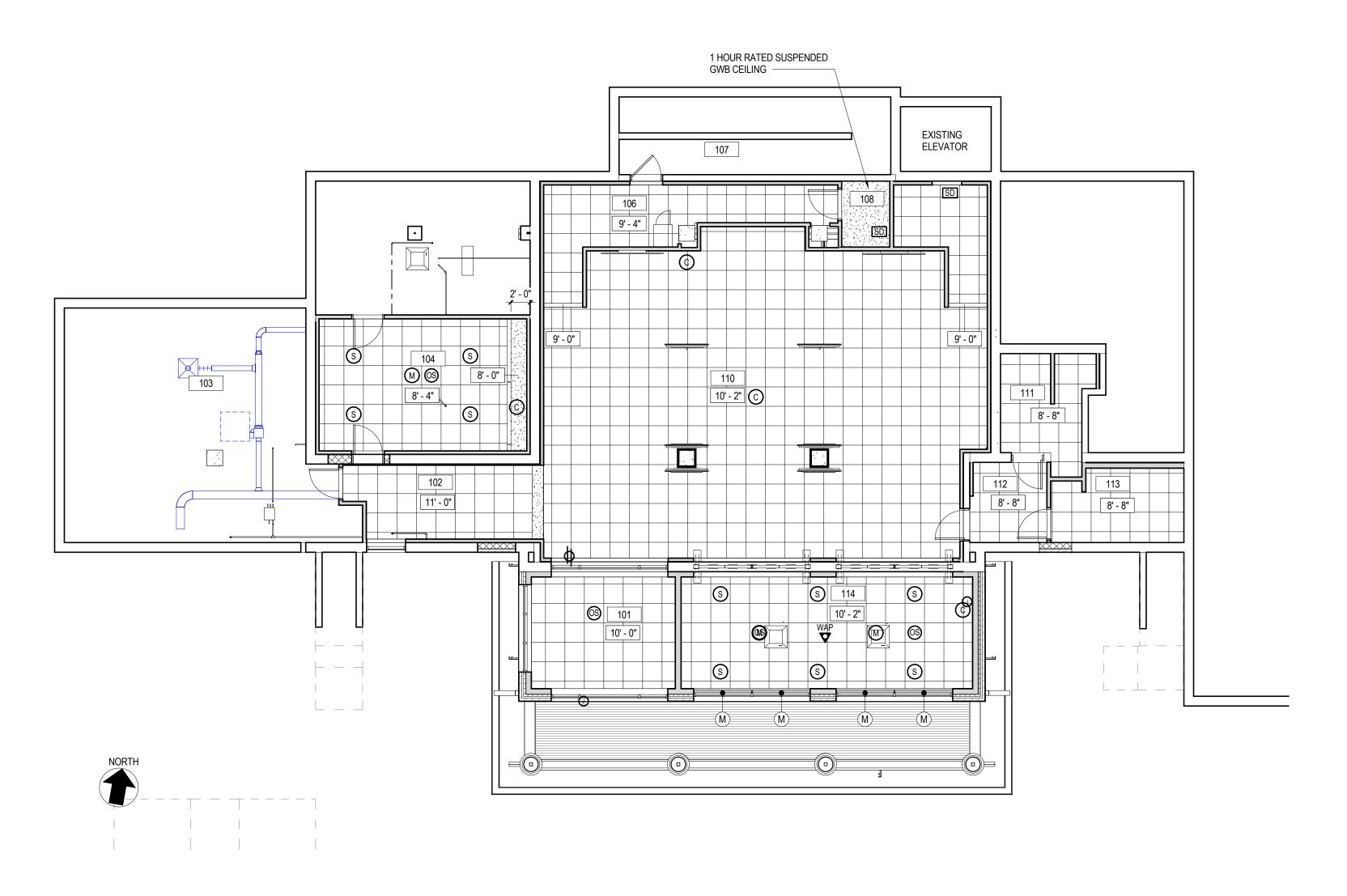


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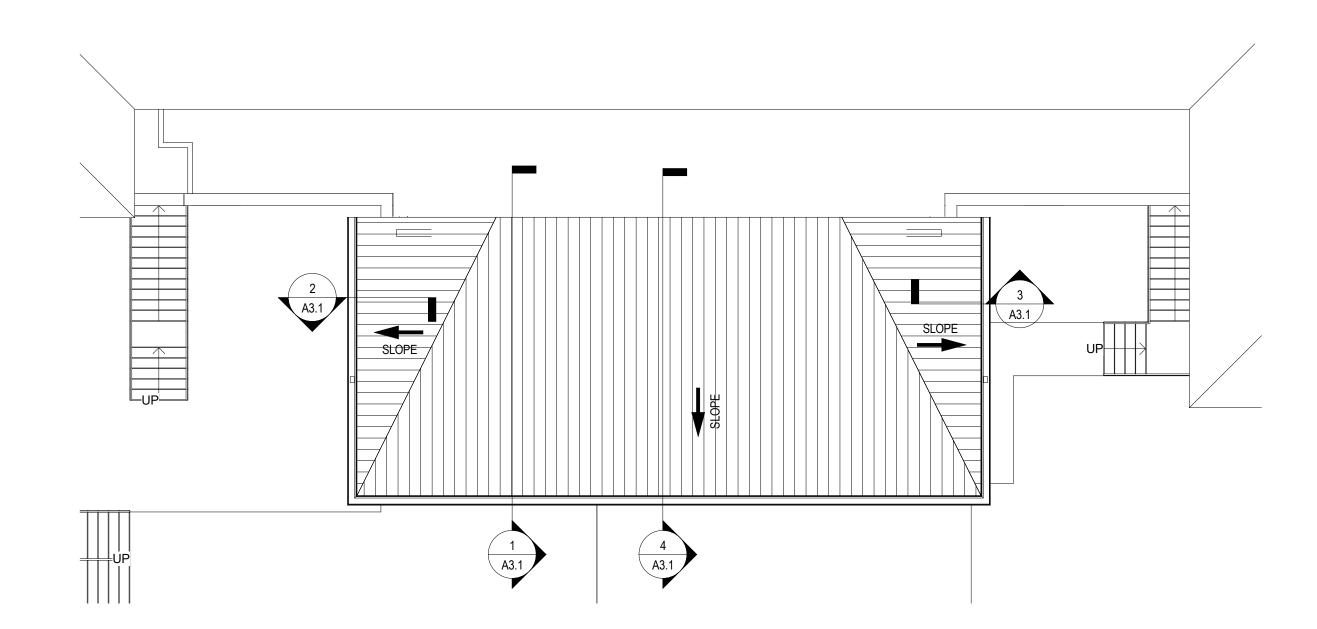
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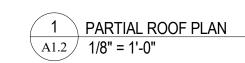
01 MM-DD-YR NAME DESCRIPTION OF CHANGES

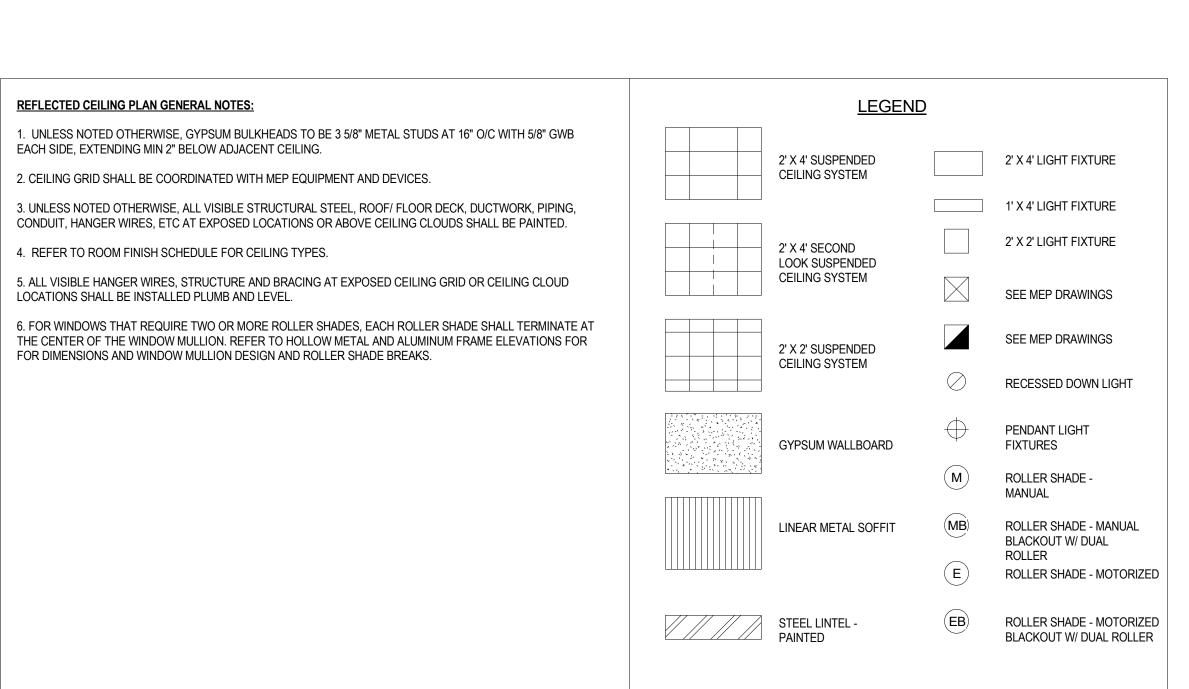
**PROJECT** SUB-BASEMENT FLOOR PLAN



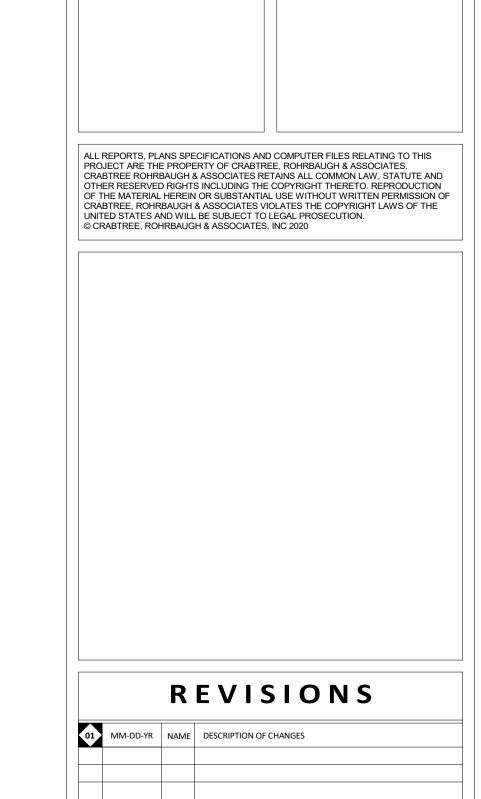
2 SUB-BASEMENT REFLECTED CEILING PLAN 1/8" = 1'-0"







<u>LEGEND</u>	ROOF PLAN NOTES:
LP LOW POINT HP HIGH POINT OD OVERFLOW DRAIN FLOW DIRECTION  INDICATES STANDING SEAM ROOF SYSTEM WITH 4" NAIL BASE INSULATION	1. COORDINATE ROOF-MOUNTED EQUIPMENT & PENETRATIONS. REFER TO MEP DRAWINGS.  2. PROVIDE ROOFING MANUFACTURERS' STANDARD DETAILS FOR ALL PENETRATIONS & FLASHING AS PER ROOFING MANUFACTURERS' WARRANTY.  3. CRICKETS AND SADDLES SHALL HAVE A MINIMUM OF TWO TIMES THE SLOPE OF THE PRIMARY TAPERED SYSTEM OR STRUCTURAL SLOPE.  4. ROOF MOUNTED EQUIPMENT CURBS AND SUPPORTS SHALL BE FURNISHED AND INSTALLED BY THE EQUIPMENT SUPPLIER.





ASSOCIATES - ARCHITECTS

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E SULPHUR SPRINGS, WEST VIRGINIA

ID RENOVATIONS

RPOSE ROOM

ADDITION AND RENOV MULTIPURPOSE F



SUB-BASEMENT REFLECTED
CEILING PLAN, ROOF PLAN
AND DETAILS
PLOT SCALE:

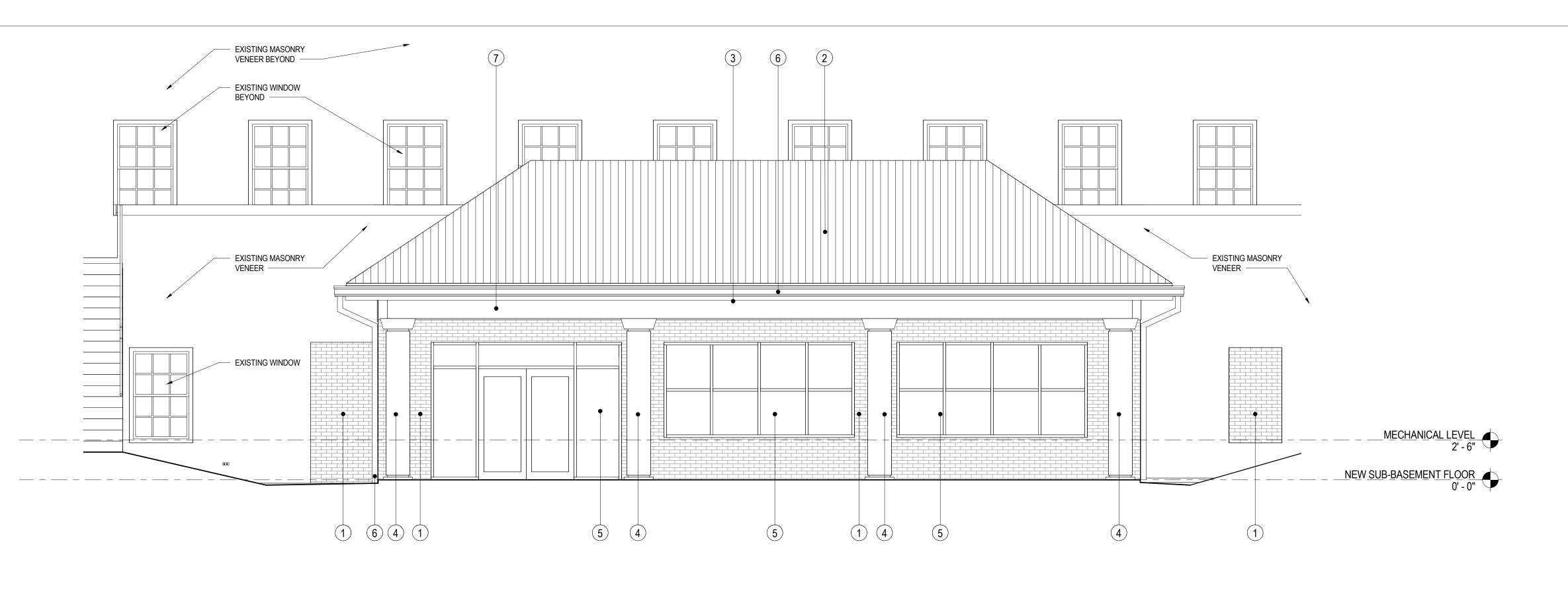
AUGUST 28, 2020

AND DETAILS

PLOT SCALE:

1/8" = 1'-0"

FILENAME:



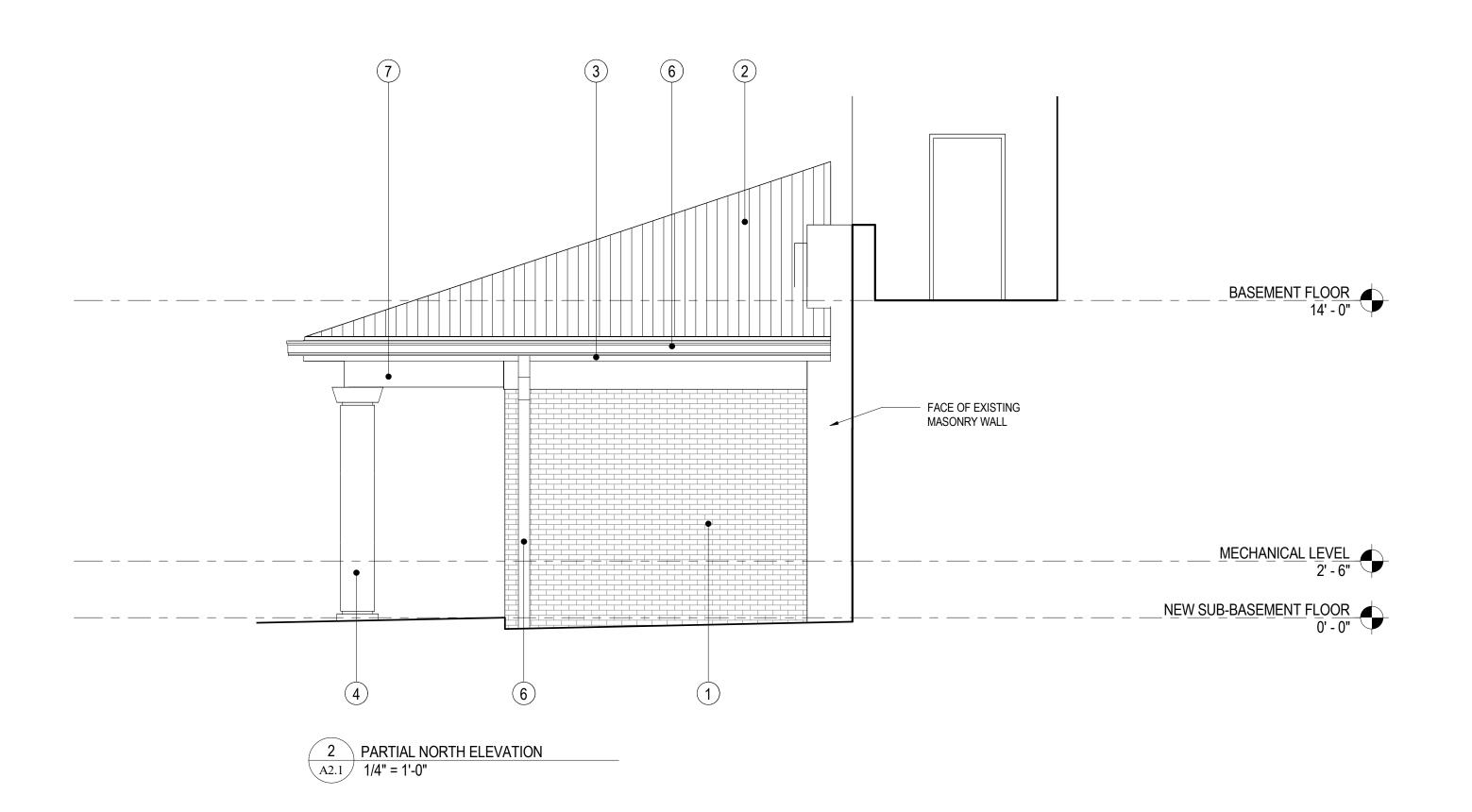
ELEVATION LEGEND

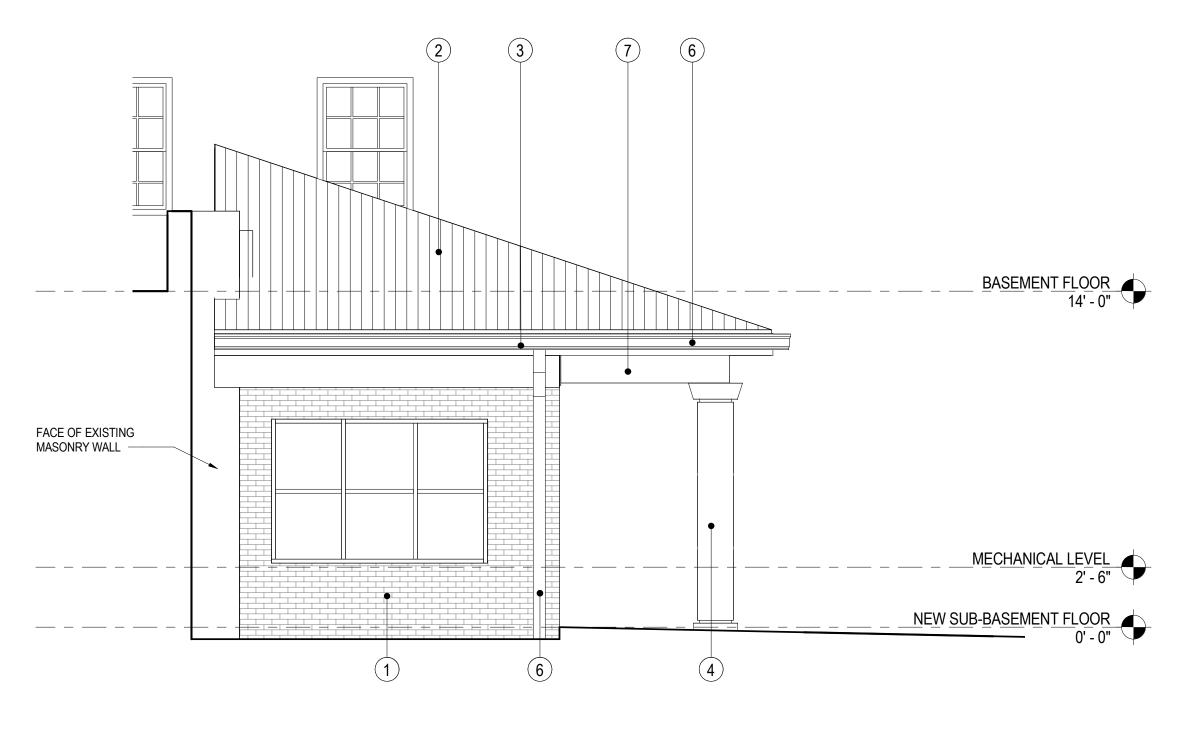
TAG

ELEVATION NOTE

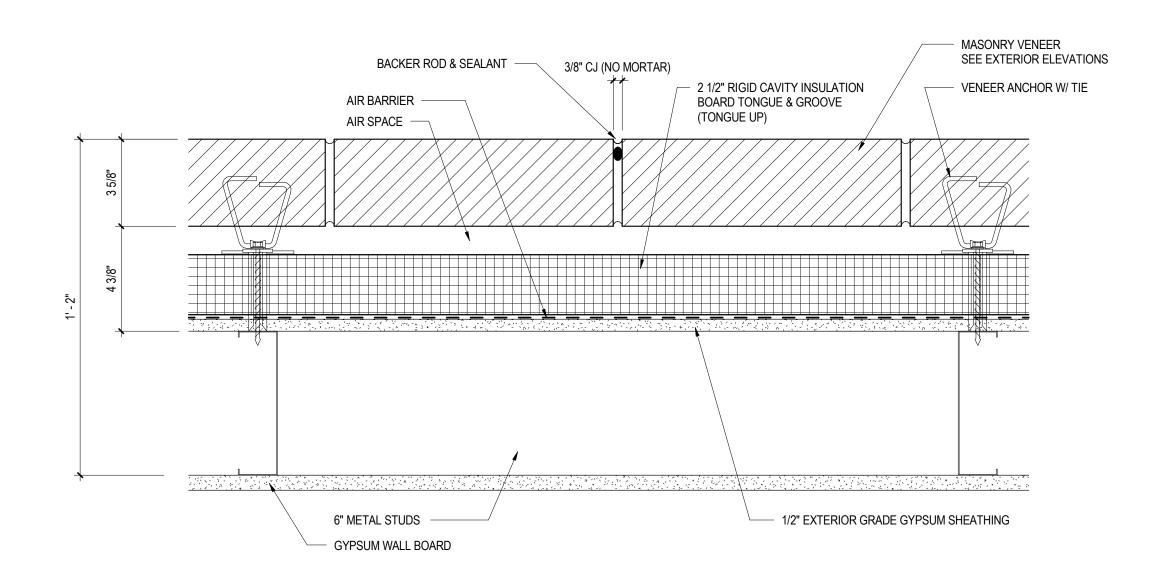
1 BRICK VENEER - MATCH EXISTING BRICK FOR COLOR AND SIZE
2 STANDING SEAM METAL ROOF PANEL SYSTEM
3 METAL FASCIA, PREFINISHED, REFER TO SECTIONS
4 COLUMN WRAP
5 ALUMINUM STOREFRONT AND GLAZING SYSTEM
6 PREFINISHED METAL GUTTER AND DOWNSPOUT SYSTEM
7 METAL TRIM, PREFINISHED, REFER TO SECTIONS

1 PARTIAL EAST ELEVATION
A2.1 1/4" = 1'-0"





3 SOUTH ELEVATION A2.1 1/4" = 1'-0"



4 TYPICAL EXTERIOR WALL CONTROL JOINT DETAIL - METAL STUD BACK UP
A2.1 3" = 1'-0"



EXTERIOR ELEVATIONS

AUGUST 28, 2020

As indicated

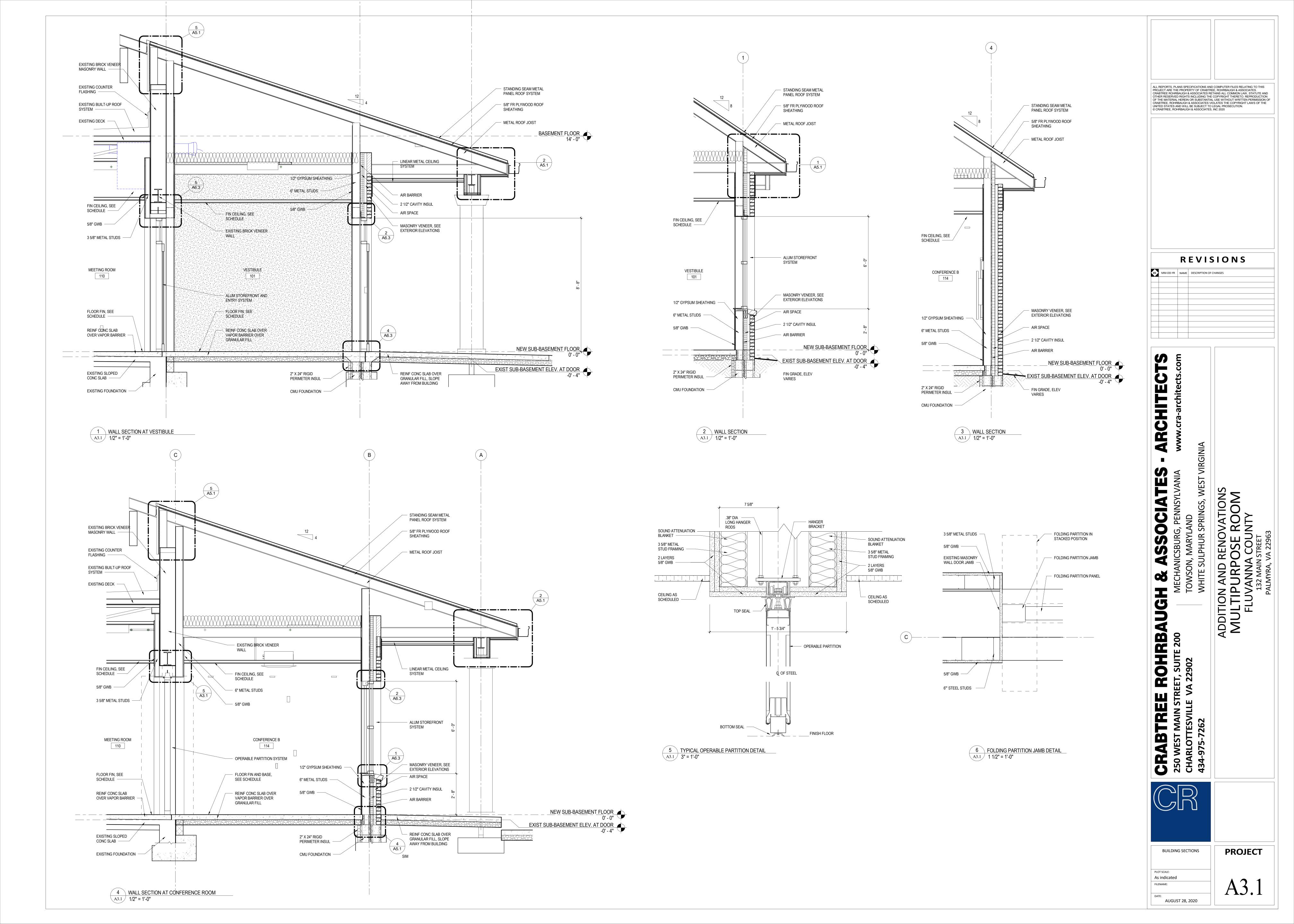
**PROJECT** 

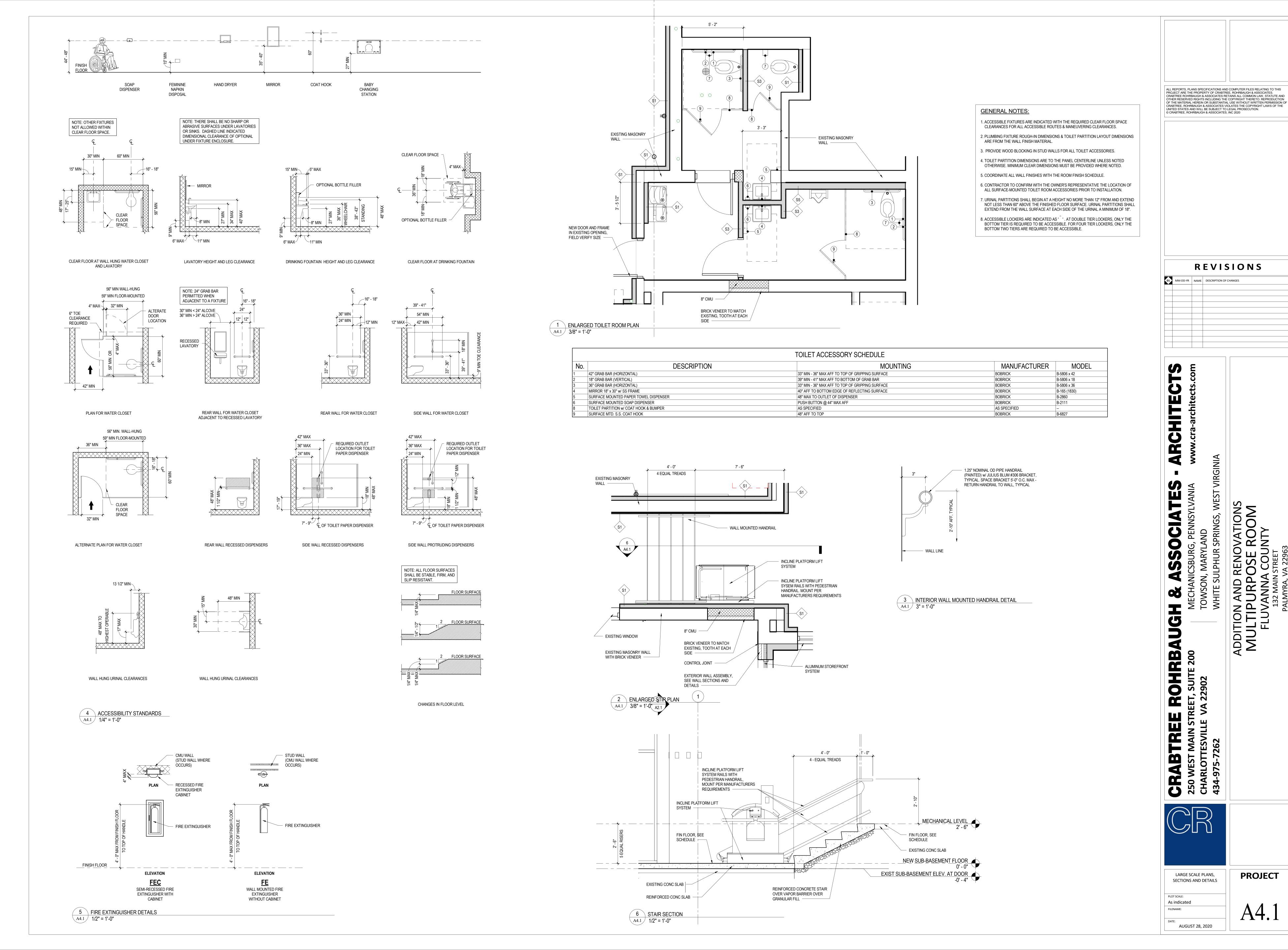
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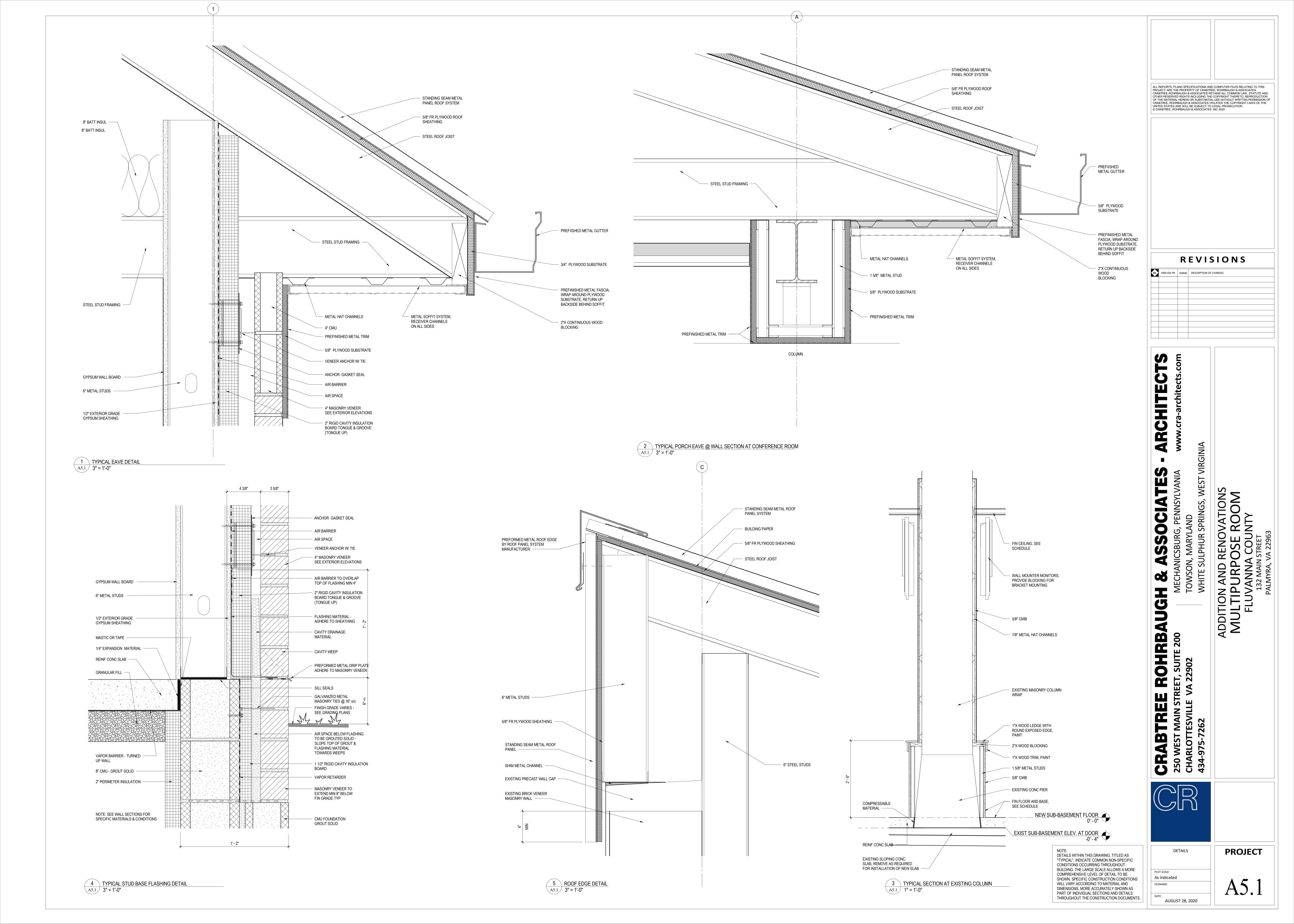
01 MM-DD-YR NAME DESCRIPTION OF CHANGES





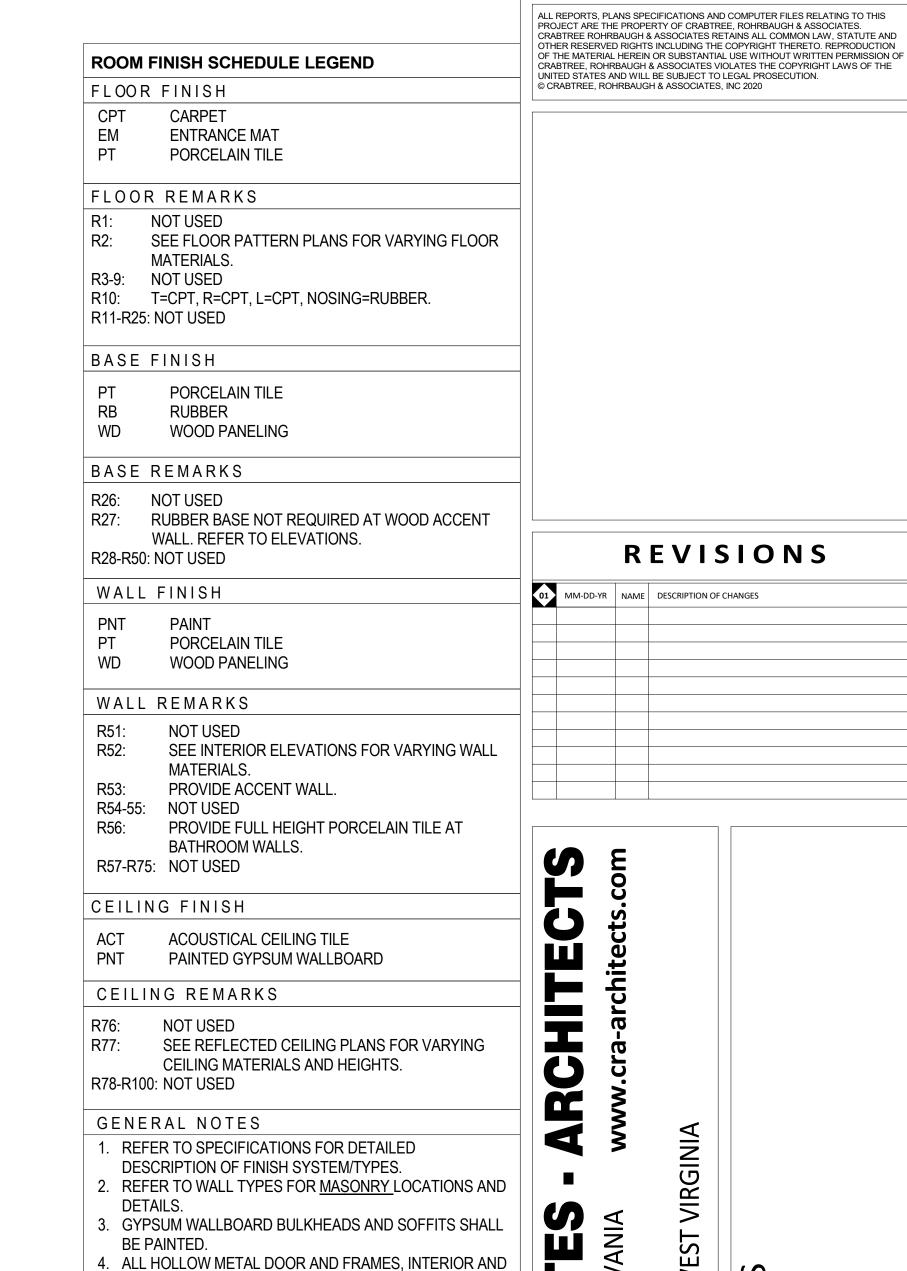
**PROJECT** 

A4.1



				ROOM FI	NISH SCHEDULE				
						WALLS			
		COLOR				WAINSCOT		CEILING	
NUMBER	NAME	SCHEME	FLOOR	BASE	WALL FINISH	FINISH	HEIGHT	FINISH	REMARKS
7	EXISTING ELEVATOR		ETR	ETR	ETR			ETR	
<u>.</u> 101	VESTIBULE		EM	RB	PNT			ACT	
102	CORRIDOR		CPT1/CPT2	RB	PNT			ACT/PNT	R2,R10,R77
103	MECHANICAL/ ELECTRICAL		ETR	ETR	ETR			ETR	, ,
104	CONFERENCE A		CPT1/CPT2	RB	PNT			ACT/PNT	R2,R53, R77
105	STORAGE		ETR	ETR	ETR			ETR	
106	CORRIDOR		CPT1/CPT2	RB	PNT			ACT/PNT	R2,R53, R77
107	STAIR		ETR	ETR	ETR			ETR	
108	ELEV. MACH.		ETR	ETR	ETR			ETR	
109	CORRIDOR		CPT1/CPT2	RB	PNT			ACT	R2,R53
110	MEETING ROOM		CPT1/CPT2	RB/WD	PNT/WD			ACT	R2,R27,R52,R53
111	WOMEN		PT1		PT1/PT2			ACT	R52,R56
112	CORRIDOR		PT1	PT1	PNT			ACT	
113	MEN		PT1		PT1/PT2			ACT	R52,R56
114	CONFERENCE B		CPT1/CPT2	RB	PNT			ACT	R2,R53

			SIGNAGE SCHE	DULE						
ORIGINAL		SIGN TO READ		SIGN TYPE				DIRECTIONAL ARROW		
ROOM#   ARCHITECTURAL ROOM NAMI	E ROOM#	ROOM NAME	TYPE	ADA	FEMALE	MALE TRANSGENDER	LEFT	RIGHT	QTY	REMARKS
EXIST SUB-BASEMENT ELEV. AT DOOR										
EXISTING ELEVATOR			4D					•	1	PLACE @ ELEVATOR
01 VESTIBULE									0	
02 CORRIDOR									0	
03 MECHANICAL/ ELECTRICAL	TBD	MECHANICAL ROOM	1A						1	PLACE ON ADJACENT WAL NEXT TO DOOR 103
04 CONFERENCE A	TBD	CONFERENCE ROOM A	1C						1	PLACE @ DOOR 104
05 STORAGE	TBD	STORAGE	1A						1	PLACE @ DOOR 105
06 CORRIDOR		<b></b>							0	
07 STAIR		<b></b>							0	
D8 ELEV. MACH.	TBD	ELEVATOR MECHANICAL	1A						1	PLACE @ DOOR 108
09 CORRIDOR		<del></del>							0	
10 MEETING ROOM			4A/4B						2	4A VERIFY PLACEMENT IN FIELD, 4B PLACE @ DOOR
11 WOMEN	TBD	WOMEN'S	2A	•	•				1	PLACE @ DOOR 111
12 CORRIDOR	TBD	RESTROOMS	2A	•	•	•			1	PLACE @ DOOR 112
13 MEN	TBD	MEN'S	2A	•		•			1	PLACE @ DOOR 113
14 CONFERENCE B	TBD	CONFERENCE ROOM B	1C						1	PLACE SIGN ON ADJACEN WALL FROM THE MAN DOOF FOLDING PARTITION



9. EXIST = EXISTING GENERAL NOTE IN REFERENCE TO A6.1

CENTERED ON

CHARACTERS

TACTILE

1' - 6" CLEAR

18" MIN.

1 PANEL SIGN - INSTALL DETAIL (TYP)

A6.1 1/2" = 1'-0"

TYPE 4A | SIZE: 8"x10"

NOT TO SCALE

1. INSTALL SIGNS LEVEL, PLUMB, AND AT THE HEIGHT INDICATED, WITH SIGN SURFACES FREE FROM DISTORTION OR OTHER

EXTERIOR, SHALL BE PAINTED.

6. T=TREAD, R=RISER, L=LANDING

FLOOR PATTERN PLANS. 8. ETR = EXISTING TO REMAIN

FINISHED ITEMS)

5. ALL INTERIOR AND EXTERIOR FERROUS METAL SHALL

7. SEE I7 DRAWINGS FOR MATERIAL TRANSITIONS &

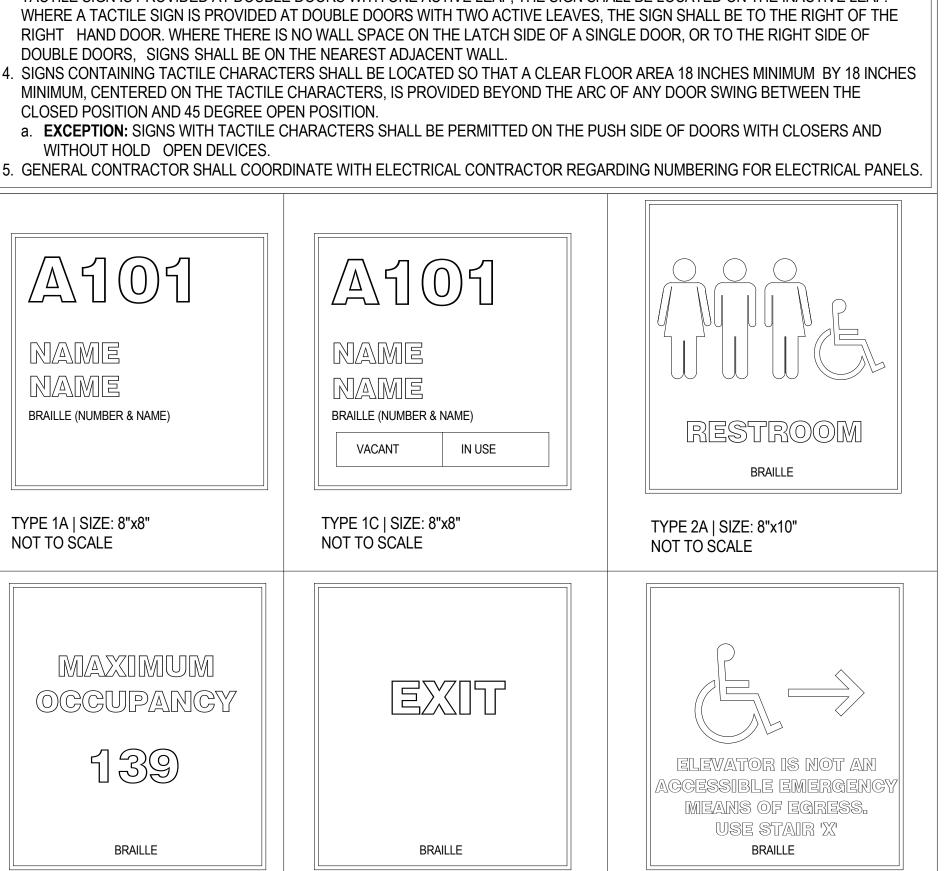
BE PAINTED INCLUDING LINTELS, RAILINGS, GRILLES

AND LOUVERS. (DOES NOT INCLUDE FACTORY OR PRE-

DEFECTS IN APPEARANCE. 2. TACTILE CHARACTERS SHALL BE 48 INCHES MINIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES MAXIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE HIGHEST TACTILE CHARACTER. 3. WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAVES, THE SIGN SHALL BE TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, OR TO THE RIGHT SIDE OF

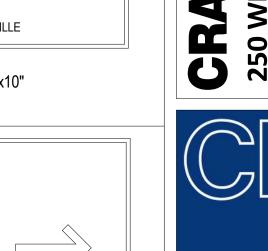
4. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR AREA 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.

5. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING NUMBERING FOR ELECTRICAL PANELS.



TYPE 4B | SIZE: 8"x10"

NOT TO SCALE



TYPE 4D | SIZE: 8"x10"

NOT TO SCALE

**ROOM FINISH & SIGNAGE** SCHEDULE PLOT SCALE:

1/2" = 1'-0"

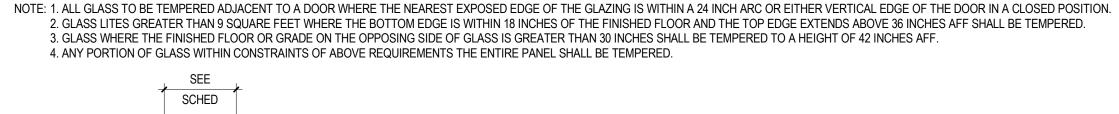
**PROJECT** 

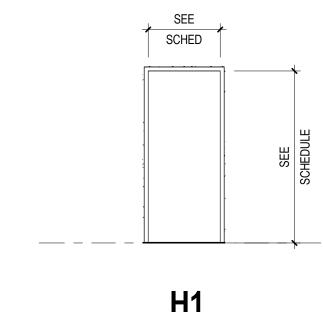
								DOOR S	CHEDULE						
	DOOR &				DOOR					FRAI	ME				
	FRAME					DIME	NSIONS				DE	TAILS			
OPENING	UL	DOOR	DOOR	GLAZING	WIE	TH			FRAME	FRAME			HARDWA	SPECIAL	
NUMBER	RATING	TYPE	MATERIAL	TYPE	LEAF 1	LEAF 2	HEIGHT	THICKNESS	TYPE	MATERIAL	HEAD	JAMB	RE SET	DETAIL	REMARKS
101A		FG	ALUM	INSUL, TEMP	3' - 0"	3' - 0"	7' - 0"	1 3/4"		ALUM	2/A6.3	3/A6.3			ALUMINUM STOREFRONT AND ENTRY SYSTE
101B		FG	ALUM	TEMP	3' - 0"	3' - 0"	7' - 0"	1 3/4"		ALUM	5/A6.3	6/A6.3			ALUMINUM STOREFRONT AND ENTRY SYSTE
103		F	WD		3' - 0"		7' - 2"	1 3/4"	H1	HM	1/A6.2	2/A6.2			
104		F	WD		3' - 0"		7' - 2"	1 3/4"	H1	HM	3/A6.2	4/A6.2			
105		F	WD		3' - 0"		7' - 2"	1 3/4"	H1	HM	1/A6.2	2/A6.2			
108	45 MIN.	F	WD		3' - 0"		7' - 2"	1 3/4"	H1	HM	1/A6.2	2/A6.2			
111		F	WD		3' - 0"		7' - 2"	1 3/4"	H1	HM	6/A6.2	7/A6.2, 8/A6.2			
112		N	WD	TEMP	3' - 0"		7' - 2"	1 3/4"	H1	HM	8/A6.2	9/A6.2			
113		F	WD		3' - 0"		7' - 2"	1 3/4"	H1	НМ	1/A6.2	2/A6.2			

# DOOR TYPES \* - RECOMMENDED MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTER LINE OF FIRE EXIT DEVICE \*\* - COORDINATE WITH DOOR MANUFACTURE REQUIREMENTS EXIT DEVICE EXIT DEVICE WHERE WHERE OCCURS OCCURS FINISH FLOOR

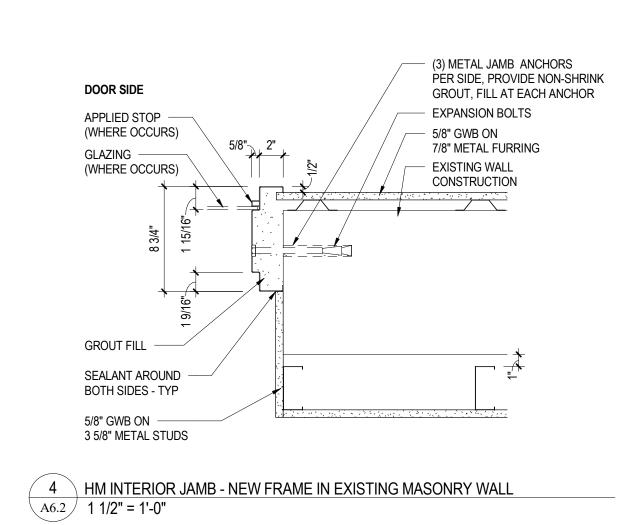
# HOLLOW METAL FRAME ELEVATIONS

FG2





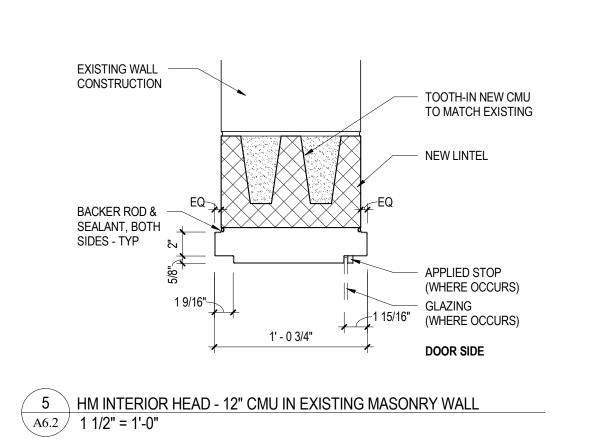
ELEVATION

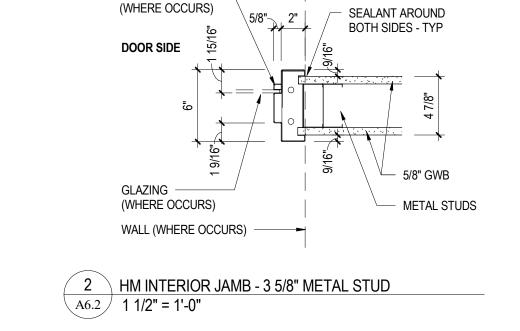


- SEALANT AROUND BOTH SIDES - TYP

 MASONRY WALL ANCHOR

- (3) METAL JAMB ANCHORS PÉR SIDE, PROVIDE NON-SHRINK GROUT, FILL AT EACH ANCHOR





SEALANT AROUND

BOTH SIDES - TYP

MASONRY WALL

APPLIED STOP ——

A6.2 1 1/2" = 1'-0"

- ROLLER SHADE HEADBOX

(WHERE OCCURS)

SEALANT AROUNDBOTH SIDE - TYP

- (3) METAL JAMB ANCHORS PER SIDE, PROVIDE NON-SHRINK

GROUT, FILL AT EACH ANCHOR

- EXISTING WALL CONSTRUCTION

- SEALANT AROUND

**BOTH SIDES - TYP** 

- EXPANSION BOLTS

METAL STUD BOX -

HEADER

DOOR SIDE

APPLIED STOP

(WHERE OCCURS)

(WHERE OCCURS)

1 HM INTERIOR HEAD - 3 5/8" METAL STUD 1 1/2" = 1'-0"

WALL (WHERE OCCURS)

GLAZING (WHERE

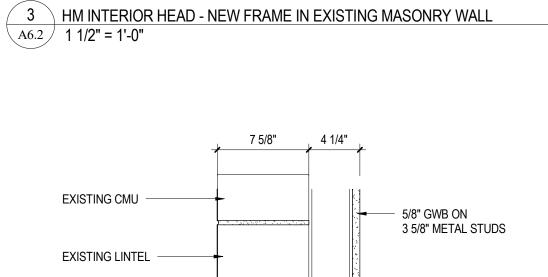
APPLIED STOP —

(WHERE OCCURS)

OCCURS)

DOOR SIDE

A6.2 1 1/2" = 1'-0"



1 15/16"

8 3/4"

EXISTING WALL

5/8" GWB ON

LINTEL

DOOR SIDE

APPLIED STOP -

(WHERE OCCURS)

GLAZING —

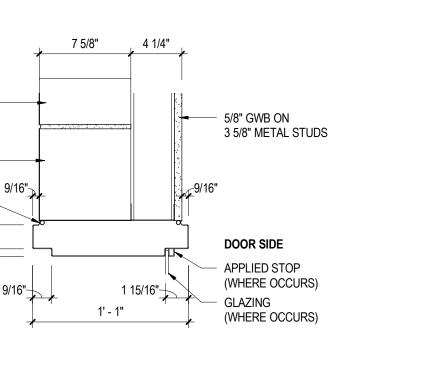
(WHERE OCCURS)

8 HM INTERIOR HEAD 1 1/2" = 1'-0"

CONSTRUCTION

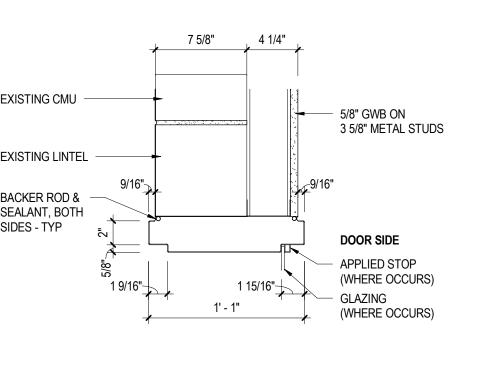
EXISTING MASONRY -

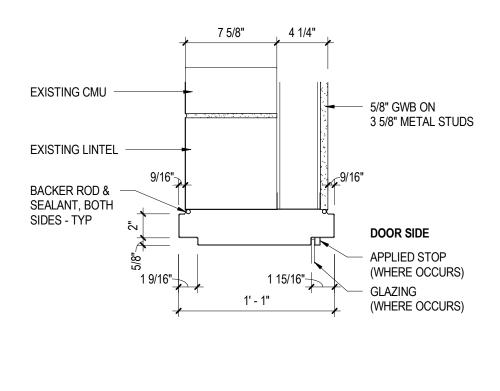
7/8" METAL FURRING ---

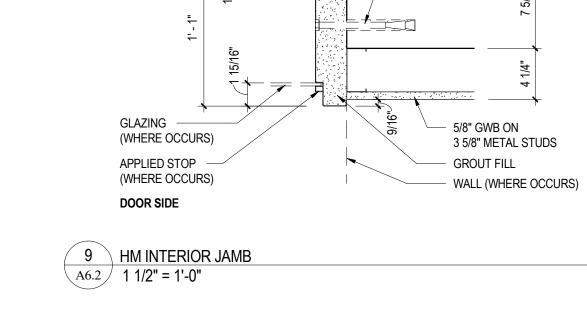


5/8" GWB ON 3 5/8" METAL STUDS

BOTH SIDES - TYP









DOOR SCHEDULE, HOLLOW METAL FRAME ELEVATIONS

AND DETAILS

AUGUST 28, 2020

**PROJECT** 

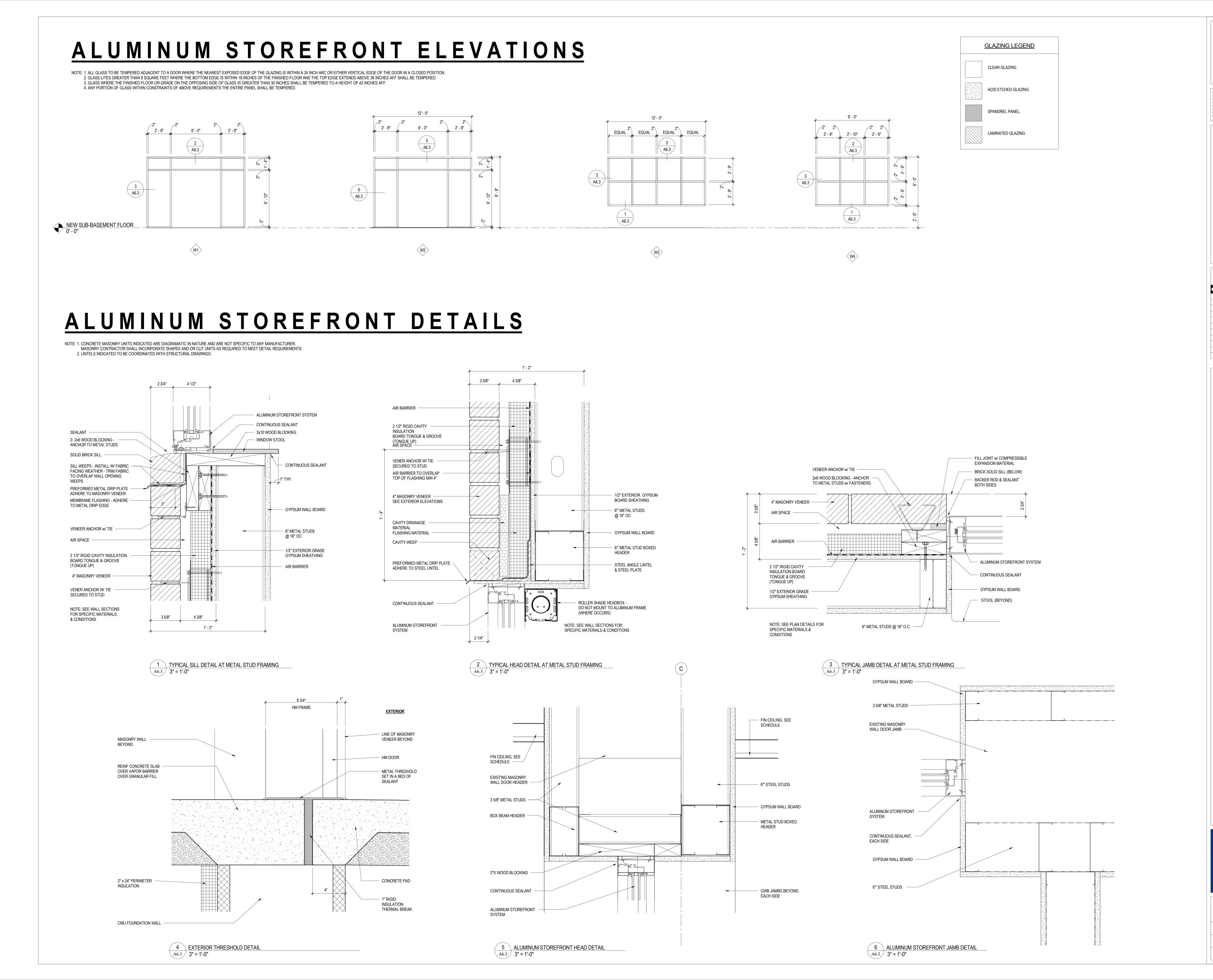
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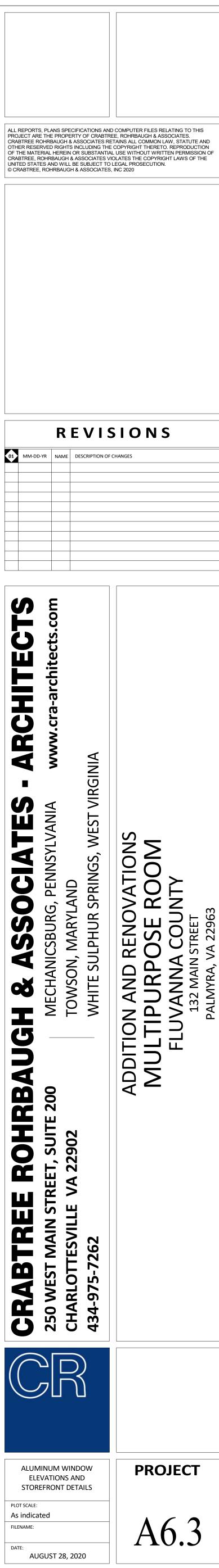
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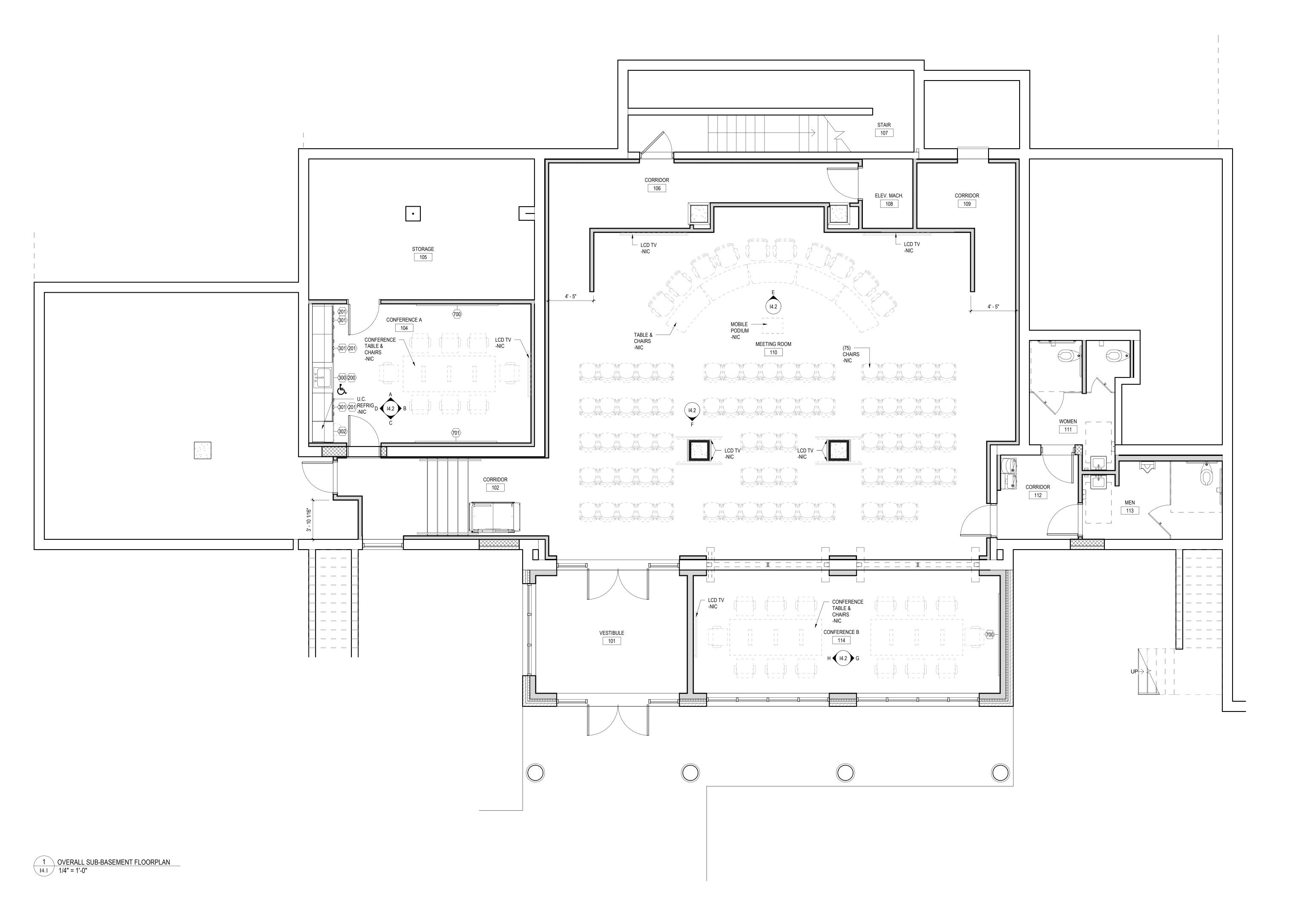
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REVISIONS

01 MM-DD-YR NAME DESCRIPTION OF CHANGES



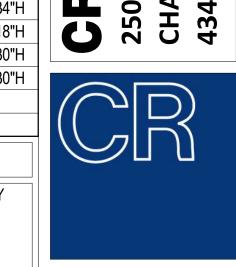




			CASEWORK & EQUIPMENT SCHEDULE						
		NO.	DESCRIPTION	DIMENSIONS					
N	MOUNTING HEIGHT SCHEDULE		ADA VANITY SINK BASE CABINET	36"W x 24"D x 34"H					
MARKER BOARD	3'-0" AFF TO BOTTOM EDGE	201	2-DOOR/2-DRAWER BASE CABINET	33"W x 24"D x 34"H					
WANTEN BOAND	3-0 ALL TO BOLLOW EDGE	300	2-DOOR WALL CABINET	36"W x 14"D x 18"H					
TACK BOARD	3'-0" AFF TO BOTTOM EDGE	301	2-DOOR WALL CABINET	33"W x 14"D x 30"H					
BASE CABINETS	3'-0" AFF TO TOP OF CABINET	302	1-DOOR WALL CABINET - LEFT HINGED	24"W x 14"D x 30"H					
MALL CARINETO	71.011.4 FE TO TOP OF CARDINET	700	MARKERBOARD	8'-0"W x 4'-0"H					
WALL CABINETS	7'-0" AFF TO TOP OF CABINET	701	TACK BOARD	8'-0"W x 4'-0"H					

# GENERAL NOTES TO APPLY TO ALL 14 DRAWINGS

- 1. MOUNTING HEIGHT SCHEDULE IS APPLICABLE TO MOST ROOMS. IN INSTANCE WHERE NOTE/DETAILS ON DRAWINGS DO NOT COINCIDE WITH THE SCHEDULE. THE DRAWINGS TAKE PRECEDENCE.
- 2. ALL BASE CABINETS SHALL RECEIVE A CONTINUOUS 1-1/4" THICK LAMINATE COUNTERTOP WITH A 4"H BACKSPLASH UNLESS NOTED OTHERWISE. THE DEPTH OF THE COUNTERTOP SHALL EXTEND 3/4" PAST THE DEPTH OF THE BASE CABINET.
- 3. COUNTERTOPS THAT RETURN INTO A WALL(S) SHALL RECEIVE BACKSPLASH THAT WRAPS
- CORNER ALONG WALL(S). 4. WHERE COLUMNS, WINDOWS OR OTHER BUILDING COMPONENTS CONFLICT WITH CASEWORK DIMENSIONAL REQUIREMENTS. FIELD VERIFY DIMENSIONS AND PROVIDE CUSTOM UNIT TO ALLOW PROPER FITTING.
- 5. ALL EXPOSED ENDS OF CASEWORK SHALL RECEIVE FINISHES END PANELS. 6. LAMINATE COLOR FOR INTERIOR OF OPEN CABINETS SHALL MATCH EXTERIOR LAMINATE COLOR.
- 7. STAINLESS STEEL SINKS, FAUCETS, AND BUBBLERS SHALL BE PROVIDED AND INSTALLED BY
- PLUMBING CONTRACTOR. 8. PROVIDE WOOD BLOCKING IN METAL STUD WALLS, PER MANUFACTURER'S
- RECOMMENDATIONS, TO RECEIVE THE TELEVISION WALL BRACKET. 9. IN ROOMS RECEIVING RESILIENT BASE, ADHERE TO ALL WALLS, BASE CABINET TOE KICKS, AND EXPOSED END PANELS. REFER TO SPECIFICATIONS FOR LOCATION OF 4" AND 6" BASE. 10. SEE REFLECTED CEILING PLANS FOR LOCATION OF WINDOW TREATMENTS.
- 11. TELEPHONE UNITS AND SYSTEMS ARE NOT IN CONTRACT. 12. COORDINATE ALL LARGE SCALE PLANS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
- 13. NIC = NOT IN CONTRACT 14. OPP = OPPOSITE HAND.



AUGUST 28, 2020

**PROJECT** OVERALL SUB-BASEMENT FLOORPLAN PLOT SCALE: 1/4" = 1'-0" FILENAME:

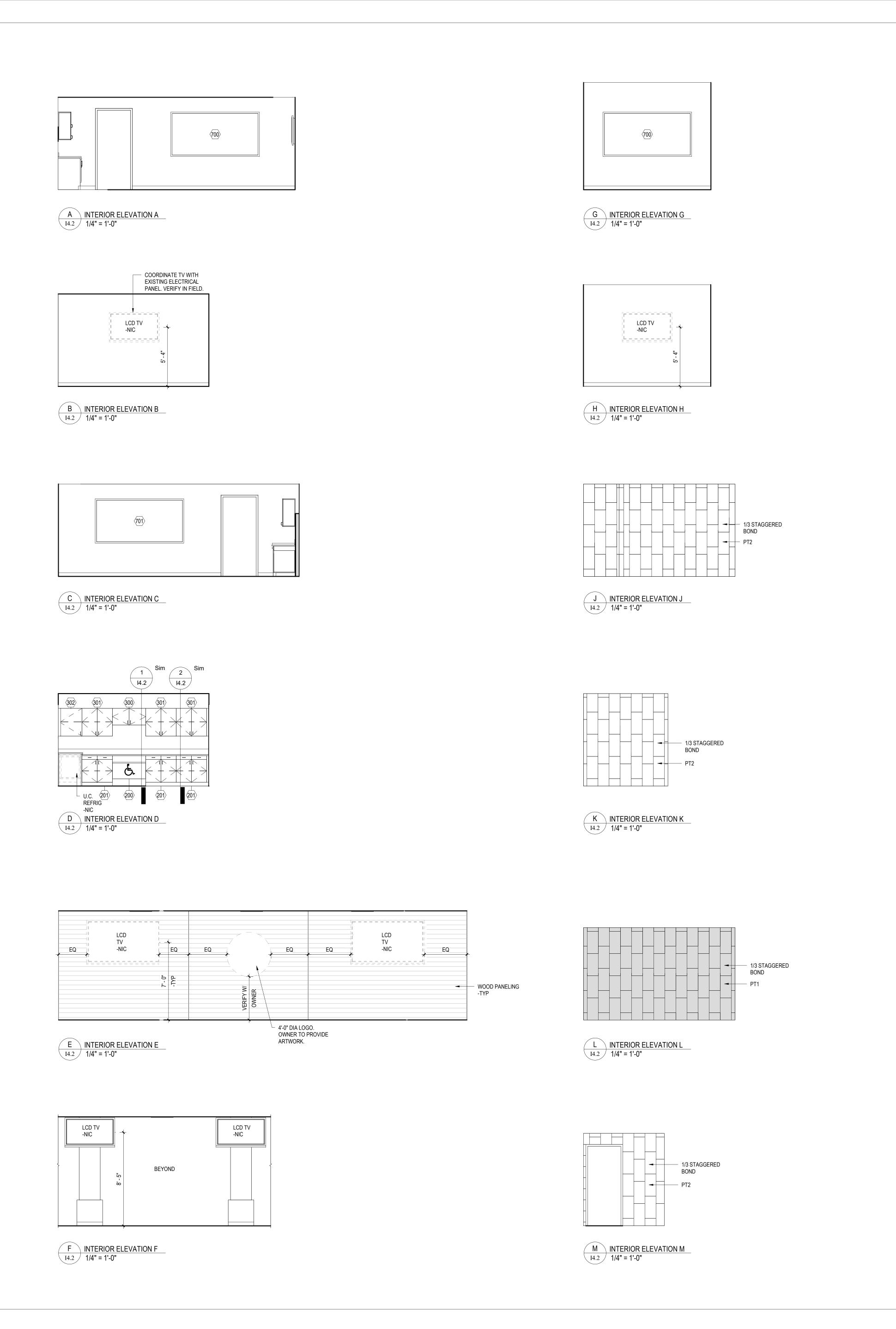
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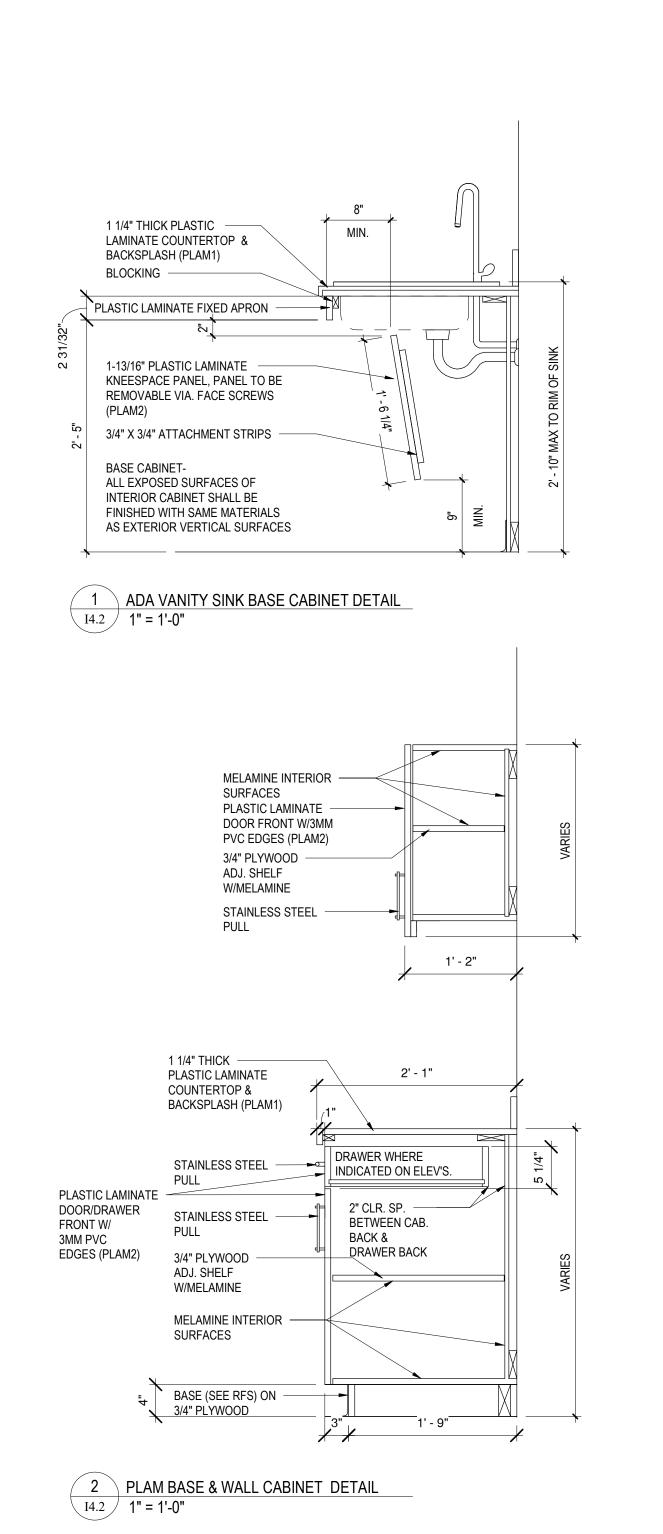
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**PROJECT** 

LARGE SCALE LAYOUTS -ELEVATIONS AND DETAILS

AUGUST 28, 2020

PLOT SCALE:
As indicated

MOUNTING HEIGHT SCHEDULE

MARKER BOARD

BASE CABINETS

WALL CABINETS

TACK BOARD

3'-0" AFF TO BOTTOM EDGE

3'-0" AFF TO BOTTOM EDGE

3'-0" AFF TO TOP OF CABINET

7'-0" AFF TO TOP OF CABINET

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GENERAL NOTE IN REFERENCE TO ALL FINISH PLAN DRAWINGS FLOOR PATTERN LEGEND 1. DRAWINGS ARE FOR CLARIFICATION OF MATERIAL LOCATIONS. REFER TO ROOM FINISH SCHEDULE, INTERIOR AND ARCHITECTURAL ELEVATIONS/PLANS AND SPECIFIFCATIONS FOR ADDITIONAL INFORMATION.
2. PROVIDE FLOOR DRAIN EXTENSION FOR FLUSH TRANSITION OF TILE AND = FIELD: CPT1 DRAIN COVER. DO NOT SLOPE. FINISH PLAN LEGEND = ACCENT A: CPT2 TRANSITION SCHEDULE AS INDICATED = TILE ON 17 DRAWINGS JOHNSONITE NO. CTA-XX-P CPT TO CONC = ACCENT PAINT PLOT SCALE: CPT TO PT SCHLUTER CPT TO VCT JOHNSONITE NO. CTA-XX-H = WOOD PANELING SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. AUGUST 28, 2020

OVERALL FINISH & FLOOR

**PROJECT** PATTERN PLANS 1/4" = 1'-0"

# **NOTES: STRUCTURAL**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2015 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC), EFFECTIVE SEPTEMBER 4, 2018.
- A. NEW CONSTRUCTION- PART 1 OF VUSBC- "VIRGINIA CONSTRUCTION CODE"
- RENOVATION/ ALTERATION- PART II OF THE VUSBC- "VIRGINIA **EXISTING BUILDING CODE"** 
  - CLASSIFICATION OF WORK FOR THIS PROJECT = ALTERATION-LEVEL 3

NO LOADS IN EXCESS OF THE DESIGN LIVE LOADS LISTED SHALL BE IMPOSED UPON ANY AREA DURING CONSTRUCTION, UNLESS ADEQUATE SHORING OR OTHER MEANS IS PROVIDED TO SUPPORT THE EXCESSIVE LOADS.

IF ANY CHANGES ARE MADE IN WEIGHT AND/OR LOCATION OF POINTS OF SUPPORT OF EQUIPMENT, THE CONTRACTOR SHALL FURNISH DETAILS OF CHANGES TO THE ARCHITECT FOR REVIEW AND NECESSARY MODIFICATIONS.

TEMPORARY BRACING, GUY WIRES, SHORING, ETC., SHALL BE USED AS NECESSARY TO RESIST ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED DURING CONSTRUCTION, INCLUDING EQUIPMENT AND ITS OPERATION.

THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. THE ERECTION PROCEDURE AND SEQUENCE INCLUDING THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

DRAWINGS DO NOT SHOW ALL OPENINGS, COORDINATE WITH MECHANICAL DRAWINGS. VERIFY SIZES AND LOCATIONS OF ALL OPENINGS WITH MECHANICAL.

REFER TO ARCHITECTURAL DRAWINGS FOR WATERPROOFING DETAILS.

THE ENGINEER SHALL NOT HAVE THE AUTHORITY OR RESPONSIBILITY TO SUPERVISE OR DIRECT THE CONSTRUCTION WORK.

ALL SECTIONS AND DETAILS, WHETHER EXPLICITLY CUT ON PLAN OR NOT, SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SIMILAR CONDITIONS.

INFORMATION REGARDING STRUCTURAL MEMBERS INDICATED TO BE EXISTING WAS OBTAINED DURING LIMITED FIELD OBSERVATIONS AND FROM LIMITED AVAILABLE EXISTING DRAWINGS. ACTUAL CONDITIONS MAY DIFFER FROM THAT WHICH IS INDICATED. IF THE CONTRACTOR UNCOVERS EXISTING CONDITIONS THAT DIFFER FROM THAT WHICH IS INDICATED ON PLAN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD OF THE DISCREPANCY IN ORDER THAT THE CONDITION MAY BE RESOLVED.

FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE CONSTRUCTION AND FABRICATION OF ANY NEW STRUCTURAL MEMBERS. AT ALL LOCATIONS WHERE NEW ROOFS AND FLOORS ADJOIN EXISTING ROOFS AND FLOORS, EMPLOY A LICENSED SURVEYOR TO VERIFY EXISTING DIMENSIONS, FLOOR ELEVATIONS. AND FLOOR-TO-FLOOR HEIGHTS BEFORE ORDERING. DETAILING. FABRICATING, OR ERECTING ANY NEW STRUCTURAL MEMBERS.

ADDITIONS AND ALTERATIONS TO THE EXISTING BUILDING DO NOT INCREASE THE DEMAND/CAPACITY RATIO OF ANY EXISTING STRUCTURAL LATERAL FORCE RESISTING ELEMENT BY MORE THAN 10%: THEREFORE, AN ENGINEERING EVALUATION AND ANALYSIS OF THE ALTERED EXISTING STRUCTURE IS NOT REQUIRED.

2. <u>SPECIAL INSPECTIONS</u> ARE REQUIRED BY THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (CHAPTER 17). THE FOLLOWING IS A LIST OF ITEMS THAT REQUIRE SPECIAL INSPECTION. REFER TO THE REFERENCED SPECIFICATION SECTION FOR THE SPECIFIC REQUIREMENTS FOR EACH ITEM. THE INDEPENDENT INSPECTION AGENCY, ENGAGED BY THE OWNER, SHALL REVIEW THE TEST PROCEDURES AND INSPECTIONS WITH THE STRUCTURAL ENGINEER OF RECORD. THE GENERAL CONTRACTOR, AND THE OWNER PRIOR TO CONDUCTING TESTS

۹.	EARTHWORK	SECTION 312000
В.	CAST-IN-PLACE CONCRETE	SECTION 033000
С.	UNIT MASONRY	SECTION 042000
D.	STRUCTURAL STEEL FRAMING	SECTION 051200
Ε.	STEEL DECKING	SECTION 053100
F.	COLD-FORMED METAL FRAMING	SECTION 054000
G.	POST-INSTALLED ANCHORS	(SEE GENERAL NOTE)

SHOP DRAWINGS: THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL REQUIREMENTS WITH THE STRUCTURAL DRAWINGS, INCLUDING THE LOCATION OF MISCELLANEOUS ITEMS AFFECTING THE STRUCTURAL WORK SUCH AS OPENINGS, BENT PLATES, INSERTS, ETC. PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS.

THE CONTRACTOR SHALL VERIFY ALL FLOOR AND ROOF MOUNTED MECHANICAL EQUIPMENT DIMENSIONS AND WEIGHTS, AND VERIFY ALL ROOF OPENING SIZES AND LOCATIONS, WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND REVIEWED SHOP DRAWINGS.

REFER TO PROJECT MANUAL FOR SUBMITTAL REQUIREMENTS. IN THE ABSENCE OF A PROJECT MANUAL, PROVIDE (1) ELECTRONIC PDF COPY OF ALL STRUCTURAL SUBMITTALS.

SHOP DRAWINGS ARE TO BE REVIEWED BY THE CONTRACTOR AND SUBCONTRACTOR PRIOR TO BEING SUBMITTED FOR APPROVAL. SUBMITTED SHEETS SHALL CONTAIN THE CONTRACTOR'S SIGNED AND DATED REVIEW STAMP.

DESIGN LOADS AND PARAMETERS

AND INSPECTIONS.

A. <u>BUILDING RISK CATEGORY</u> (TABLE 1604.5) CATEGORY II

B. <u>LIVE LOADS</u>

ROOF STAIRS

LIVE LOAD REDUCTION (BY EQ 16-23 OR EQ 16-24 AND 16-25 OR NOT USED) ROOF LIVE LOAD REDUCTION (BY EQ 16-26 OR NOT USED)

# C. SNOW LOADS

Pg=25 PSF (GROUND SNOW)

Ce=1.0 (SNOW EXPOSURE FACTOR) Ct=1.0 (THERMAL FACTOR) Is=1.0 (SNOW LOAD IMPORTANCE FACTOR: ASCE 7-10 TABLE 1.5-2) Pf (SNOW LOAD FOR LOW-SLOPE ROOF)=0.7X(Ce)X(Ct)X(Is)X(Pg) Pf=0.7X1.0X1.0X1.0X25 = 18.0 PSF MINIMUM PF (LOW-SLOPE ROOF WHERE PG> 20.0 PSF) =

Pm=(20)X(Is) = 20.0X1.0 = 20.0 PSFPs=(Cs)X(Pf) (SLOPED ROOF SNOW LOAD)

### (1.0)X20.0 = 20 PSFD. WIND LOADS

Vult=115 MPH (BUILDING RISK CATEGORY: II ) (BASIC WIND SPEED: 3-SECOND GUST) Vult=120 MPH (BUILDING RISK CATEGORY: III & IV ) (BASIC WIND SPEED: 3-

SECOND GUST) EXPOSURE C Kd=0.85 (WIND DIRECTIONALITY FACTOR) Kzt=1.0 (TOPOGRAPHIC FACTOR)

Gcpi=±0.18 (ENCLOSED BUILDING)

WIND LOAD DETERMINATION BY: ASCE 7-10, CHAPTERS 26 - 30 (DIRECTIONAL PROCEDURE)

COMPONENTS AND CLADDING LOADS (STRENGTH LEVEL LOAD INDICATED IN TABLE THIS DRAWING):

COMPONENTS AND CLADDING WIND PRESSURE TABLES (ULTIMATE) FOR BUILDINGS WITH MEAN ROOF HEIGHT H<60'

WALL PRESSURES (PSF) (FIGURE 30.4-1) EFFECTIVE ZONES 4.5 ZONE 4 ZONE 5 WIND AREA (+) ( - ) (SQ FT) 100

5 4 J5 a WALL PRESS	-31.8 -29.7 -26.9 -24.7 -22.6 -19.7	-25.8 -24.7 -23.3 -22.2 -21.1 -19.7	23.8 22.7 21.3 20.2 9.1 7.7

SURE ZONES

PRESSURE ZONES (PLAN VIEW)

FLAT ROOF PRESSURES (PSF) (FIGURE 30.4-2A) ROOF SLOPES < 7 DEGREES)									
EFFECTIVE WIND AREA (SQ FT)	ZONES 1,2,3 (+)	ZONE 1 (-)	ZONE 2 (-)	ZONE 3 (-)					
10 20 50 100 AND GREATER	+9.7 +9.1 +8.3 +7.7	-23.8 -23.2 -22.4 -21.8	-39.9 -35.6 -30.0 -25.8	-60.0 -49.7 -36.1 -25.8					

200

500

	RHANG PRESSU FIGURE 30.4-2A)	` ,	<u> </u>		a
EFFECTIVE WIND AREA (SQ FT)	ZONES 1,2 ( - )	ZONE 3 (-)	a 3	2	_ <del> </del> 3
10 20	-34.2 -33.6	-56.4 -44.3		1	2     
50 100 200	-32.8 -32.2 -28.0	-28.2 -16.1 -16.1	3	2	_ <sub> </sub> 3
500	-22 2	-16 1	FLAT RC	OF AND O	<u>VERH</u>

### PARAPET NET PRESSURES (PSF) (FIGURE 30.9-1)

EFFECTIVE WIND AREA (SQ FT)	ZONE 4 (+)	ZONE 5 (+)	ZONE 4 (-)	ZONE 5 (-)
10	+56.4	+76.5	-42.3	-48.3
20	+51.1	+65.2	-40.2	-45.1
50	+44.1	+50.1	-37.3	-40.9
100	+38.7	+38.7	-35.2	-37.7
200	+37.7	+37.7	-33.0	-34.5
500	+36.2	+36.2	-30.2	-30.2

1. a = PRESSURE ZONE WIDTH = 6 FT 2. PLUS SIGN (+) SIGNIFIES PRESSURE ACTING TOWARD THE SURFACE. 3. MINUS SIGN (-) SIGNIFIES PRESSURE ACTING AWAY FROM THE SURFACE.

## E. <u>SEISMIC LOADS</u>

le=1.0 (ASCE 7-10 TABLE 1.5-2) SEISMIC SITE CLASS = D (ASSUMED)

Sms=(Fa)X(Ss)=(1.60)X(19.6)=31.3%GSs=19.6%G S1=6.3%G Sm1=(Fv)X(S1)=(2.40)X(6.3) = 15.2%GSds=(2/3)X(Sms) = 20.9%GFa=1.60 Fv=2.40 Sd1=(2/3)X(Sm1) = 10.1%G

SEISMIC DESIGN CATEGORY = B

BASIC STRUCTURAL SYSTEM:

STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE FOUNDATIONS FOR THIS STRUCTURE ARE SPREAD FOOTINGS BEARING ON EITHER

VIRGIN SOIL OR CONTROLLED COMPACTED FILL WITH AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF THE OWNER'S GEOTECHNICAL ENGINEER SHALL VERIFY, PRIOR TO PLACING

CONCRETE, THAT THE SOIL IS CAPABLE OF SUPPORTING SUCH A LOAD AND IS CONSISTENT WITH THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL PROTECT THE FOOTINGS AND SLABS FROM DAMAGE

FROM FROST HEAVE DURING CONSTRUCTION UNTIL THE FINAL DESIGN STRUCTURE STEPS IN WALL FOOTINGS SHALL HAVE A MINIMUM SPACING OF DOUBLE THE

CHANGE IN ELEVATION. AT LOCATIONS WHERE THE BUILDING ELECTRICAL GROUND LOOP IS TIED TO FOUNDATION REINFORCING STEEL, CONTINUOUSLY TIE REINFORCING TOGETHER

ALL <u>CONCRETE</u> WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

FOR MINIMUM DISTANCE REQD BY ELECTRICAL CODE AND BUILDING OFFICIAL.

f'c=3500 PSI (SLABS-ON-GRADE AND ELEVATED SLABS) f'c=3000 PSI (ALL OTHER CONCRETE) ASTM A615 GRADE 60 (TYPICAL REINFORCING STEEL) ASTM A706 (REINFORCING STEEL AT WELDED CONDITIONS) ASTM A1064 (PLAIN WELDED WIRE FABRIC - USE FLAT SHEETS ONLY)

ALL EXTERIOR EXPOSED CONCRETE SHALL BE FURNISHED WITH AN AIR-ENTRAINING ADMIXTURE PROVIDING AN AIR-CONTENT OF 6% (+/- 1 1/2%) AT POINT OF PLACEMENT - REFER TO SPECIFICATIONS.

REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF DEPRESSIONS FOR SPECIAL FLOOR COVERINGS.

REFER TO SPECIFICATIONS FOR FINISHES.

ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF (ACI 530-13/ASCE 5-13/TMS 402-13) "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND (ACI 530.1-13/ASCE 6-13/TMS 602-13) "SPECIFICATION FOR MASONRY STRUCTURES".

> ASTM C90 (BLOCK) ASTM C270 (MORTAR) - TYPE S (CMU), TYPE N (BRICK) ASTM C476 (GROUT) - 2000 PSI MINIMUM COMPRESSIVE STRENGTH f'm=2000 PSI ASTM A615 GRADE 60 (REINFORCING)

SOLIDLY FILL COLLAR JOINTS WITH MORTAR AS THE WORK PROGRESSES.

PROVIDE STEEL SLEEVES AT PIPE PENETRATIONS (GALVANIZED AT EXTERIOR WALLS AND ALL BELOW GRADE WALLS)

GROUT ALL CELLS OF FOUNDATION WALLS SOLID UP TO FINISH GROUND FLOOR.

AT HOLLOW WALLS THAT CHANGE IN THICKNESS OR NUMBER OF WYTHES. PROVIDE A COURSE OF SOLID MASONRY OR GROUT FILLED UNITS BELOW THE

ALL BLOCK CONTAINING VERTICAL REINFORCING SHALL HAVE TWO CELLS PER 16" BLOCK. CELLS SHALL ALIGN VERTICALLY AND BE GROUTED SOLID AT ALL REINFORCING LOCATIONS. BARS SHALL BE HELD IN PLACE BY REBAR POSITIONERS OR OTHER SUITABLE DEVICES AND SHALL BE CENTERED IN CMU

IN VERTICALLY REINFORCED WALLS, USE LADDER TYPE (NOT TRUSS TYPE) REINFORCING IN HORIZONTAL MORTAR JOINTS.

GROUT SLUMP SHALL BE 8" TO 11". PLACE GROUT PER ACI 530.1 SECTION 3.5 AND CONSOLIDATE BY VIBRATION. RECONSOLIDATE BY VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT.

AFTER STEEL ERECTION IS COMPLETE, FILL ALL POCKETS AT BEARING OF JOISTS AND BEAMS SOLID WITH MASONRY. BUILD TIGHT TO STEEL MEMBER.

STEEL FLOOR AND ROOF DECK SHALL COMPLY WITH STEEL DECK INSTITUTE PUBLICATION No. 31. IN THE ABSENCE OF A COMPLETE SPECIFICATION SECTION 053100. THE FOLLOWING MINIMUM PARAMETERS SHALL BE MET: GALVANIZED STEEL SHEET = ASTM A 653, G60 MINIMUM GALV

> PROVIDE BAKED-ON ENAMEL SHOP PRIMER TO BOTTOM OF ALL DECK TO RECEIVE FIELD PAINT. PROFILE DEPTH AND STEEL THICKNESS = AS INDICATED SPAN CONDITION = TRIPLE OR MORE

ROOF DECK MIN YIELD STRENGTH = (1 1/2" DEEP FY= 50KSI, 3" DEEP FY= 40 KSI) COMPOSITE FLOOR DECK MIN YIELD STRENGTH = 50KSI NON-COMPOSITE FLOOR DECK MIN YIELD STRENGTH = 60KSI

MIN DECK END BEARING = 1 1/2" END JOINTS = LAPPED 2" EXCEPT FOR COMPOSITE OR CELLULAR DECK

ALL <u>STRUCTURAL COLD-FORMED METAL FRAMING</u> SHALL CONFORM TO THE S100-12 "NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS BY AMERICAN IRON AND STEEL INSTITUTE (AISI)". ALL STUDS, JOISTS, AND ACCESSORIES SHALL BE GALVANIZED STEEL WITH THE TYPE, SIZE, GAUGE, AND SPACING INDICATED ON THE DRAWINGS. ALL MEMBERS WITHOUT A DESIGNATED SIZE ON THE DRAWINGS SHALL BE DESIGNED BY A LIGHT GAUGE STEEL SPECIALTY ENGINEER REGISTERED IN THE COMMONWEALTH OF VIRGINIA; PROVIDE CALCULATIONS AND SHOP DRAWINGS FOR DMWPV REVIEW ACCORDING TO SPECIFICATION SECTION 054000.

DESIGN MINIMUM YIELD STRENGTHS ARE AS FOLLOWS:

Fv=33 KSI FOR 43 AND 33 MIL THICKNESS Fy=50 KSI FOR 97, 68 AND 54 MIL THICKNESS

PUNCH OUTS SHALL NOT BE LOCATED WITHIN 10" OF END OF MEMBER OR INSIDE FACE OF SUPPORT. PROVIDE BRIDGING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS - NOT TO EXCEED 5'-0" OC IN VERTICAL WALL STUDS.

PAF USED TO CONNECT LIGHT GAGE STEEL MEMBERS OR CONNECTORS TO CONCRETE OR STRUCTURAL STEEL SHALL BE ONE OF THOSE INDICATED IN "POST INSTALLED ANCHOR" NOTES.

USE NO. 10 SCREWS (MINIMUM SIZE) IN ALL CONNECTIONS OF LIGHT GAUGE STEEL STRUCTURAL MEMBERS UNLESS NOTED OTHERWISE.

10. ALL <u>STRUCTURAL STEEL</u> AND <u>ARCHITECTURALLY EXPOSED STRUCTURAL STEEL</u> WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC 360-10 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS". BOLTED CONNECTIONS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION UNLESS NOTED OTHERWISE ON PLAN. REFER TO DRAWINGS FOR CONNECTIONS. IF CONNECTIONS ARE NOT SHOWN. FABRICATOR SHALL DESIGN CONNECTIONS FOR BEAM UNIFORMLY LOADED TO CAPACITY.

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FY = 50 KSI
ASTM A992 (W-SHAPES AND WT-SHAPES)
ASTM A500 GRADE C (SQUARE AND
                                           FY = 50 KSI
     RECTANGULAR HSS SHAPES)
                                           FY = 35 KSI
ASTM A53, TYPE E OR S (PIPE)
ASTM A36 (ANGLE, CHANNELS, PLATES, AND
                                          FY = 36 KSI
    OTHER STRUCTURAL SHAPES)
E70XX (SMAW PROCESS WELDING)
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E6022 (METAL DECK TO OWSJ OR STRUCTURAL STEEL - SMAW PROCESS) ASTM A325-N (BOLTS)

ASTM A563 (HEAVY HEX NUT) ASTM F436 (HARDENED STEEL WASHER)

STRENGTH PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.

ASTM F1554 FY=36 KSI (ANCHOR RODS UNO) ASTM A108 (HEADED SHEAR STUDS)

ASTM A496, AWS D1.1, TYPE C (DEFORMED BAR ANCHORS) DETAILING AND ERECTION OF STRUCTURAL STEEL SHALL COMPLY WITH CURRENT OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY-SUBPART R - STEEL

CONTRACTOR SHALL PROVIDE FIELD CURED SAMPLES OF CAST-IN-PLACE CONCRETE IN FOOTINGS, PIERS, AND WALLS AND PRISMS OF MASONRY PIERS AND WALLS IN ACCORDANCE WITH OSHA SECTION 1926.752 TO DETERMINE THAT CONCRETE AND MASONRY HAVE ACHIEVED A MINIMUM OF 75% OF DESIGN

FABRICATOR SHALL PROVIDE CHANNELS, ANGLES, ETC., AS REQUIRED FOR STEEL DECK BEARING AT LOCATIONS WHERE TOP OF STRUCTURAL MEMBERS ARE NOT AT DECK BEARING ELEVATION. REFER TO DETAILS.

ALL STEEL MEMBERS AND CONNECTORS EXPOSED TO THE WEATHER SHALL BE HOT-DIP GALVANIZED UNLESS NOTED AS

ALL FIELD WELDING TO EXISTING STRUCTURAL STEEL SHALL COMPLY WITH AISC AND AWS D1.1 FOR WELDING PROCEDURES TO EXISTING STEEL. EXISTING STEEL SHALL BE PROPERLY PRE-HEATED AND ALLOWED TO COOL DOWN BETWEEN PASSES TO LIMIT STEEL BEAM DISTORTION. ALL UNDERCUTS, NOTCHES, AND GOUGES SHALL BE FILLED AND GROUND OUT. ALL EXISTING STEEL SHALL BE CLEANED TO REMOVE ALL RUST, FIREPROOFING, PAINT OR CONTAMINANTS TO EXPOSE BARE METALS FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF WELD EXISTING STEEL BEAMS SHALL BE TEMPORARILY SHORED AS REQUIRED DURING FIELD WELDING PROCESS.

12. ALL POST-INSTALLED ANCHORS (IN CONCRETE OR CMU) ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS (INCLUDING BUT NOT LIMITED TO DRILL BIT SIZE, PROPER CLEANING OF HOLES, INSTALLATION TORQUE, AND TEMPERATURE CONSTRAINTS).

WHEN A SPECIFIC PRODUCT AND MANUFACTURER IS REFERENCED IN THE CONTRACT DOCUMENTS, THAT SPECIFIC PRODUCT SHALL BE USED UNLESS AN ALTERNATE PRODUCT IS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE LRFD OR CODE COMPLIANT CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC - ES REPORT SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

THE ANCHOR MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT DURING THE INITIAL INSTALLATION OF EACH TYPE OF ANCHOR TO REVIEW AND APPROVE OF THE CONTRACTOR'S INSTALLATION PROCEDURES. THE OWNER'S TESTING AGENCY SHALL ALSO OBSERVE THE INITIAL INSTALLATION OF EACH ANCHOR TYPE, AND PROVIDE THE INSPECTION OF ANCHORS DURING INSTALLATION TO VERIFY CONFORMANCE WITH THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS. SUBMIT REPORT FROM MANUFACTURER'S REPRESENTATIVE FOR DMWPV REVIEW. INSTALLATION OF ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY ACI/CRSI ADHESIVE ANCHOR INSTALLER CERIFICATION PROGRAM OR APPROVED EQUIVALENT. SUBMIT CREDENTIALS OF CERTIFIED INSTALLERS CONTINUOUS INSPECTION IS REQUIRED FOR ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS. REMOVE AND REPLACE MISPLACED OR MALFUNCTIONING ANCHORS. FILL EMPTY ANCHOR HOLES AND PATCH FAILED ANCHOR LOCATIONS WITH HIGH-STRENGTH, NONMETALLIC GROUT.

CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN HOLLOW MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

> HIT-HY 270 BY HILTI SET XP SYSTEM BY SIMPSON STRONG TIE ANCHOR SYSTEM

AC100 + GOLD BY DEWALT USE STAINLESS STEEL SCREEN TUBES BY THE SAME MANUFACTURER WHEN USING

THESE ADHESIVES IN MASONRY WITH VOIDS OR HOLLOW CMU. INSTALL USING DRILL IN ROTATION- ONLY MODE TO KEEP FROM DAMAGING INSIDE OF FACE SHELL. CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN SOLID OR GROUTED MASONRY

GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

SET XP BY SIMPSON STRONG TIE ANCHOR SYSTEMS

HIT-HY 270 BY HILTI AC100 + GOLD BY DEWALT

PURE 110 + BY DEWALT

AC 200 + BY DEWALT

CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN CONCRETE GENERICALLY

REFERRED TO AS "ADHESIVE ANCHORS" SHALL BE ONE OF: SET-XP BY SIMPSON STRONG TIE SET - 3G BY SIMPSON STRONG TIE HIT-RE 500-V3 BY HILTI (WITH STD ROD AND HOLE CLEANING) HIT-RE 500-V3 BY HILTI (SAFE-SET SYSTEM) HIT-HY 200 BY HILTI (WITH STD ROD AND HOLE CLEANING) HIT-HY 200 BY HILTI (SAFE-SET SYSTEM)

THREADED ROD ANCHORS USED WITH THESE SYSTEMS SHALL HAVE A MINIMUM STEEL STRENGTH OF Fy = 36 KSI UNLESS NOTED OTHERWISE. REINFORCING STEEL USED WITH THESE SYSTEMS SHALL COMPLY WITH ASTM A615 GRADE 60. ANCHORS SHALL BE INSTALLED IN DRY CONCRETE A MINIMUM OF 21 DAYS OLD. USE ONLY A CARBIDE DRILL BIT (NO CORE DRILLING). HOLE CLEANING SHALL BE ACCOMPLISHED FOLLOWING MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION USING AIR COMPRESSOR WITH NOZZLE AND WIRE BRUSH PROVIDED BY ADHESIVE MANUFACTURER. HILTI SAFE SET SYSTEM DOES HAVE AN OPTION WITHOUT HOLE CLEANING REQUIREMENT IF HILTI HIT-Z ANCHOR ROD IS USED. OVERHEAD HOLES AND ANY HOLES GREATER THAN 12 INCHES DEEP REQUIRE THE USE OF A PISTON PLUG AT THE END OF THE END OF ADHESIVE

ANY PRODUCTS SUBMITTED AS A REQUEST FOR SUBSTITUTION SHALL BE COMPLIANT WITH ACI 318-14 CHAPTER 17 AND APPROVED FOR USE IN CRACKED CONCRETE.

FASTENERS GENERICALLY REFERRED TO AS "EXPANSION ANCHORS" OR "WEDGE ANCHORS" SHALL BE ONE OF:

APPLICATOR. USE ADHESIVE RETAINING CAP IN OVERHEAD CONDITIONS.

KWIK BOLT TZ BY HILTI STRONG-BOLT 2 BY SIMPSON STRONG TIE ANCHOR SYSTEMS POWER- STUD + SD2 BY DEWALT

FASTENERS GENERICALLY REFERRED TO AS "CONCRETE/MASONRY SCREWS" SHALL BE

KWIK-CON II + BY HILTI

TITEN 2 BY SIMPSON STRONG TIE ANCHOR SYSTEMS TAPPER + BY DEWALT

FASTENERS GENERICALLY REFERRED TO AS "PAF" (POWER ACTUATED FASTENERS) SHALL BE ONE

PAF INTO NORMAL OR LIGHT WEIGHT CONCRETE

	<u>ANCHOR</u>	<u>MANUF</u>	SHANK DIAMETER	MIN EMBEDMENT
1.	X-U OR X-P	HILTI	0.157"	1 1/4"
2.	8 mm HEAD	DEWALT	0.157"	1 1/4"
	SPIRAL CSI PIN	<b>FASTENERS</b>		
3.	SP SERIES	RAMSET	0.150"/0.180" TAPERED SHANK	1 1/4"
4.	PDPA	SIMPSON	0.157"	1 1/4"

# PAFINTO STRUCTURAL STEEL

DOUBLE DOT). AND LIGHTER LINE WEIGHT.

'AF IN	1051	RUCTURAL STEEL:			
		ANCHOR	MANUF	SHANK DIAMETER	
	1.	X-U	HILTI	0.157"	
	2.	8 mm HEAD	DEWALT	0.157"	
		SPIRAL CSI PIN	FASTENERS		
	3.	SP	RAMSET	0.150"	
	4.	PDPA	SIMPSON	0.157"	
	USE C	NLY HILTI X-U PAF II	N STRUCTURAL STE	EL GREATER THAN 1/2" THICK.	1/2" MINIMUM POINT

PENETRATION REQUIRED IN STRUCTURAL STEEL GREATER THAN 1/2" THICK.

13. EXISTING CONSTRUCTION IS DENOTED USING SLANTED LETTERING, PHANTOM LINETYPE (DASH

# 14. <u>ABBREVIATIONS</u>

DIAG = DIAGONAL

DIM = DIMENSION

DL = DEAD LOAD

DWGS= DRAWINGS

EL = ELEVATION

EJ = EXPANSION JOINT

DN = DOWN

EA = EACH

AB = ANCHOR BOLT AFF = ABOVE FINISHED FLOOR ARCH = ARCHITECTURAL BLDG = BUILDING BM = BEAM BOT = BOTTOM BRG = BEARING CANT = CANTILEVER CFS-S = COLD-FORMED STEEL- STRUCTURAL CFS-NS= COLD-FORMED STEEL- NON STRUCTURAL CIP = CAST-IN-PLACE = CONTROL JOINT = CENTERLINE GA = GAUGE CLG = CEILING CLR = CLEAR CLSM = CONTROLLED LOW-STRENGTH MATERIAL CMU = CONCRETE MASONRY UNIT COL = COLUMN CONC = CONCRETE CONN = CONNECTION CONT = CONTINUOUS COORD = COORDINATE DET = DETAIL DFT = DRY FILM THICKNESS DIA = DIAMETER

ELEV = ELEVATOR EOS = EDGE OF SLAB EQ = EQUALEQUIP = EQUIPMENT EXIST = EXISTING EW = EACH WAY EXP = EXPANSION EXT = EXTERIOR FFE = FINISHED FLOOR ELEVATION FLR = FLOORFLT = FLAT BAR FRT = FIRE RETARDANT TREATED FTG = FOOTING

GALV = GALVANIZED GC = GENERAL CONTRACTOR GT = GIRDER TRUSS HK = HOOK HORIZ = HORIZONTAL HS = HIGH STRENGTH HT = HEIGHT INT = INTERIOR JT = JOINT

JBE = JOIST BEARING ELEVATION LBS = POUNDS LGST = LIGHT GAGE STEEL TRUSS LL = LIVE LOAD LLH = LONG LEG HORIZONTAL LLV = LONG LEG VERTICAL LSH = LONG SIDE HORIZONTAL LSV = LONG SIDE VERTICAL

MAS = MASONRY

MAX = MAXIMUM

MECH = MECHANICAL

MFR = MANUFACTURER

STIFF = STIFFENER TBE = TRUSS BEARING ELEVATION T&B = TOP AND BOTTOM TOC = TOP OF CONCRETE TOS = TOP OF STEEL TYP = TYPICAL UNO = UNLESS NOTED OTHERWISE VERT = VERTICAL WCJ = WALL CONTROL JOINT WT = WEIGHT

MISC = MISCELLANEOUS

[NC] = NON-COMPOSITE

NTS = NOT TO SCALE

OC = ON CENTER

OPP = OPPOSITE

PL = PLATE

NW = NORMAL WEIGHT

OH = OPPOSITE HAND

POJ = PLANE OF JOIST

REF = REFERENCE

REINF = REINFORCING

SOG = SLAB-ON-GRADE

WWF = WELDED WIRE FABRIC

REQD = REQUIRED

STD = STANDARD

SECT = SECTION

SIM = SIMILAR

SPA = SPACE

(H) = HIGH

(L) = LOW

PAF = POWDER ACTUATED FASTENER

PLF = POUNDS PER LINEAR FOOT

PSF = POUNDS PER SQUARE FOOT

PSI = POUNDS PER SQUARE INCH

MIN = MINIMUM

NO. = NUMBER

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CHARLOTTESVILLE, VA 22902

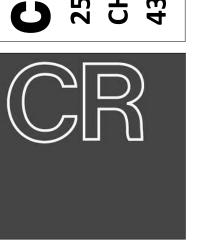
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REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES

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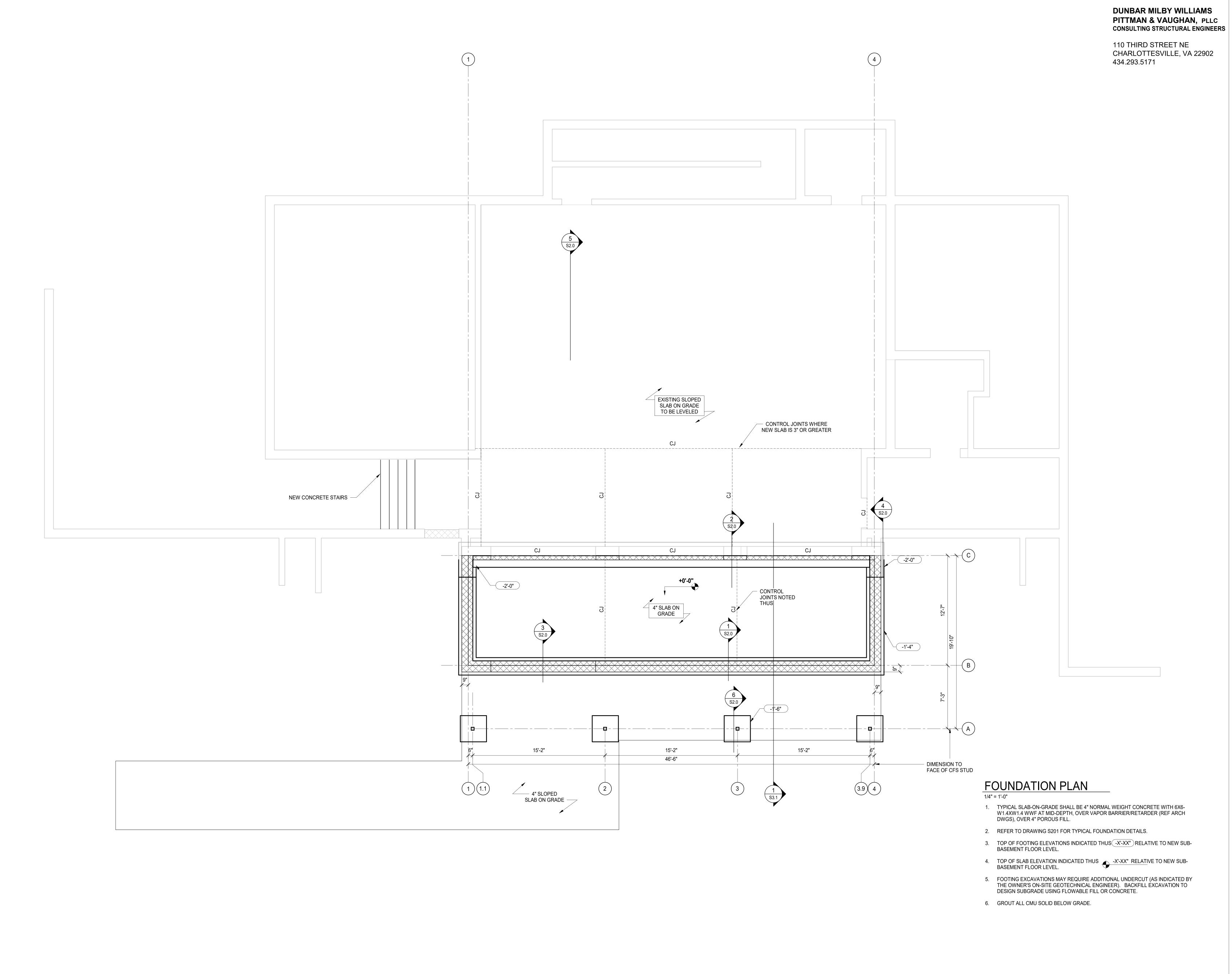
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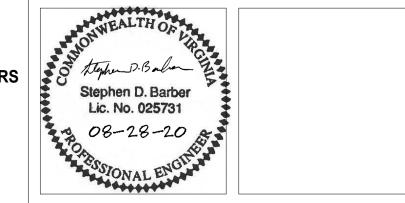


GENERAL STRUCTURAL NOTES

FILENAME:

3/4" = 1'-0" 8/28/2020





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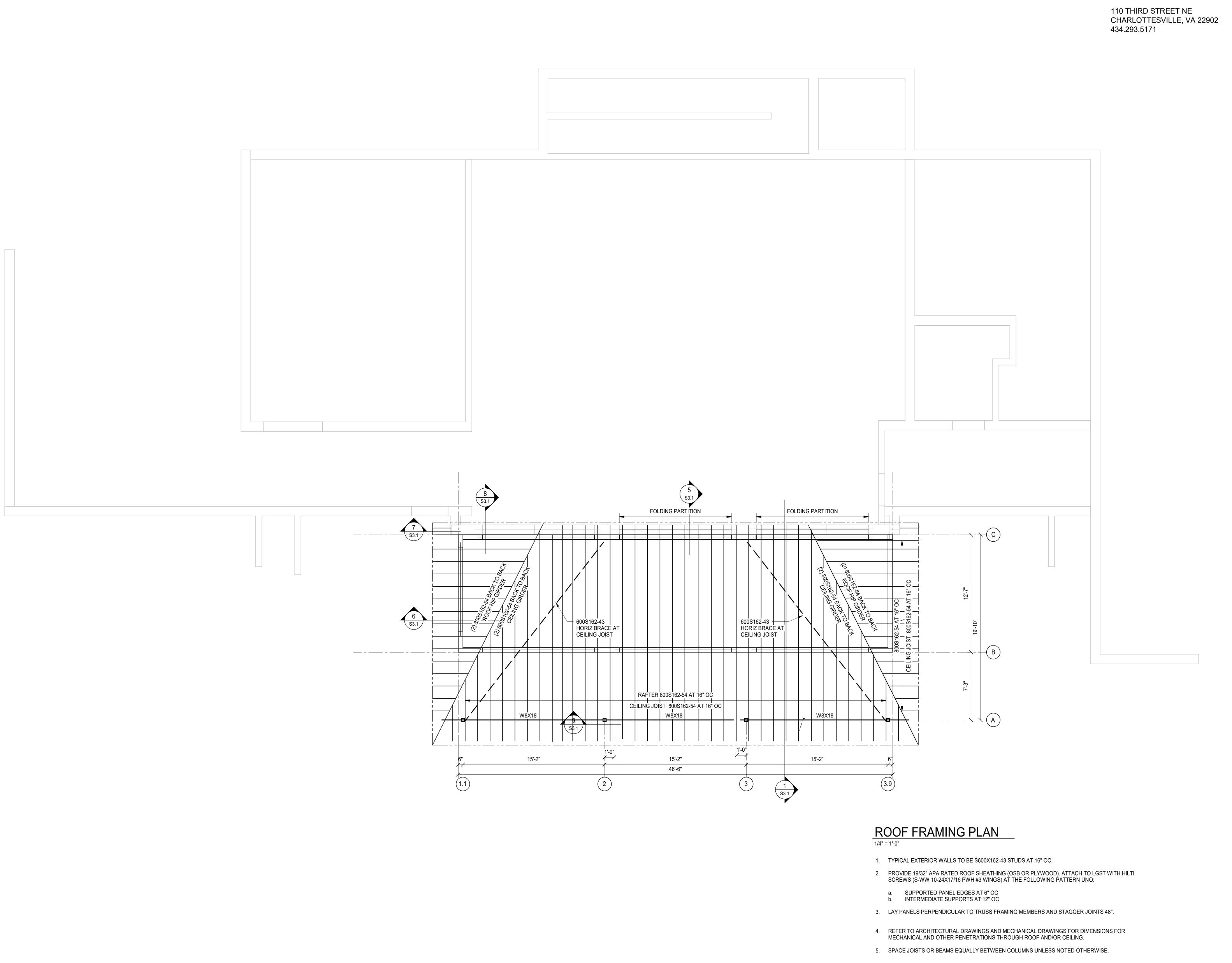
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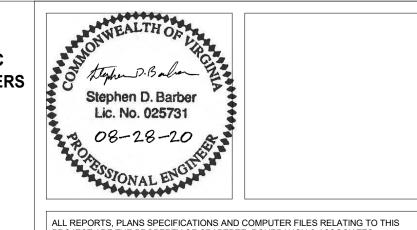


FOUNDATION PLAN

As indicated 8/28/2020



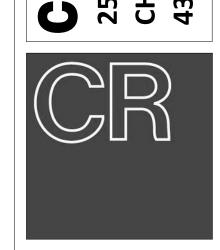
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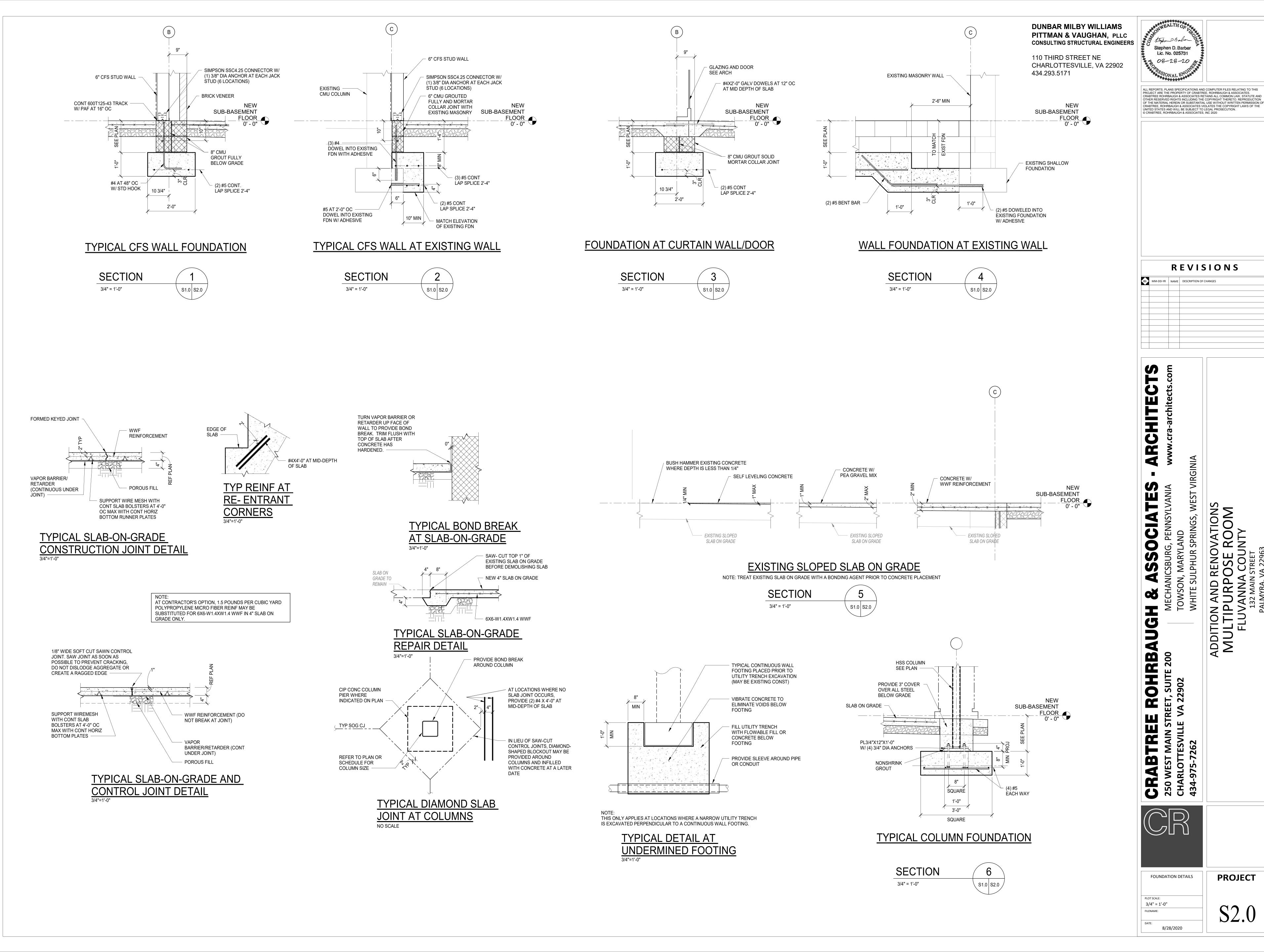
REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES



**ROOF FRAMING PLAN** 

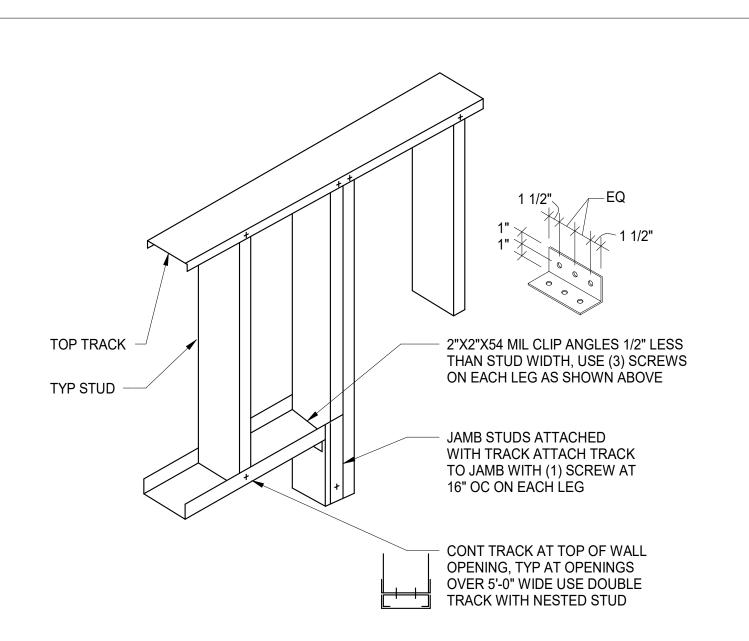
As indicated

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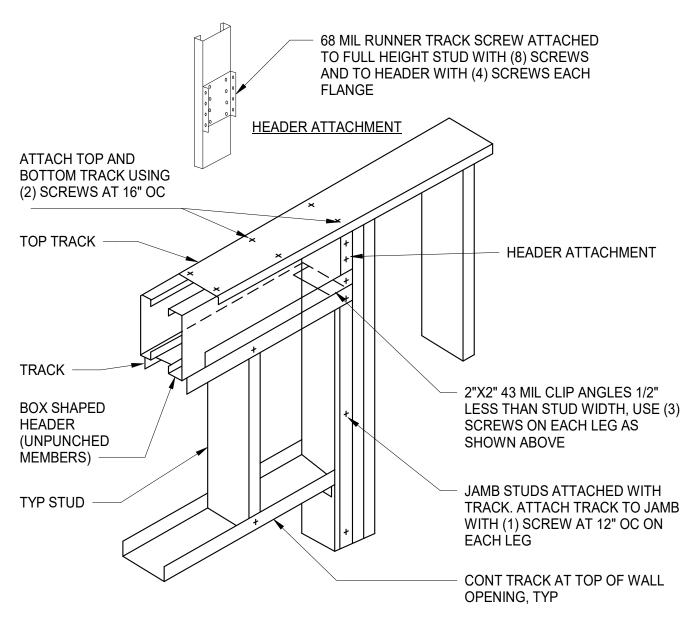
**PROJECT** 

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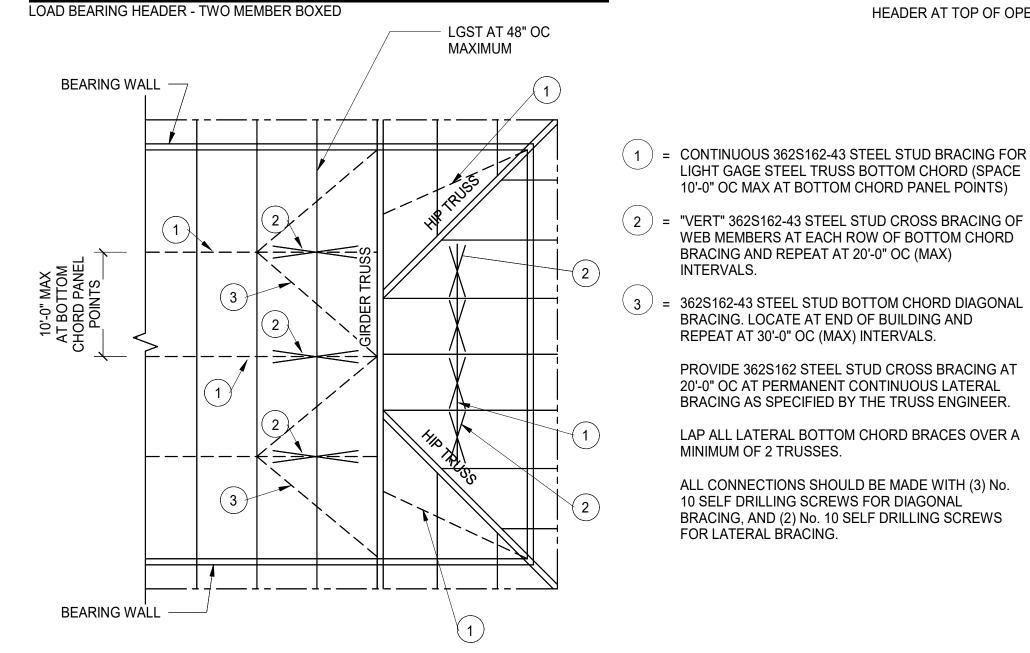


# TYPICAL HEAD CONNECTION

NON-LOAD BEARING EXTERIOR STEEL STUD WALL

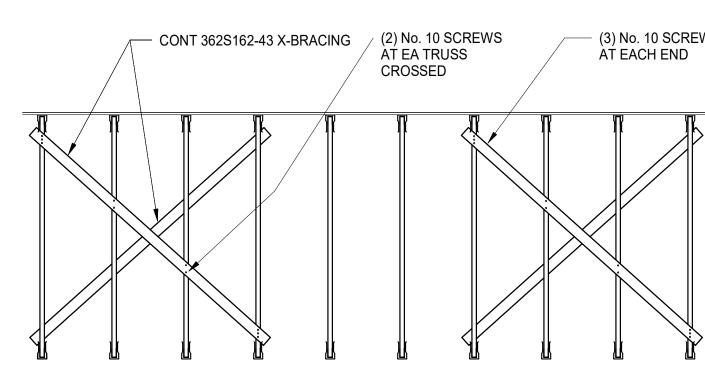


# TYPICAL BOXED HEADER CONNECTION



# LIGHT GAGE STEEL BRACING AT ENDS OF HIP ROOFS (PLAN VIEW)

NO SCALE REFER TO TYPICAL GABLE ROOF TRUSS BRACING DIAGRAM FOR ALL OTHER DETAILS. NOTE: TRUSS MANUFACTURER SHALL DESIGN COMPLETE BRACING SYSTEM AND PROVIDE PLANS AND DETAILS OF BRACING AS PART OF SHOP DRAWING

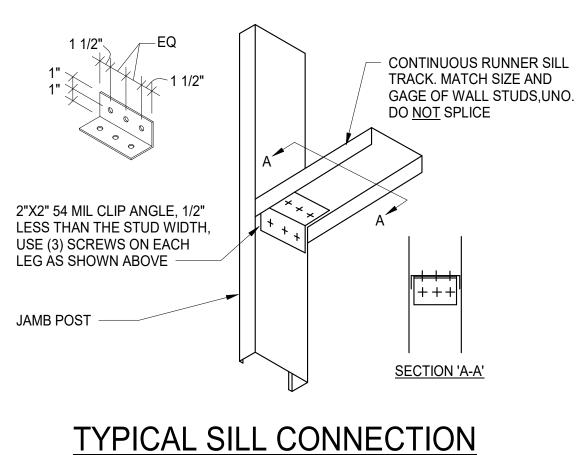


DIAGONAL X- BRACING AT TRUSS WEB MEMBERS (ELEVATION VIEW)

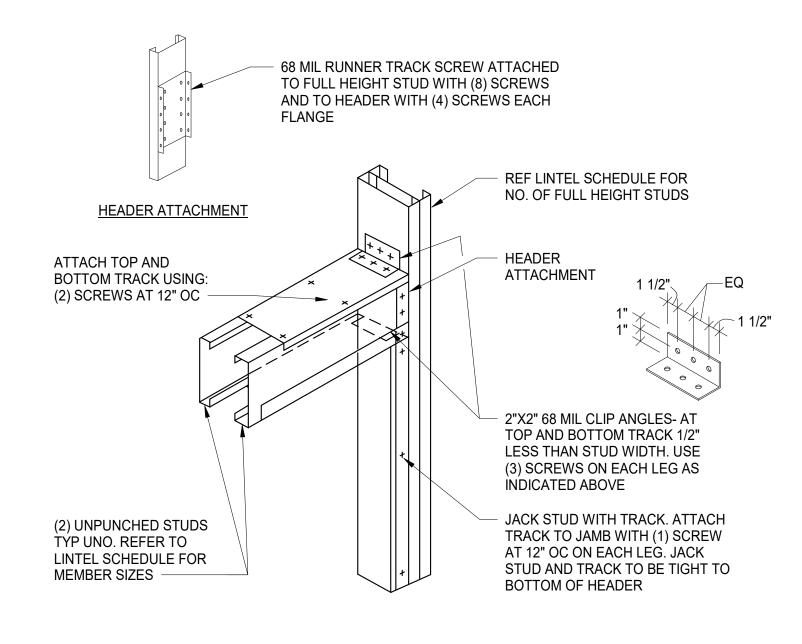
2"X2" 54 MIL CLIP ANGLE (WIDTH SHALL BE 1/4" LESS THAN STUD WIDTH) -(2) SCREWS TO **BRIDGING AND** STUD, (4) TOTAL CONT 1 1/2" COLD ROLLED BRIDGING CHANNEL DO NOT EXCEED 5'-0" STEEL STUD -VERT SPACING

# TYPICAL STEEL STUD WALL BRIDGING DETAIL (STUDS 6" DEEP OR LESS)

APPLIES AT ALL EXTERIOR STEEL STUD WALLS. APPLIES AT INTERIOR STEEL STUD BEARING WALLS. APPLIES AT ALL INTERIOR STUD PARTITION WALLS THAT DO NOT HAVE SHEATHING ON EACH FACES.



SILL CONNECTION USING SCREW ATTACHED CLIP ANGLE



# TYPICAL BOXED HEADER CONNECTION HEADER AT TOP OF OPENINGS

LIGHT GAGE STEEL TRUSS BOTTOM CHORD (SPACE

10'-0" OC MAX AT BOTTOM CHORD PANEL POINTS)

WEB MEMBERS AT EACH ROW OF BOTTOM CHORD

362S162-43 STEEL STUD BOTTOM CHORD DIAGONAL BRACING. LOCATE AT END OF BUILDING AND REPEAT AT 30'-0" OC (MAX) INTERVALS.

PROVIDE 362S162 STEEL STUD CROSS BRACING AT

20'-0" OC AT PERMANENT CONTINUOUS LATERAL

BRACING AS SPECIFIED BY THE TRUSS ENGINEER.

LAP ALL LATERAL BOTTOM CHORD BRACES OVER A

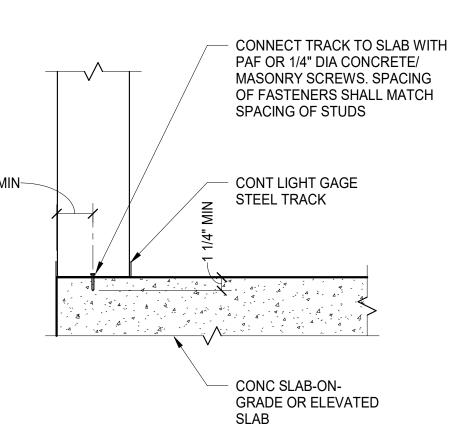
ALL CONNECTIONS SHOULD BE MADE WITH (3) No.

BRACING, AND (2) No. 10 SELF DRILLING SCREWS

10 SELF DRILLING SCREWS FOR DIAGONAL

MINIMUM OF 2 TRUSSES.

BRACING AND REPEAT AT 20'-0" OC (MAX)



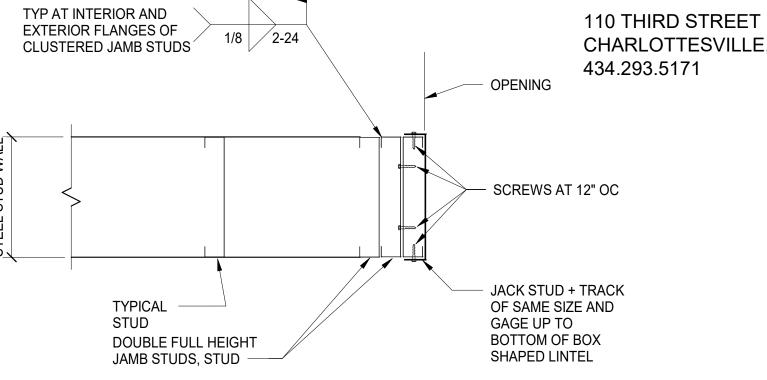
TYPICAL CONNECTION OF LIGHT GAGE STEEL TRACK

3" MIN-

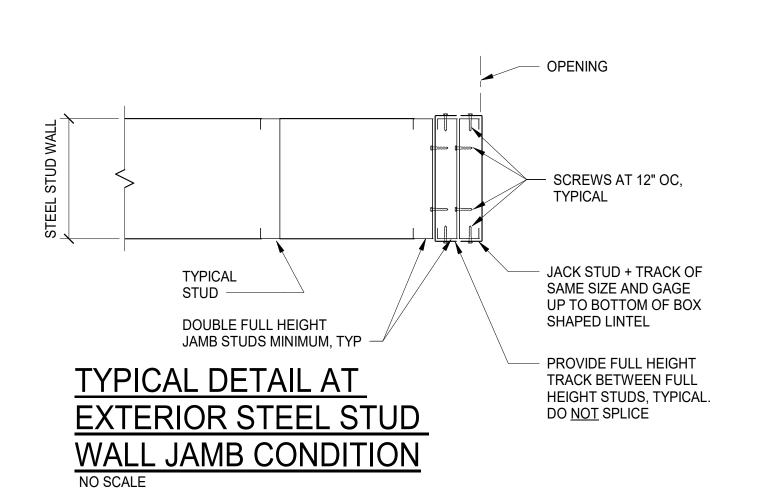
TO CONCRETE NO SCALE

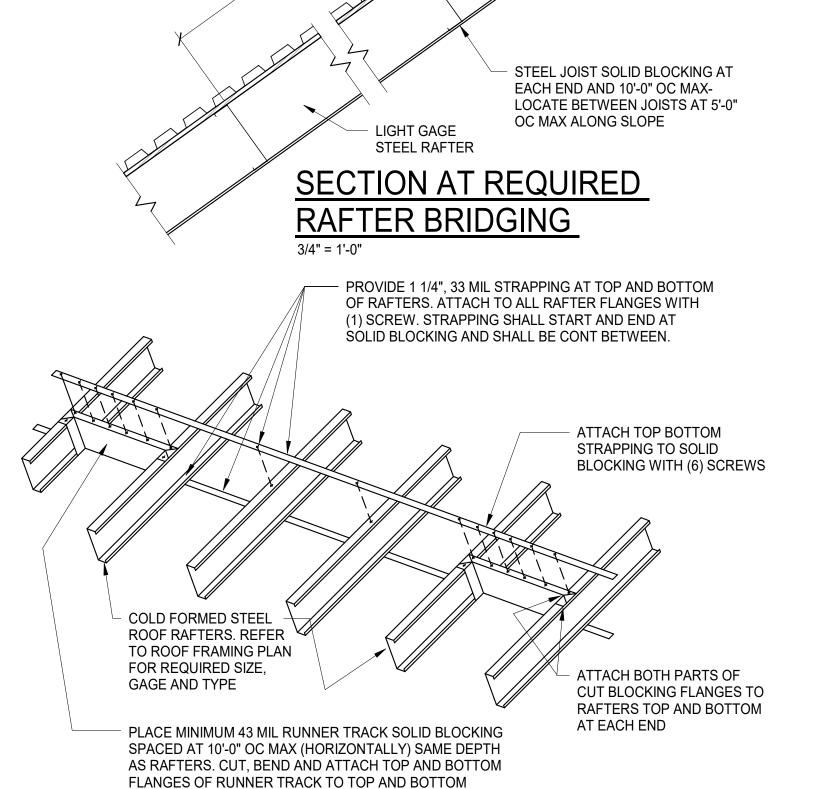
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# TYPICAL DETAIL AT EXTERIOR STEEL STUD WALL JAMB CONDITION





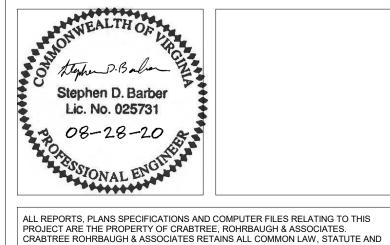
# <u>NOTES</u>

- 1. RAFTER BRIDGING IS REQUIRED AT ALL RAFTERS AND IS NOT SHOWN ON ROOF FRAMING PLANS. BRIDGING SHALL BE INSTALLED AS REQUIRED BY MANUFACTURER OF RAFTERS TO SUPPORT ALL LOADS AS INDICATE ON DRAWINGS, BUT SHALL NOT BE SPACED MORE THAN 5'-0" OC ALONG SLOPE OF RAFTERS.
- 2. BRIDGING SHALL BE INSTALLED PRIOR TO INSTALLATION OF ROOF SHEATHING.

FLANGES OF RAFTERS AT EACH END WITH (2) SCREWS.

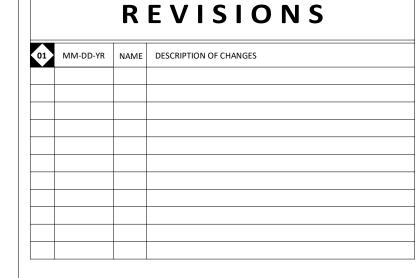
3. TOP STRAPPING MAY BE OMITTED AT CONTRACTOR'S OPTION, IF ROOF SHEATHING IS CONTINUOUSLY ATTACHED TO RAFTER TOP FLANGES. IT IS RECOMMENDED THAT TOP STRAPPING BE INSTALLED TO BRACE TOP FLANGES FOR STABILITY DURING ERECTION.

TYPICAL REQUIRED RAFTER AND **CEILING JOIST BRIDGING** 



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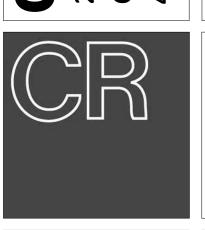


ARC

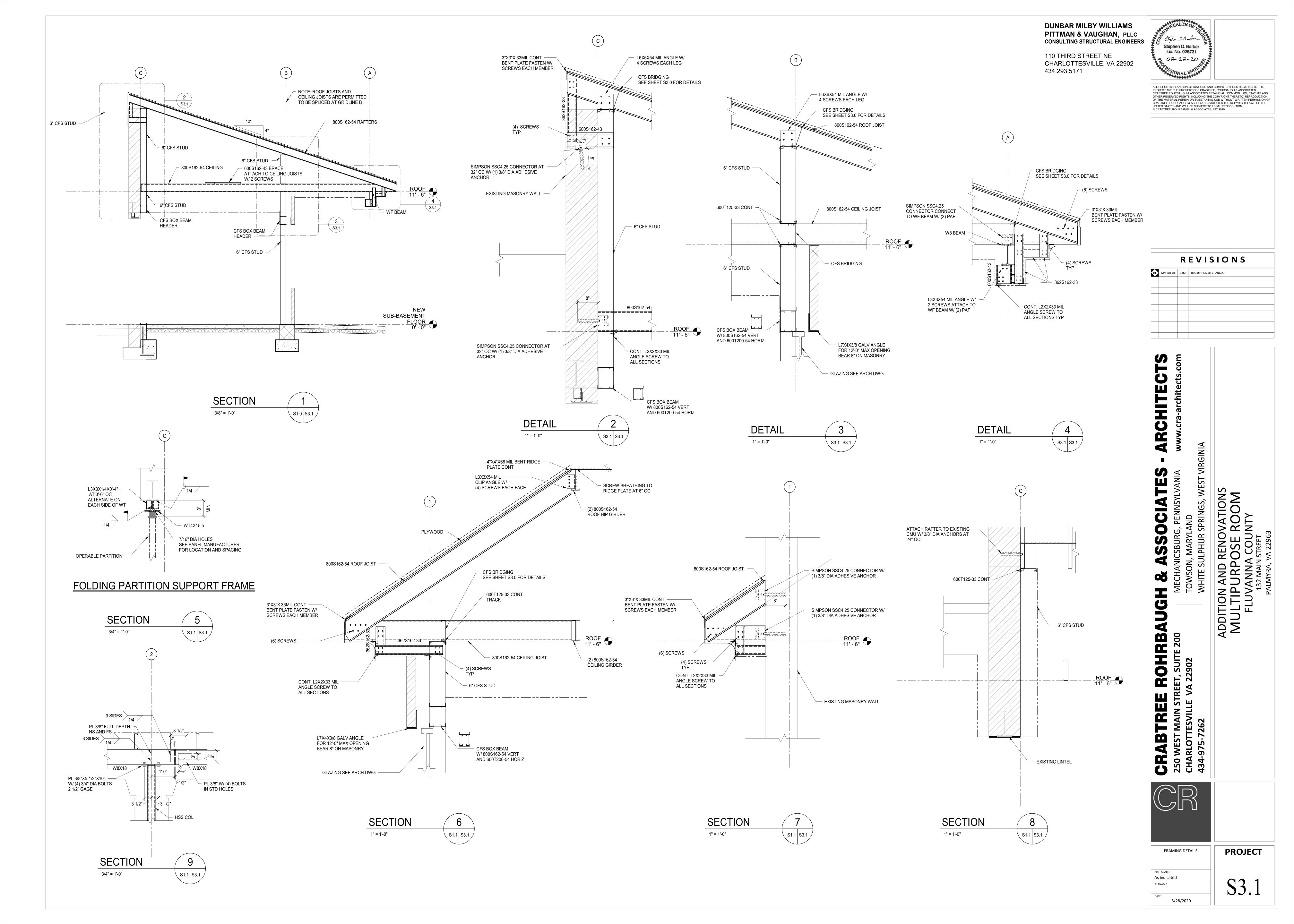
ADDITIOI MULTI

RB

ROH



**PROJECT** FRAMING DETAILS 3/4" = 1'-0" 8/28/2020



## MECHANICAL GENERAL NOTES

- A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE
- CONTRACTOR. B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL. STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES,
- THE MOST STRINGENT REQUIREMENT SHALL APPLY. WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- D ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
- E COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS. F PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- G OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF KENTUCKY, ETC.) H CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING, HVAC AND ELECTRICAL WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION

THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE

- IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR
- PENETRATIONS. WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.
- K ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS. L ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE
- SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES. M ALL DUCTWORK, PIPING, CONDUITS, ETC. IN ROOMS WITH CEILINGS SHALL BE
- ABOVE CEILING EXCEPT AS NOTED. N INSTALL AIR VENTS AT HIGH POINTS IN PIPING AND DRAINS IN LOW POINTS.
- USE CARE TO AVOID FREEZING OF EXTERIOR VENTS. O LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
- P ALL OFFSETS IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- O COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT. R INSTALL ALL PIPING, DUCTWORK AND EOUIPMENT IN STRICT ACCORDANCE
- WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT. S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH
- WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION. T SEAL ALL NEW DUCTWORK JOINTS WITH UNITED MCGILL, IRONGRIP 601 OR EQUAL WATER BASED SEALANT.
- U ALL MOTOR DRIVEN EQUIPMENT SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS TO DUCTWORK, PIPING, ETC., UNLESS OTHERWISE NOTED. V THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.
- W WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE
- X DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED
- FOR KITCHEN EXHAUSTS. Y ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE
- DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC, FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- AA VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.
- AB ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.
- AC WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.
- AD THE DOCUMENTS COMPLY WITH 2006 IMC, 2007 KBC, AND 2009 IECC.

SAFETY POLICY REQUIREMENTS.

AE THE DOCUMENTS COMPLY WITH 2006 IMC, 2007 KBC, AND ASHRAE 90.1-2007. AF WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S

### **ABBREVIATIONS** ALTERNATING CURRENT ADJ ADJUSTABLE ABOVE FINISHED FLOOR ABOVE FINISHED ROOF AFR AFUE ANNUAL FUEL UTILIZATION EFFICIENCY AHJ AUTHORITY HAVING JURISDICTION AMP AMPERE (AMP, AMPS) ANSI AMERICAN NATIONAL STANDARD INSTITUTE APD AIR PRESSURE DROP AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND ASHRAE AIR-CONDITIONING ENGINEERS ATU AIR TERMINAL UNIT AVG AVERAGE BAS BUILDING AUTOMATION SYSTEM BHP BREAK HORSEPOWER BTU BRITISH THERMAL UNIT CAP CAPACITY CAV CONSTANT AIR VOLUME CD CONDENSATE DRAIN CFM CUBIC FEET PER MINUTE C.I. CAST IRON CLG CLR CO CARBON MONOXIDE CO2 CARBON DIOXIDE COND CONDENS (-ER, -ING, -ATION, -ATE) CONT CONTINU (-ED, -OUS) CU FT CUBIC FEET CU IN **CUBIC INCHES** VALVE FLOW COEFFICIENT CV dB DECIBEL DBT DRY BULB TEMPERATURE DIRECT CURRENT DD DUCT SMOKE DETECTOR DDC **DIRECT DIGITAL CONTROLS** DEG DEGREE (-S) DIA DIAMETER (-S) DN DWG EAT ENTERING AIR TEMPERATURE **ELECTRICAL CONTRACTOR** ELEV ELEVA (-TION, -TOR) **ENGR** ENGINEER EQ EXTERNAL STATIC PRESSURE ESP ETR **EXISTING TO REMAIN EVAP** EVAPORAT (-E, -ING, -ED, -OR, -ION) EWT ENTERING WATER TEMPERATURE EXP **EXPANSION** EXT EXTERIOR FREE AREA

NO NTS OC OD CFCI OFCI OFOI OR OZ PC PD PH PLBG	CONTRACTOR FURNISHED, CO
OC OD CFCI OFCI OFOI OR OZ PC PD PH PLBG	ON CENTER  OUTSIDE DI (-AMETER, -MENS  CONTRACTOR FURNISHED, CO  OWNER FURNISHED, CONTRAC  OWNER FURNISHED, OWNER I  OPEN RECEPTACLE  OUNCE (-S)  PLUMBING CONTRACTOR  PRESSURE DROP
OD  CFCI  OFCI  OFOI  OR  OZ  PC  PD  PH  PLBG	OUTSIDE DI (-AMETER, -MENS CONTRACTOR FURNISHED, CO OWNER FURNISHED, CONTRAC OWNER FURNISHED, OWNER I OPEN RECEPTACLE OUNCE (-S) PLUMBING CONTRACTOR PRESSURE DROP
CFCI OFCI OFOI OR OZ PC PD PH PLBG	CONTRACTOR FURNISHED, CO OWNER FURNISHED, CONTRAC OWNER FURNISHED, OWNER I OPEN RECEPTACLE OUNCE (-S) PLUMBING CONTRACTOR PRESSURE DROP
OFCI OFOI OR OZ PC PD PH PLBG	OWNER FURNISHED, CONTRACTOR  OWNER FURNISHED, OWNER IS  OPEN RECEPTACLE  OUNCE (-S)  PLUMBING CONTRACTOR  PRESSURE DROP
OFOI OR OZ PC PD PH PLBG	OWNER FURNISHED, OWNER I  OPEN RECEPTACLE  OUNCE (-S)  PLUMBING CONTRACTOR  PRESSURE DROP
OR OZ PC PD PH PLBG	OPEN RECEPTACLE  OUNCE (-S)  PLUMBING CONTRACTOR  PRESSURE DROP
PC PD PH PLBG	OUNCE (-S)  PLUMBING CONTRACTOR  PRESSURE DROP
PC PD PH PLBG	PLUMBING CONTRACTOR  PRESSURE DROP
PD PH PLBG	PRESSURE DROP
PH PLBG	
PLBG	PHASE [ELECTRICAL]
<del></del>	
<del></del>	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
<del></del>	PRESSURE REDUCING VALVE (
<del></del>	POUNDS PER SQUARE FOOT
<del></del>	POUNDS PER SQUARE INCH
<del></del>	PPSI GAUGE
<del></del>	
<del></del>	RELATIVE HUMIDITY [%]
<del></del>	RUNNING LOAD AMPS
	REVOLUTIONS PER MINUTE
	SMOKE DAMPER
	STATIC PRESSURE
SQ	SQUARE
SQ FT	SQUARE FEET <b>OR</b> FOOT
N) SQ IN	SQUARE INCH <b>OR</b> INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
ТҮР	TYPICAL
UNO	UNLESS NOTED OTHERWISE
	VOLT (-AGE, -S)
VAR	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
	VARIABLE FEQUENCY DRIVE
	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WPD	WATER PRESSURE DROP
<del></del>	WEIGHT
<del></del>	
<del></del>	WITHOUT
<del></del>	WITHOUT
<del></del>	PERCENT
ΔΡ	DIFFERENTIAL PRESSURE
ΔΤ	TEMPERATURE DIFFERENCE
	PPM PRS PRV PSF PSI PSIG RH RLA RPM SD SP SQ SQ SQ FT ON) SQ IN TAB TBD TE TEMP TSP TYP UNO V VAR VAV VEL VFD W WB WB WBT WPD W/O 9% AP

OUTSIDE DI (-AMETER, -MENSION)

CONTRACTOR FURNISHED, CONTRACTOR INSTALLED

OWNER FURNISHED, CONTRACTOR INSTALLED

OWNER FURNISHED, OWNER INSTALLED

CENTERLINE

M-001

PRESSURE REDUCING VALVE (STEAM, WATER, GAS)

<u></u>	TAGGED NOTE DESIGNATOR
$\triangle$	REVISION TRIANGLE
ROOM NAME RM #	ROOM TAG
TAG XXX-# NSTANCE XXXX	EQUIPMENT TAG
•	POINT OF CONNECTION / CONNECT TO EXISTING
<b>♦</b>	POINT OF DEMOLITION
	1

MM	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	TRANSFER AIR DIFFUSER W/ SOUND ATTENUATING BOOT
_	SIDEWALL DIFFUSER/GRILLE
	SIDEWALL DIFFUSER/GRILLE
TAG XXX AIRFLOW #,###	AIR DEVICE TAG (REGISTER, GRILLE, DIFFUSER,LOUVER)
##x##	RECTANGULAR DUCT
#ø	ROUND/SPIRAL DUCT
##/##	FLAT OVAL DUCT
SA	SUPPLY AIR DUCT
RA	RETURN AIR DUCT
EA	EXHAUST AIR DUCT
OA	OUTSIDE AIR DUCT
ТА	TRANSFER AIR DUCT
CAE	COMBUSTION AIR EXHAUST DUCT
CAI	COMBUSTION AIR INTAKE DUCT
SA	SA AIR DUCT TURNING UP
× SA	SA AIR DUCT TURNING DOWN
RA	RA AIR DUCT TURNING UP
RA	RA AIR DUCT TURNING DOWN
EA	EA AIR DUCT TURNING UP
EA	EA AIR DUCT TURNING DOWN
E(XXX)	EXISTING DUCT - (XXX) DENOTES SYSTEM
D(XXX)	DUCT TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
A(XXX)	DUCT TO BE ABANDONED IN PLACE - (XXX) DENOTES SYSTEM
ચ્ચુ	MITERED ELBOW WITH TURNING VANES
HHH	FLEXIBLE DUCT
T	THERMOSTAT
T	TEMPERATURE SENSOR
$\oplus$	HUMIDITY SENSOR
©	CARBON DIOXIDE SENSOR
10	TEMPERATURE & CARBON DIOXIDE SENSOR
VERT. HORIZ.	MANUAL BALANCING/VOLUME DAMPER
VERT. HORIZ.	MOTORIZED DAMPER
VERT. HORIZ.	FIRE DAMPER
VERT. HORIZ.	SMOKE DAMPER
VERT. HORIZ.	COMBINATION FIRE & SMOKE DAMPER

<u>— ү—</u>	PIPE TEE, CONNECTION ON TOP
<del></del>	PIPE TEE; CONNECTION ON BOTTOM
<del></del>	PIPE CAP
BFW	BOILER FEEDWATER
——CAI/E——	COMBUSTION AIR INTAKE/EXHAUST
—	CHILLED BEAM SUPPLY/RETURN
CD	CONDENSATE DRAIN
—CHWS/R—	CHILLED WATER SUPPLY/RETURN
—	CLEAN STEAM PIPING
—	CONDENSER WATER SUPPLY/RETURN
—	DUAL TEMP. WATER SUPPLY/RETURN
GS/R	GEOTHERMAL WATER SUPPLY/RETURN
——HPC——	HIGH PRESSURE STEAM CONDENSATE
—HPS(#)—	HIGH PRESSURE STEAM; (#) DENOTES PRESSURE
——HPS/R—	HEAT PUMP WATER SUPPLY/RETURN
——HRS/R—	HEAT RECOVERY SUPPLY/RETURN PIPING
—HWS/R—	HEATING WATER SUPPLY/RETURN
——LPC——	LOW PRESSURE STEAM CONDENSATE
—LPC ———————————————————————————————————	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
——MPC——	MEDIUM PRESSURE STEAM RETURN
	MEDIUM PRESSURE STEAM; (#) DENOTES PRESSURE
—MPS(#)—	STEAM CONDENSATE PUMPED DISCHARGE
——SPD——	STEAM VENT PIPING
—SVT—	
D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
—E(XXX)—	EXISTING PIPING - (XXX) DENOTES SYSTEM
—A(XXX)— —————————————————————————————————	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
	TWO-WAY CONTROL VALVE
——————————————————————————————————————	THREE-WAY CONTROL VALVE
<u>-</u>	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
<u></u> —₩—	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
<del></del>	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
- <del></del>	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
Fs	FLOW SWITCH
Ps	PRESSURE SWTICH
	TAMPER SWITCH
	THERMOMETER

PETE'S PLUG; TEMPERATURE/PRESSURE PORT

**MECHANICAL PIPING LEGEND** 

——O PIPE ELBOW TURNING UP

—— PIPE ELBOW TURNING DOWN

———— PIPE TEE; CONNECTION ON TOP

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REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES

HO

MECHANICAL LEGEND

AUGUST 28, 2020

**PROJECT** Fluvanna Co. 1/8" = 1'-0"

# MECHANICAL DEMOLITION NOTES

- A THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELED VERIFY EXACT REQUIREMENTS.
- B DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES. C ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND
- REPAIRED TO MAINTAIN RATING. D ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION
- E HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (UON) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN. F COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR
- DEMOLITION) WITH THE OWNER. G ALL OUTAGES SHALL BE SCHEDULED THROUGH THE UK CPMD PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE
- SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE. H ALL DUCTWORK, PIPING, CONDUIT, ETC. SHALL BE INSTALLED A MINIMUM OF 4" ABOVE THE TOP OF THE CEILING GRID PER UK STANDARDS.

# **MECHANICAL PHASING NOTES**

A THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

# MECHANICAL HAZARDOUS MATERIALS

- A THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
- B CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.
- D THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.

NIC

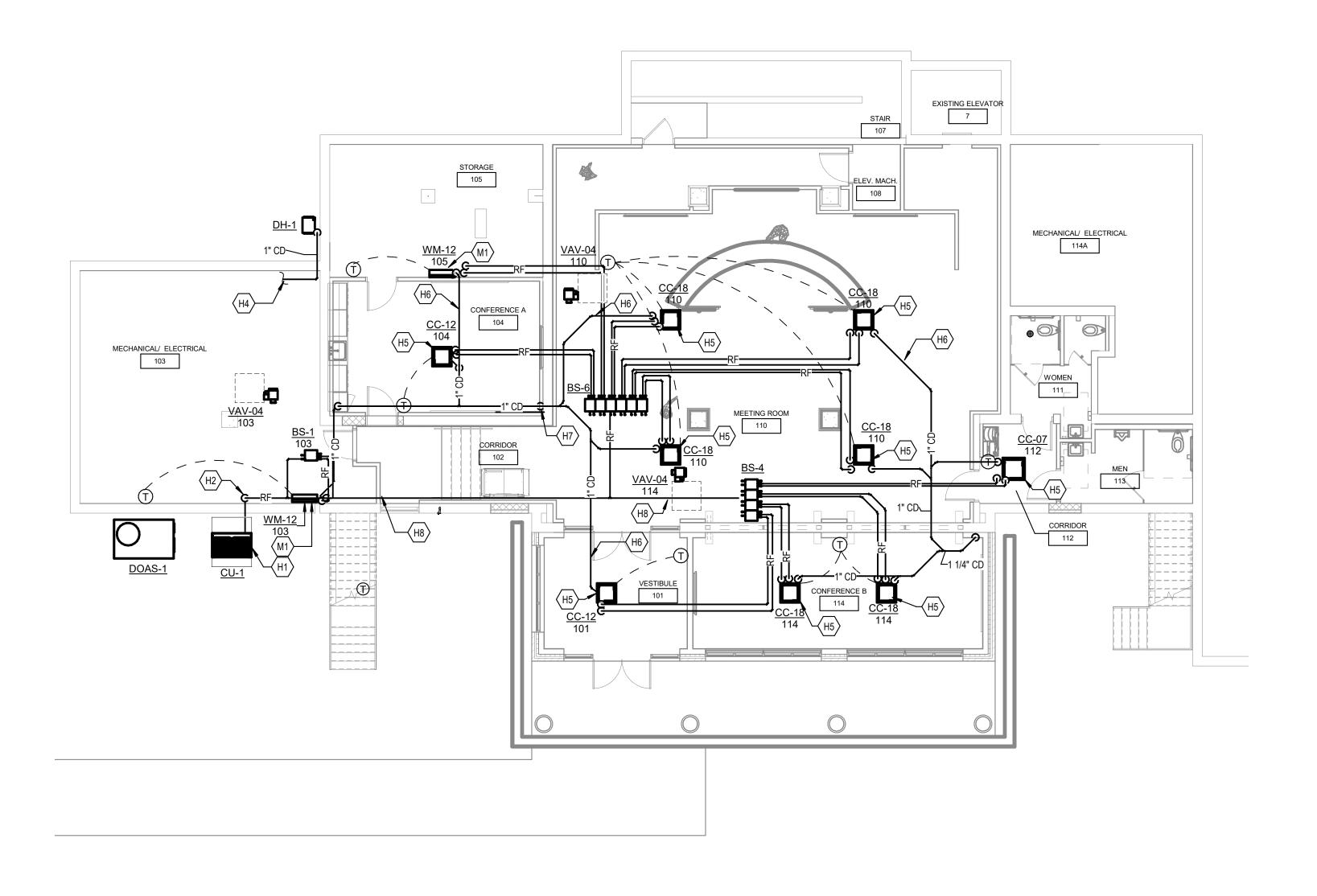
NOT IN CONTRACT

- E THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

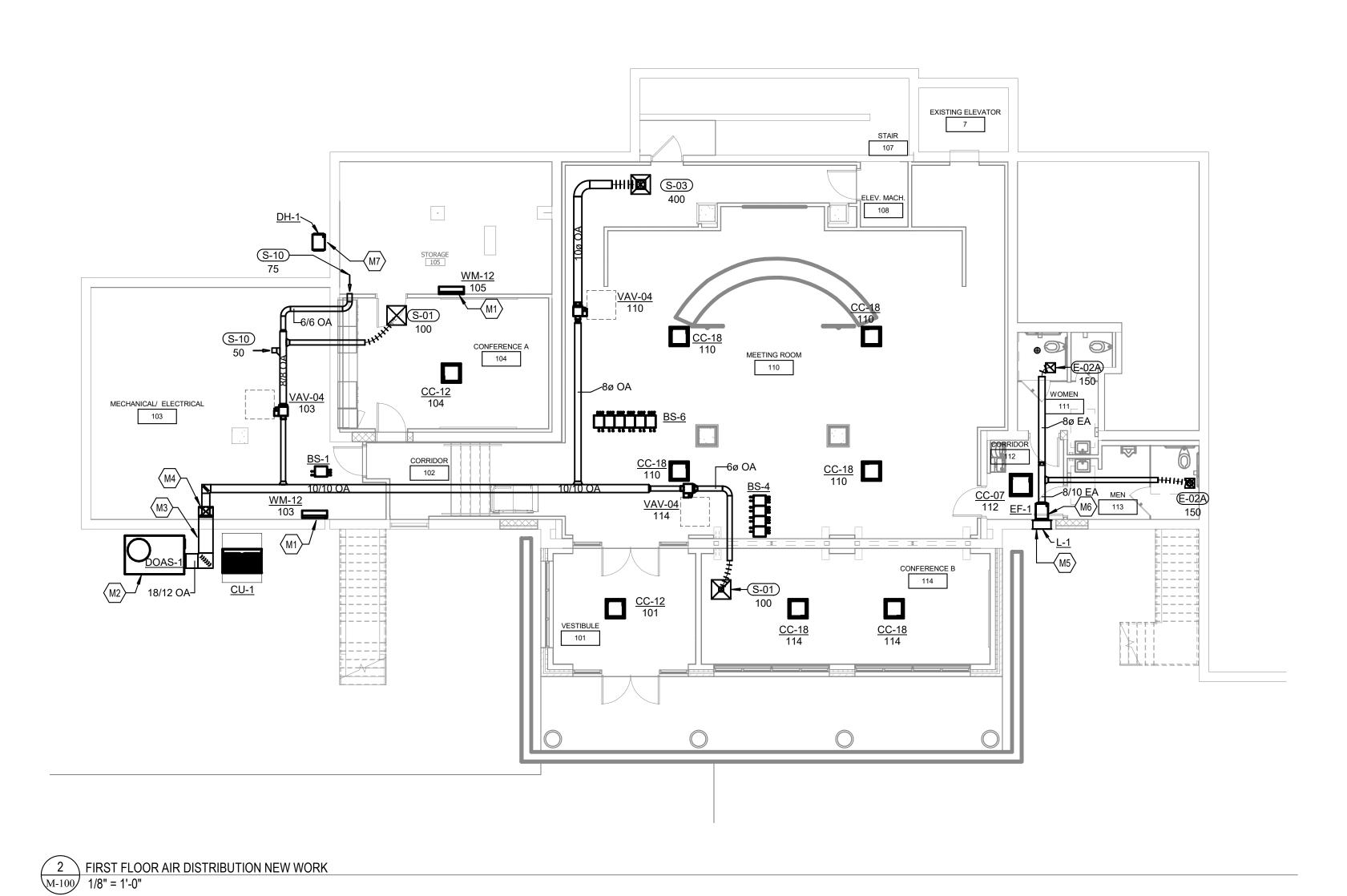
	Sheet List - Mechanical
SHEET #	SHEET NAME
M-100	MECHANICAL NEW WORK PLAN
M-200	MECHANICAL SCHEDULES, DETAILS, AND CONTROL

MECHANICAL LEGEND

APPLICABLE BUILDING CODES				
APPLICABLE BUILDING CODES	DOCUMENT	YEAR		
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009		
FIRE SPRINKLER CODE	NFPA 13	2013		
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2015		
INTERNATIONAL ENERGY CONSERVATION CODE (IECC) OR ASHRAE 90.1	STATE EDITION	2012 <u>OR</u> 20		
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2015		
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2015		
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2015		
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2015		
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2009		
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2017		
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2013		
UNIFORM STATEWIDE BUILDING CODE		2018		



1 FIRST FLOOR HYDRONICS NEW WORK 1/8" = 1'-0"



TAGGED NOTES

DRAWINGS.

- H1 MOUNT NEW VRF CONDENSING UNIT ON EXISTING CONCRETE PAD. EXPAND EXISTING CONCRETE PAD AS REQUIRED TO FIT NEW CONDENSING UNIT. PIPING TO RUN THROUGH EXISTING PENETRATION IN WALL, SEAL AIRTIGHT AROUND PIPING. MOUNT DISCONNECT ON WALL.
- H2 REFRIGERANT PIPING TO BE ROUTED UP WALL TO 10'-6" TO BE ABOVE NEW CEILING.
- H4 ROUTE 1" CONDENSATE PIPING THRU MECHANICAL ROOM WALL AND DRAIN TO FLOOR DRAIN. SEAL WALL PENETRATION AIR TIGHT.
- H5 MOUNT CASSETTE IN NEW CEILING. REFER TO VRF CASSETTE PIPING SCHEMATIC FOR DETAILS.
- H6 ROUTE CONDENSATE PIPING IN BETWEEN JOISTS AS HIGH AS POSSIBLE. H7 CONDENSATE PIPING TO CONNECT TO EXISTING PIPE. DROP IN
- H8 VRF MANUFACTURER TO SPECIFY PIPE SIZE. NOT ALL REFRIGERANT PIPES ARE SHOWN. REFER TO VRF MANUFACTURER'S INSTALL
- M1 MOUNT NEW WALL MOUNTED UNIT 8'-6" ABOVE FINISHED FLOOR. M2 NEW DOAS-1 UNIT TO BE MOUNTED ON EXISTING CONCRETE CURB.
- EXPAND CURB AS REQUIRED TO INSTALL UNIT. M3 PROVIDE EXTERIOR DUCT WRAP FOR DUCT BEFORE IT ENTERS THE BUILDING. REFER TO SPECIFICATIONS.
- M4 18"X12" OUTSIDE AIR DUCTWORK TO BE ROUTED UP WALL AND TRANSITION TO 10"X10" DUCTWORK.
- M5 NEW LOUVER TO BE INSTALLED IN EXTERIOR WALL. REFER TO
- LOUVER SCHEDULE. M6 EXHAUST FAN TO BE MOUNTED TIGHT TO LOUVER.
- M7 PROVIDE NEW DEHUMIDIFIER IN CRAWL SPACE. MOUNT DEHUMIDIFIER TO STRUCTURE. PIPE CONDENSATE OUTSIDE. REFER TO DEHUMIDIFIER SCHEDULE.

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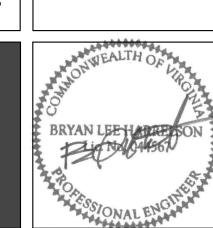
R,G,D RUNOUT SCHEDULE				
	DUCT BRANCH			
MARK	SIZE			
E-02A	8"Ø			
S-01	6"Ø			

**VAV BOX RUNOUT SCHEDULE** 

MARK DUCT INLET SIZE 6"Ø

REVISIONS				
01	MM-DD-YR	NAME	DESCRIPTION OF CHANGES	

ROHRBAUG

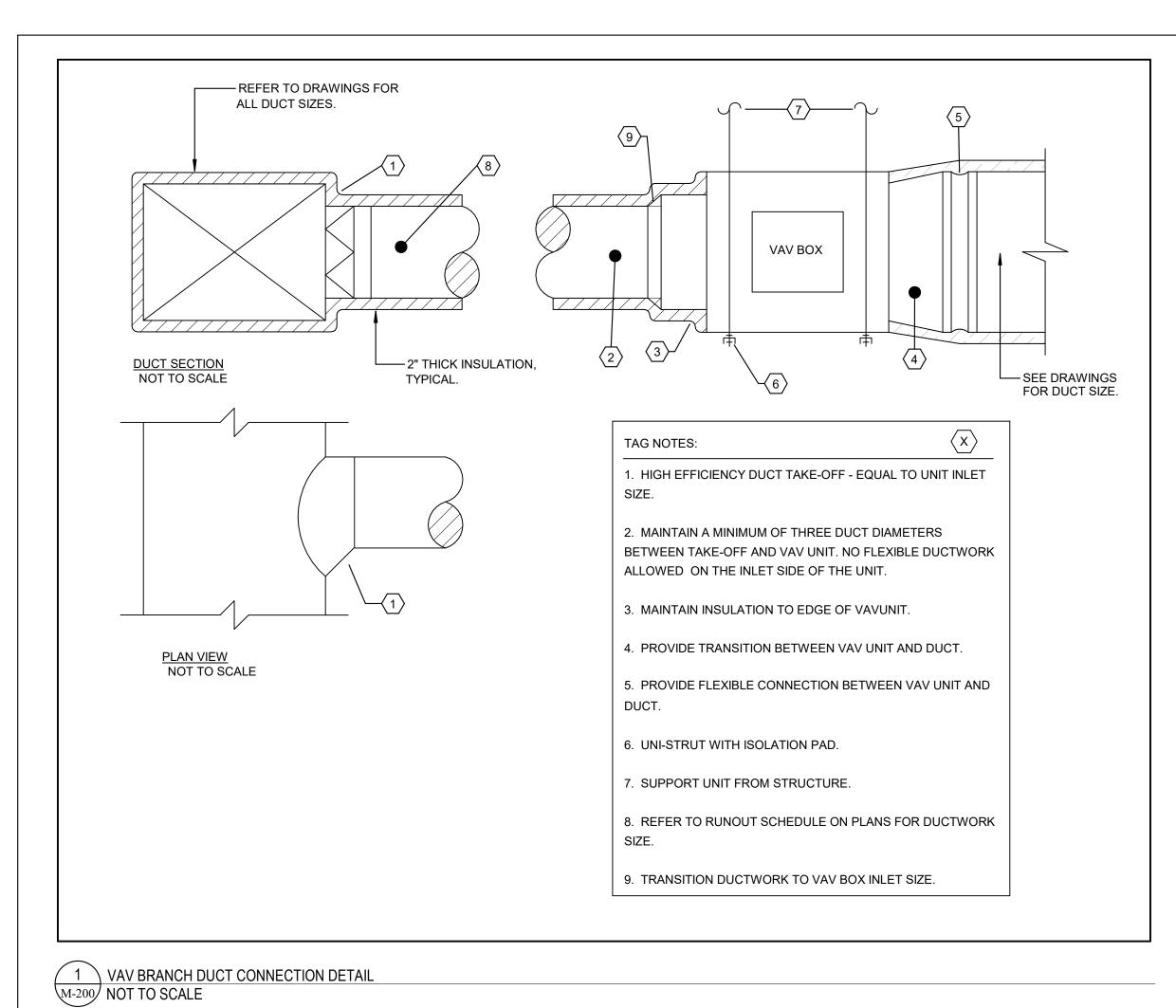


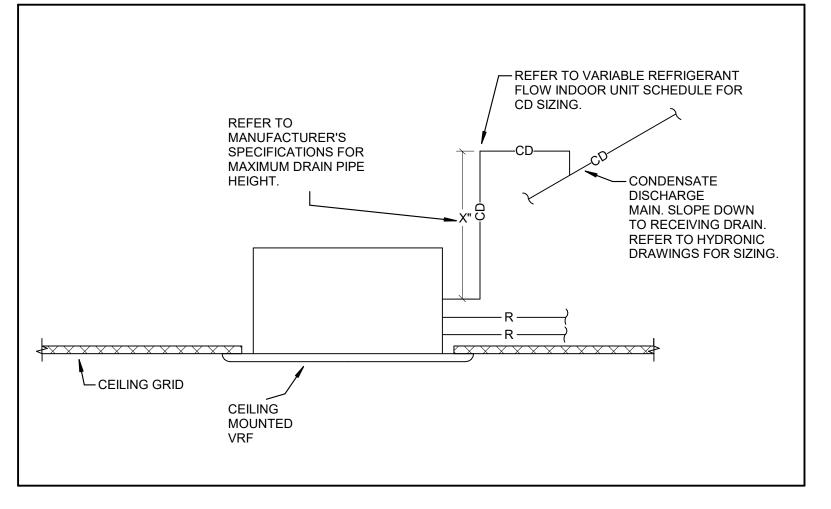
**PROJECT** 

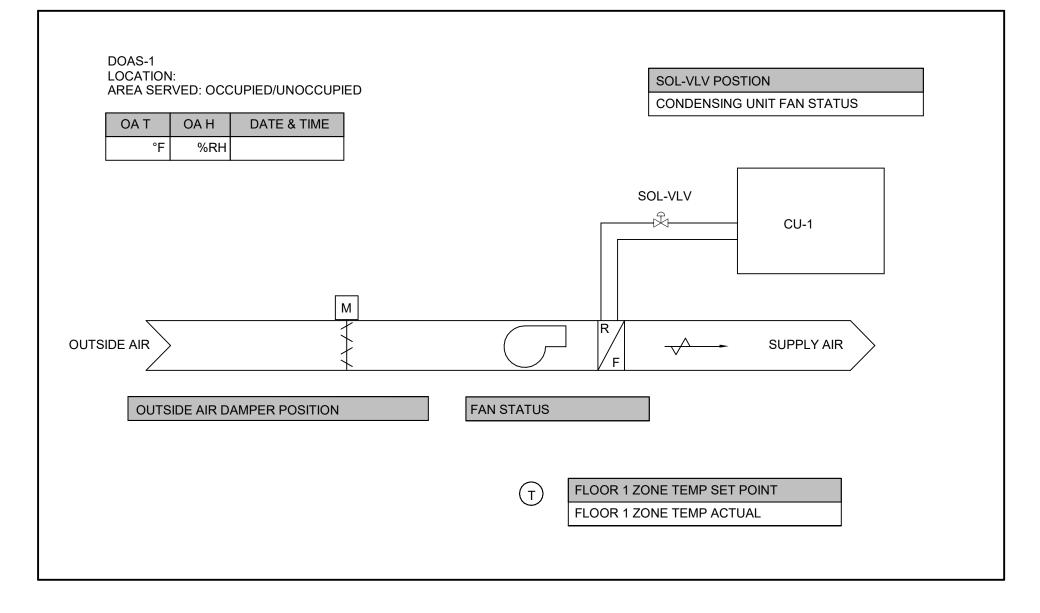
Fluvanna Co.

MECHANICAL NEW WORK PLAN

1/8" = 1'-0"

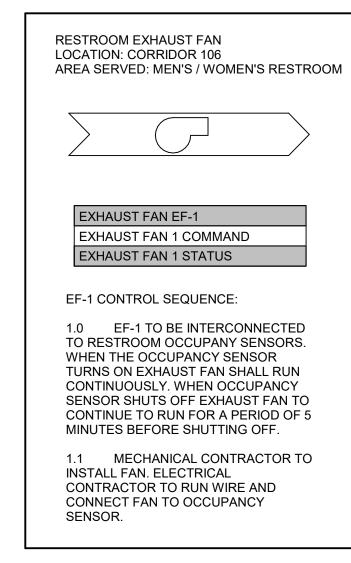






### 1. <u>DOAS-1</u>

1.1. These units shall be provided with factory controls. The DOAS-1 unit shall run when based on occupancy, schedule shall be fully adjustable. The DOAS-1 unit shall provide room neutral outside air when the building is occupied. The unit will shall activate electric auxillary heating when outside air temperature is below 40 deg F.



											DOAS L	JNIT SCI	HEDULE											
						DHASIC	AL DATA							SUPPLY FAN							ELECTRICAL			
						PHISIC	AL DATA							SUPPLIFAIN							ELECTRICAL		1	
	MANUFACTUR								TOTAL SA		FAN MOTOR					RATED H.P.	B.H.P. (PER							
MARK	ER	MODEL#	SERVICE	LOCATION	WIDTH (IN.)	LENGTH (IN.)	HEIGHT (IN.)	WEIGHT (LBS)	CFM	MIN. OA CFM	TYPE	# OF FANS	FAN RPM	E.S.P. (" WC)	T.S.P. (" WC)	(PER FAN)	FAN)	VOLT.	PH.	FLA	MCA	MOCP	VFD	REMARKS
DOAS-1	DAIKIN	DVSV05	MEETING	EXTERIOR	71	67	41	1132	700	700	ECM DIRECT	1	1750	2.00	4	2.0	1.3	208 V	3	53 A	66 A	70	No	ALL
			ROOM																			<u>'</u>	1	

2 VRF CASSETTE PIPING SCHEMATIC NOT TO SCALE

						DO	DAS UNI	T SCHE	DULE - D	X COIL						
									DX COIL							
	COOLING PERFORMANCE HEAT										EATING PERFOR	RMANCE				
		FIN SPACING	FACE AND		SENSIBLE					FACE VELOCITY					FACE VELOCITY	
MARK	NO. OF ROWS	(FINS/IN)	BYPASS	TOTAL (MBH)	(MBH)	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	(FPM)	APD (IN. WG.)	TOTAL (MBH)	EAT (°F)	LAT (°F)	(FPM)	APD (IN. WG.)
DOAS-1	3	14	No	49609.0	31140.0	95	75	55	54	115	0.10	7595.0	70	80	115	0.10

DO	OAS UN	IT SCHE	ULE - A	UXILLAF	RY ELEC	TRIC HE	ATER S	CHEDU	LE
		M HEATING CAPACITY	M FAT	M LAT			ELECTRICAL		
MARK	CFM	ELECTRIC	ELECTRIC	ELECTRIC	INPUT (KW)	VOLTAGE	PHASE	FLA	REMARKS
DOAS-1	700	61434.0	15	75	18 W	208 V	3	50 A	ALL

# REMARKS:

- 1. COOLING PERFORMANCE IS FOR 95 DEG. F. OUTDOOR, 70 DEG. F DB / 61 DEG. F WB INDOOR.
- 2. HEATING PERFORMANCE IS FOR 6 DEG. F OUTDOOR, 68 DEG. F INDOOR. 3. CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
- 4. PROVIDE GFI OUTLET. 5. PROVIDE SINGLE POINT CONNECTION.
- 6. PROVIDE INTEGRAL DISCONNECT. FIELD-INSTALLED DISCONNECTS ARE ACCEPTABLE, AND SHALL BE PROVIDED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.

				VARIABLI	E REFRIGERANT	FLOW	INDOOR	UNIT SC	HEDUL	E							
			MINIMUM NOMINAL COOLING		MINIMUM NOMINAL HEATING	AIRFLOW				DIMENSIONS (IN	)			ELECT	RICAL		
MARK	MANUFACTURER MOD	EL# TYPE	(MBH)	SENSIBLE COOLING (MBH)	(MBH)	(CFM)	SOUND (dB)	CD PIPE SIZE	LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	VOLTAGE	PHASE	MCA	MOCP	REMARKS
CC-07	DAIKIN FXZQ0	TAVJU CONCEALED CEILIN CASSETTE UNIT	G 7.5	5.5	8.5	300	30	3/4	24	24	11	34	208 V	1	1 A	15	ALL
CC-12	DAIKIN FXZQ1:	CONCEALED CEILIN CASSETTE UNIT	G 12.0	7.8	13.5	350	30	3/4	24	24	11	36	208 V	1	1 A	15	ALL
CC-18	DAIKIN FXZQ1	BTAVJU CONCEALED CEILIN CASSETTE UNIT	G 18.0	13.0	20.0	500	32	3/4	24	24	11	41	208 V	1	1 A	15	ALL
WM-12	DAIKIN FXAQ1	2PVJU WALL MOUNTED UNIT	12.0	8.9	13.5	290	38	1	31	12	10	26	208 V	1	1 A	15	ALL

- 1. COOLING PERFORMANCE IS FOR 95 DEG. F. OUTDOOR, 70 DEG. F DB / 61 DEG. F WB INDOOR.
- HEATING PERFORMANCE IS FOR 6 DEG. F OUTDOOR, 68 DEG. F INDOOR. 3. CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
- 4. TEMPERATURE SENSOR FOR UNIT TO BE MOUNTED IN THE SPACE. 5. PROVIDE SINGLE POINT CONNECTION.
- 6. PROVIDE INTEGRAL DISCONNECT. FIELD-INSTALLED DISCONNECTS ARE ACCEPTABLE, AND SHALL BE PROVIDED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR. 7. PROVIDE CONDENSATE PUMP.

			VA	ARIABLE F	REFRIGERA	NT FL	OWO.	UTDO	OR UN	NIT SCHE	DULE				VARIABLE REFRIGERANT FLOW OUTDOOR UNIT SCHEDULE  TOTAL COOLING MINIMUM NOMINAL SOUND NOMINAL SIZE (IN) ELECTRICAL														
				TOTAL COOLING	MINIMUM NOMINAL	SOUND	NON	/INAL SIZE	(IN)			El	LECTRIC	AL															
MARK	MANUFACTURER	MODEL#	TYPE	CAPACITY (MBH)	HEATING (MBH)	(dB)	LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	VOLTAGE	PHASE	MCA	MOCP	MCA	MOCP	REMARKS												
CU-1	DAIKIN	REYQ192TTJU	VRV-IV-HEAT RECOVERY	153.0	106.0	65	31	86	67	1210	208 V	3	43 A	50	31 A	35	ALL												

- 1. COOLING PERFORMANCE IS FOR 95 DEG. F. OUTDOOR, 70 DEG. F DB / 61 DEG. F WB INDOOR.
- . HEATING PERFORMANCE IS FOR 6 DEG. F OUTDOOR, 68 DEG. F INDOOR. 3. CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
- 4. OUTDOOR UNIT HEATING CAPACITY IS BASED ON FULLY HEATING INDOOR UNITS. OUTDOOR UNIT COOLING CAPACITY IS BASED ON FULLY COOLING INDOOR UNITS.
- PROVIDE INTEGRAL WALL MOUNTED DISCONNECT. 7. PROVIDE LOW AMBIENT HEATING ACCESSORY.

			REGISTER	S, GRILL	ES, AND	DIFFUS	SERS					
MARK	MANUFACTURER	MODEL#	TYPE	GRILLE SIZE	PANEL SIZE	DUCT INLET SIZE	DUCT BRANCH SIZE	MAX CFM	P.D.	NOISE CRITERIA	THROW PATTERN	REMARKS
E-02A	TITUS	TDC-AA	ALUMINUM LOUVERED FACE DIFFUSER	10"X10"	12"X12"	8"Ø	8"Ø	225	0.05	25	-	ALL
S-01	TITUS	TDC-AA	ALUMINUM LOUVERED FACE DIFFUSER	22"X22"	24"X24"	6"Ø	6"Ø	100	0.05	25	4-WAY	ALL
S-03	TITUS	TDC-AA	ALUMINUM LOUVERED FACE DIFFUSER	22"X22"	24"X24"	10"Ø	10"Ø	400	0.05	25	4-WAY	ALL
S-10	TITUS	350FL	ALUMINUM SIDEWALL GRILLE	6"X6"	8"X8"	6"X6"	6"X6"	75	0.09	25	SINGLE DEFLECTION	ALL

# REMARKS:

1. ARCHITECT TO SELECT COLOR. PROVIDE FULL COLOR OPTIONS. 2. REFER TO ARCHITECTURAL PLANS FOR MOUNTING TYPE (LAY-IN, GYP, ETC.)

								VAV B	OX SCHEDULE						
				DIM	ENSIONS (	(IN)	DUCT CO	NNECTIONS	INLET STATIC PRESS. @ MAX CFM ("	MAX DISCHARGE	MAX.	MIN.	PRESSURE INDEPENDENT	LEAKAGE RATE @	
MARI	K MANUFACTURER	MODEL#	BOX TYPE	LENGTH	WIDTH	HEIGHT	INLET SIZE	OUTLET SIZE	WG)	NC	CFM	CFM	CONTROLS	1.0"	REMARKS
VAV-0	04 NAILOR	3000 SERIES	DOUBLE WALL	21	10	10	6"Ø	10"X10"	1.00	25	400	0	Yes	3	ALL

1. BOX SHALL BE DOUBLE WALL WITH 1" THICK INSULATION.

	VARIAB	LE REF	RIGE	RAN <sup>-</sup>	T CON	NTROLLI	ER UNIT	SCHI	EDU	LE	
			DIM	IENSIONS	(IN.)			ELECTRICA	4L		
MARK	MANUFACTURER	MODEL#	LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	VOLTAGE	PHASE	MCA	MOCP	REMARKS
BS-1	DAIKIN	BSQ36TVJ	15	12	8	27	208 V	1	1 A	15	ALL
BS-4	DAIKIN	BS4Q54TVJ	19	15	12	49	208 V	1	1 A	15	ALL
BS-6	DAIKIN	BS6O54TV.I	19	23	12	68	208 V	1	1 Δ	15	ΔΙΙ

2. CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED. 3. PROVIDE INTEGRAL DISCONNECT.

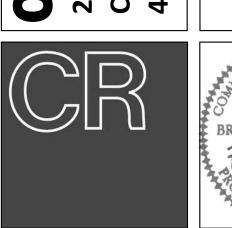
					EXHA	UST FA	N SCHE	DULE						
					AIRFLOW					El	LECTRICAL DAT	Α		
MARK	MANUFACTURER	MODEL#	SERVICE	TYPE	(CFM)	E.S.P.	DRIVE	RPM	FAN HP	VOLTAGE	PHASE	HZ	SONES	REMARKS
EF-1	GREENHECK	CSP-A390	RESTROOMS	SQUARE INLINE CENTRIFUGAL FAN	300	0.59	DIRECT	1350	0	208 V	1	60	4.5	ALL

# REMARKS:

1. PROVIDE SINGLE POINT CONNECTION. 2. FAN TO BE MOUNTED UP AGAINST LOUVER. 3. REFER TO EXHAUST FAN CONTROLS FOR CONTROLS.

LOUVER SCHEDULE  VELOCITY  DRAINABLE														
MARK	MANUFACTURER	MODEL#	SERVICE	DEPTH (IN)	CFM	WIDTH (IN)	HEIGHT (IN)	FREE AREA	VELOCITY (FPM)	APD (IN. WG.)	BIRD SCREEN	DRAINABLE BLADE	REMARKS	
L-1	GREENHECK	EDK-402	EF-1	4	300	16	16	0.6	460	0.03	Yes	Yes	ALL	

1. ARCHITECT TO SELECT COLOR. PROVIDE FULL COLOR PALETTE. 2. PROVIDE GRAVITY BACKDRAFT DAMPER.



ROHRB/ EET, SUITE 200

**PROJECT** MECHANICAL SCHEDULES, DETAILS, AND CONTROLS Fluvanna Co. 1/8" = 1'-0"

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REVISIONS

01 MM-DD-YR NAME DESCRIPTION OF CHANGES

### PLUMBING GENERAL NOTES

- A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
- B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT
- REQUIREMENT SHALL APPLY. C WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- D ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
- E COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS. F PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- G OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF KENTUCKY, ETC.)
- H CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING. I IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. CONTRACTOR
- SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS. J WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING
- CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE. K ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE
- APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS. L ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE
- SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES. M ALL PIPING IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS
- N IN ACCORDANCE WITH K.R.S. ALL PLUMBING WORK SHALL BE CONSTRUCTED IN COMPLIANCE WITH PLANS APPROVED BY AND BEARING THE APPROVAL STAMP OF THE KENTUCKY DIVISION OF PLUMBING AND/OR THE DIVISION OF WATER. THE
- O LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO
- MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS. P ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.

CONTRACTOR SHALL NOT BEGIN WORK UNTIL HE HAS RECEIVED SUCH APPROVED

- Q THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES OR OTHER COSTS THAT ANY UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (GAS, SEWER, WATER, ETC.). R INSTALL ALL PIPING AND EQUIPMENT IN STRICT ACCORDANCE WITH
- MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.
- S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION. T THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.
- U WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS. V DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN,
- KITCHEN EXHAUSTS. W ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR

AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR

- INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER. X DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EOUIPMENT, ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE
- RESPONSIBILITY OF THE PURCHASER. Y VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE
- CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING. Z ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY
- AA WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.
- AB THE DOCUMENTS COMPLY WITH 2006 IMC, 2007 KBC, AND 2009 IECC. AC THE DOCUMENTS COMPLY WITH 2006 IMC, 2007 KBC, AND ASHRAE 90.1-2007.
- AD WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

# PLUMBING DEMOLITION NOTES

- A THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELED VERIFY EXACT REQUIREMENTS.
- B DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.
- C ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MAINTAIN RATING.
- D ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
- E HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (UON) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- F COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER. G ALL OUTAGES SHALL BE SCHEDULED THROUGH THE UK CPMD PROJECT
- SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE. H ALL DUCTWORK, PIPING, CONDUIT, ETC. SHALL BE INSTALLED A MINIMUM OF 4" ABOVE THE TOP OF THE CEILING GRID PER UK STANDARDS.

REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE

PLUMBING PHASING NOTES

DOCUMENTS.

A THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING

SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO

COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING

SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN

GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES,

REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S

RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS

PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION,

PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID

WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT

DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW

SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR

STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED

# PLUMBING HAZARDOUS MATERIALS NOTES

ASCERTAINED TO BE NON-HAZARDOUS.

- A THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE
- B CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.
- D THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
- E THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

	ATIONS
AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
АНЈ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
ВНР	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
СО	CARBON MONOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DIA	DOWN
DWG	DRAWING
טייט	DIAWING
EC	ELECTRICAL CONTRACTOR
EC ELEV	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
	•
EXP	EXPANSION

BBREVIA	TIONS (CONTINUED)	ABBREVIA	TIONS (CONTINUED)
		NO	NORMALLY OPEN <b>OR</b> NUMBER
FL	FLOOR	NTS	NOT TO SCALE
FLA	FULL LOAD AMPS	OC	ON CENTER
FOB	FLAT ON BOTTOM	OD	OUTSIDE DI (-AMETER, -MENSIC
FOT	FLAT ON TOP	CFCI	CONTRACTOR FURNISHED, CON
FPC	FIRE PROTECTION CONTRACTOR	OFCI	OWNER FURNISHED, CONTRACT
FPM	FEET PER MINUTE	OFOI	OWNER FURNISHED, OWNER IN
FPS	FEET PER SECOND	OR	OPEN RECEPTACLE
FT	FEET <b>OR</b> FOOT	OZ	OUNCE (-S)
FUT	FUTURE	PC	PLUMBING CONTRACTOR
FV	FACE VELOCITY	PD	PRESSURE DROP
GA	GAGE/GAUGE	PH	PHASE [ELECTRICAL]
GAL	GALLON (-S)	PLBG	PLUMBING
GC	GENERAL CONTRACTOR	PPM	PARTS PER MILLION
GPD	GALLONS PER DAY	PRS	PRESSURE REDUCING STATION
GPH	GALLONS PER HOUR	PRV	PRESSURE REDUCING VALVE (ST
GPM	GALLONS PER MINUTE	PSF	POUNDS PER SQUARE FOOT
GR	GRAINS	PSI	POUNDS PER SQUARE INCH
Н	HUMIDITY	PSIG	PPSI GAUGE
HD	HEAD	RLA	RUNNING LOAD AMPS
HG	MERCURY	RPM	REVOLUTIONS PER MINUTE
HORIZ	HORIZONTAL	SQ	SQUARE
HP	H (-ORSEPOWER, -EAT PUMP)	SQ FT	SQUARE FEET <b>OR</b> FOOT
HR	HOUR (-S)	SQ IN	SQUARE INCH <b>OR</b> INCHES
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING	TAB	TESTING AND BALANCING
Hz	HERTZ	TBD	TO BE DETERMINED
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)	TE	TOP ELEVATION
IN	INCH (-ES)	TEMP	TEMPERATURE
INSUL	INSULAT (-ED, -ION)	TPA	TRAP PRIMER ADAPTER
INT	INTER (-IOR, -ERVAL)	TSP	TOTAL STATIC PRESSURE
IPS	IRON PIPE SIZE	TYP	TYPICAL
kW	KILOWATT	UNO	UNLESS NOTED OTHERWISE
kWh	KILOWATT HOUR	V	VOLT (-AGE, -S)
		VAR	VARI (-ABLE, -IES)
LBS	POUNDS	VAV	VARIABLE AIR VOLUME
LF	LINEAR FEET/FOOT	VEL	VELOCITY
LRA	LOCKED ROTOR AMPS	VFD	VARIABLE FEQUENCY DRIVE
LWT	LEAVING WATER TEMPERATURE	W	WATT (-AGE, -S)
MAX	MAXIMUM	WB	WET BULB
MBH	BTU PER HOUR [THOUSANDS]	WBT	WET BULB TEMPERATURE
MCA	MINIMUM CIRCUIT AMPS	WPD	WATER PRESSURE DROP
MFG	MANUFACTURER	WT	WEIGHT
MIN	MIN (-IMUM, -UTE)		WITH
MISC	MISCELLANEOUS		WITHOUT
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]		PERCENT
MTG	MOUNTING	ΔΡ	DIFFERENTIAL PRESSURE
N/A	NOT APPLICABLE	<u></u> ΔΤ	TEMPERATURE DIFFERENCE
. 4/1	NOISE CRITERIA <b>OR</b> NORMALLY CLOSED	<u>—————————————————————————————————————</u>	CENTERLINE
NC	HOTOL CHILLIAN ON HONINALLI CLOSED	<b>*</b>	CEITIEINE
NC NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU		

	OC	ON CENTER
<del></del>	OD	OUTSIDE DI (-AMETER, -MENSION)
	CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
	OFOI	OWNER FURNISHED, OWNER INSTALLED
	OR	OPEN RECEPTACLE
	OZ	OUNCE (-S)
	PC	PLUMBING CONTRACTOR
	PD	PRESSURE DROP
	PH	PHASE [ELECTRICAL]
	PLBG	PLUMBING
	PPM	PARTS PER MILLION
	PRS	PRESSURE REDUCING STATION
	PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
	PSF	POUNDS PER SQUARE FOOT
	PSI	POUNDS PER SQUARE INCH
	PSIG	PPSI GAUGE
	RLA	RUNNING LOAD AMPS
	RPM	REVOLUTIONS PER MINUTE
	SQ	SQUARE
	SQ FT	SQUARE FEET <b>OR</b> FOOT
	SQ IN	SQUARE INCH OR INCHES
	TAB	TESTING AND BALANCING
	TBD	TO BE DETERMINED
	TE	TOP ELEVATION
	TEMP	TEMPERATURE
	TPA	TRAP PRIMER ADAPTER
	TSP	TOTAL STATIC PRESSURE
	TYP	TYPICAL
	UNO	UNLESS NOTED OTHERWISE
	V	VOLT (-AGE, -S)
	VAR	VARI (-ABLE, -IES)
	VAV	VARIABLE AIR VOLUME
	VEL	VELOCITY
	VFD	VARIABLE FEQUENCY DRIVE
	W	WATT (-AGE, -S)
	WB	WET BULB
	WBT	WET BULB TEMPERATURE
	WPD	WATER PRESSURE DROP
	WT	WEIGHT
	W/	WITH
	W/ W/O	WITH WITHOUT
	W/O	WITHOUT
	W/O %	WITHOUT PERCENT
	W/O % ΔP	WITHOUT  PERCENT  DIFFERENTIAL PRESSURE
	W/O % ΔP ΔT	WITHOUT  PERCENT  DIFFERENTIAL PRESSURE  TEMPERATURE DIFFERENCE
	W/O % ΔP ΔT	WITHOUT  PERCENT  DIFFERENTIAL PRESSURE  TEMPERATURE DIFFERENCE
	W/O % ΔP ΔT	WITHOUT  PERCENT  DIFFERENTIAL PRESSURE  TEMPERATURE DIFFERENCE

	PLUMBING FIXTURE SCHEDI	ULE					
TAG	DESCRIPTION	cw	HW	VENT	WASTE	VOLTAGE	EXTERNAL CHECK VALVE
P-1	LAVATORY - WALL HUNG W/ SINGLE LEVER FAUCET - ADA COMPLIANT: VITREOUS CHINA, 20"X18" WALL HUNG LAVATORY WITH 4" FAUCET CENTERS, CONCEALED ARMS AND 4" HIGH BACKSPLASH. PROVIDE WITH A 0.5 GPM SINGLE LEVER FAUCET, CHROME PLATED 3/8" SUPPLIES WITH STOPS, GRID DRAIN, A KENTUCKY CODE P-TRAP, TAILPIECE AND ESCUTCHEONS. MOUNT LAVATORY AT A HEIGHT LEAVING A CLEARANCE OF AT LEAST 29" FROM THE FLOOR TO THE APRON AND THE RIM AT A MAXIMUM OF 34" AFF. PROVIDE ON THE EXPOSED WASTE PIPE AND WATER SUPPLY LINES A TRAP-WRAP INSULATION KIT WITH A VINYL AND PLASTIC COVERING.	1/2"	1/2"	2"	2"	Yes	Yes
P-2A	URINAL - ADA COMPLIANT : VITREOUS CHINA SIPHON JET URINAL WITH 3/4' TOP SPUD INLET, 2" I.P.S. OUTLET AND 1.0 GPF MANUAL FLUSH VALVE. MOUNT WITH LIP OF URINAL AT 16" ABOVE FINISHED FLOOR. CONTROLS SHALL BE A MAXIMUM OF 39" ABOVE FINISHED FLOOR. PROVIDE FLOOR MOUNTED WALL CARRIER.	3/4"	-	2"	2"	Yes	Yes
P-3A	WATER CLOSET - FLOOR MOUNTED - MANUAL FLUSH VALVE - ADA COMPLIANT : VITREOUS CHINA, 18" HIGH ELONGATED BOWL, SIPHON JET, 11/2" TOP SPUD INLET, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES. PROVIDE MANUAL 1.6 GPF FLUSH VALVE WITH HANDLE AT A MAXIMUM OF 31" AFF.	1-1/2"	-	2"	4"	Yes	Yes
P-3B	WATER CLOSET - FLOOR MOUNTED - MANUAL FLUSH VALVE: VITREOUS CHINA, 15" HIGH ELONGATED BOWL, SIPHON JET, 11/2" TOP SPUD INLET, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES. PROVIDE WITH MANUAL 1.6 GPF FLUSH VALVE. VITREOUS CHINA, 15" HIGH ELONGATED BOWL, SIPHON JET, 11/2" TOP SPUD INLET, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES. PROVIDE WITH MANUAL 1.6 GPF FLUSH VALVE. VITREOUS CHINA, 15" HIGH ELONGATED BOWL, SIPHON JET, 11/2" TOP SPUD INLET, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES. PROVIDE WITH MANUAL 1.6 GPF FLUSH VALVE.	1-1/2"	-	2"	4"	Yes	Yes
P-4	SINGLE COMPARTMENT SINK: ELKAY LRAD191960 SINGLE COMPARTMENT STAINLESS SINK. 19-1/2" x 19" O.D., 14"X18" I.D., 6" DEEP, 18 GAUGE, WITH CHICAGO FAUCET 786-E3ABCP GOOSENECK SWING SPOUT FAUCET WITH 4" WRIST BLADE CONTROL HANDLES, REAR CENTERED CRUMB CUP STRAINER DRAIN, CHROME PLATED 3/8" ANGLE SUPPLIES WITH STOPS, P-TRAP, TAILPIECE AND ESCUTCHEONS.	1/2"	1/2"	2"	2"	Yes	Yes
P-5	ELECTRIC WATER COOLER – BI LEVEL – ADA COMPLIANT: OASIS PG8EBFSL BI-LEVEL BARRIER FREE WATER COOLER WITH SINGLE COMPRESSOR, WATER SUPPLY, DRAIN AND ELECTRICAL CONNECTION. 8.0 GPH OF 50°F WATER AT 90°F AMBIENT AND 80°F INLET WATER, 18.8 GAUGE STAINLESS STEEL BASIN, 1/5 HP COMPRESSOR115V/1PH, SURFACE MOUNTED TO THE WALL WITH CHILLER BELOW BOWL AND SIDE AND FRONT PUSH BAR OPERATORS. PROVIDE WITH VERSA FILTER WATER FILTER. MOUNT UNIT SO THE BOTTOM OF THE LOWER COOLER IS AT 9" MINIMUM AFF WITH A CLEARANCE OF 27" MINIMUM FROM THE BOTTOM OF THE APRON OF THE BOWL TO THE FINISHED FLOOR. THE DIMENSION TO THE CENTERLINE OF THE LOWER COOLER BUBBLER SHALL BE 35". PROVIDE WITH STAINLESS STEEL CANE TOUCH APRON ATTACHED TO THE HI COOLER.	1/2"	-	2"	2"	Yes	Yes

ENEKAL	SYMBOLS
(#)	TAGGED NOTE DESIGNATOR
$\triangle$	REVISION TRIANGLE
ROOM NAME	ROOM TAG
TAG XXX-# TANCE XXXX	EQUIPMENT TAG
XXX ##	DOMESTIC WATER RISER TAG
XXX ##	SANITARY, WASTE, & VENT RISER TAG
XXX ##	FIRE SUPPRESSION RISER TAG
•	POINT OF CONNECTION / CONNECT TO EXISTING
<b>♦</b>	POINT OF DEMOLITION
-D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
-E(XXX)	EXISTING PIPING - (XXX) DENOTES SYSTEM
	EXISTING PIPING - (XXX) DENOTES SYSTEM  ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
-A(XXX)	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM    BOL LEGEND
ALVE SYN	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM  BOL LEGEND  TWO-WAY CONTROL VALVE
ALVE SYN	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM  BOL LEGEND  TWO-WAY CONTROL VALVE  THREE-WAY CONTROL VALVE
ALVE SYN	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM  ABOL LEGEND  TWO-WAY CONTROL VALVE  THREE-WAY CONTROL VALVE  AUTOMATIC AIR VENT (AAV)
ALVE SYN	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM  BOL LEGEND  TWO-WAY CONTROL VALVE  THREE-WAY CONTROL VALVE  AUTOMATIC AIR VENT (AAV)  MANUAL AIR VENT (MAV)
ALVE SYN	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM  BOL LEGEND  TWO-WAY CONTROL VALVE  THREE-WAY CONTROL VALVE  AUTOMATIC AIR VENT (AAV)  MANUAL AIR VENT (MAV)  MANUAL BALANCING VALVE (BV)

GLOBE VALVE

CHECK VALVE

OS&Y (GATE) VALVE

─────── | MANUAL ISOLATION VALVE

AUTO-FLOW CONTROL VALVE

DOUBLE CHECK VALVE ASSEMBLY

PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)

<u> </u>	PIPE ELBOW TURNING UP
<del></del> -	PIPE ELBOW TURNING DOWN
<u> </u>	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
3	PIPE CAP
AVT	ACID VENT
——AW——	ACID WASTE
——CA——	COMPRESSED AIR
——CAI/E——	COMBUSTION AIR INTAKE/EXHAUST
—CBS/R—	CHILLED BEAM SUPPLY/RETURN
——CD——	CONDENSATE DRAIN
——CO2——	CARBON DIOXIDE
——CST——	CLEAN STEAM PIPING
— - DCW - —	DOMESTIC COLD WATER (DCW)
—— —— —— —— —— —— —— —— —— —— —— —— ——	DOMESTIC HOT WATER (DHW)
— — — -DHR- — —DHR(#°F)—	RECIRCULATED DOMESTIC HOT WATER (DHR)
HPC	HIGH PRESSURE STEAM CONDENSATE
—HPS(#)—	HIGH PRESSURE STEAM; (#) DENOTES PRESSURE
HPS/R	HEAT PUMP WATER SUPPLY/RETURN
—HRS/R—	HEAT RECOVERY SUPPLY/RETURN PIPING
—HWS/R—	HEATING WATER SUPPLY/RETURN
LPC	LOW PRESSURE STEAM CONDENSATE
—_LPS(#)—	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
MPC	MEDIUM PRESSURE STEAM RETURN
—MPS(#)—	MEDIUM PRESSURE STEAM; (#) DENOTES PRESSURE
——SPD——	STEAM CONDENSATE PUMPED DISCHARGE
SVT	STEAM VENT PIPING
PLUMBING	SYMBOL LEGEND
	FLEXIBLE PIPE CONNECTION
<u></u>	FLOW METER (VENTURI)
<u> </u>	PIPING UNION
PFS	FLOW SWITCH
Ps	PRESSURE SWTICH
₽™	TAMPER SWITCH
Į	THERMOMETER

PLUMBING PIPING LEGEND

Sheet List - Plumbing				
SHEET #	SHEET NAME			
P-100	UNDERGROUND PLUMBING PLAN			
P-101	FIRST FLOOR PLUMBING PLAN			
P-200	PLUMBING RISER			
D_001	DI LIMRING LEGEND	٦		

2018

APPLICABLE BUILDING CODES				
APPLICABLE BUILDING CODES	DOCUMENT	YEAR		
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009		
FIRE SPRINKLER CODE	NFPA 13	2013		
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2015		
INTERNATIONAL ENERGY CONSERVATION CODE (IECC) <u>OR</u> ASHRAE 90.1	STATE EDITION	2012		
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2015		
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2015		
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2015		
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2015		
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2009		
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2017		
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2013		

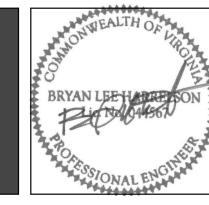
UNIFORM STATEWIDE BUILDING CODE

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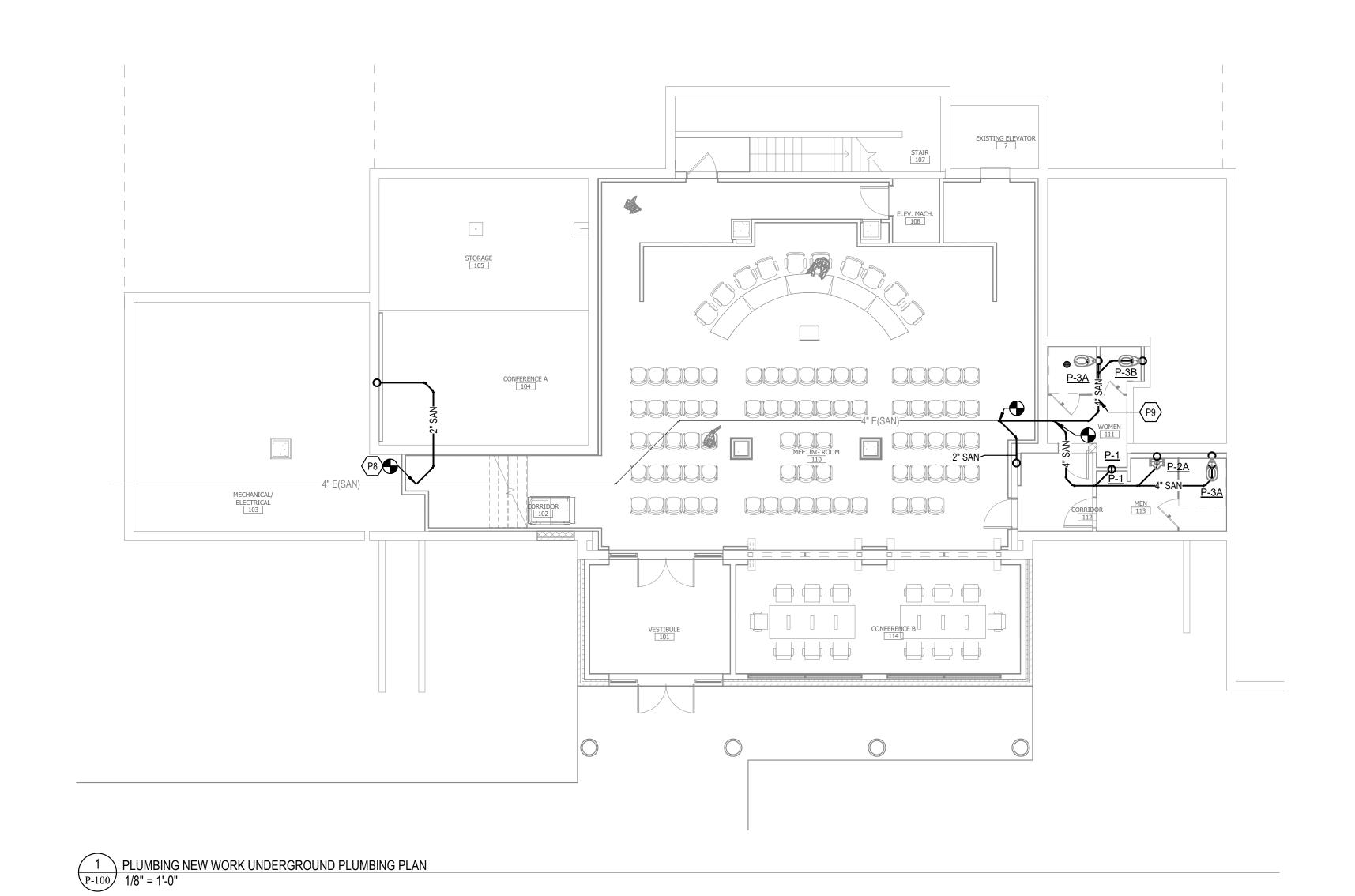
01	MM-DD-YR	NAME	DESCRIPTION OF CHANGES



AUGUST 28, 2020



**PROJECT** PLUMBING LEGEND Fluvanna Co. 1/8" = 1'-0"



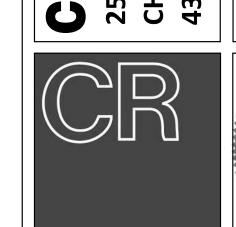
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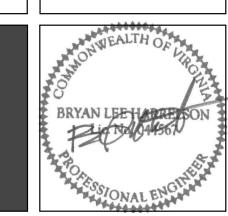
P8 TRENCH DOWN TO INSTALL NEW SANITARY PIPE AND CONNECT TO EXISTING MAIN. P9 REWORK EXISTING UNDERGROUND PIPING AND INSTALL NEW SANITARY LINES.

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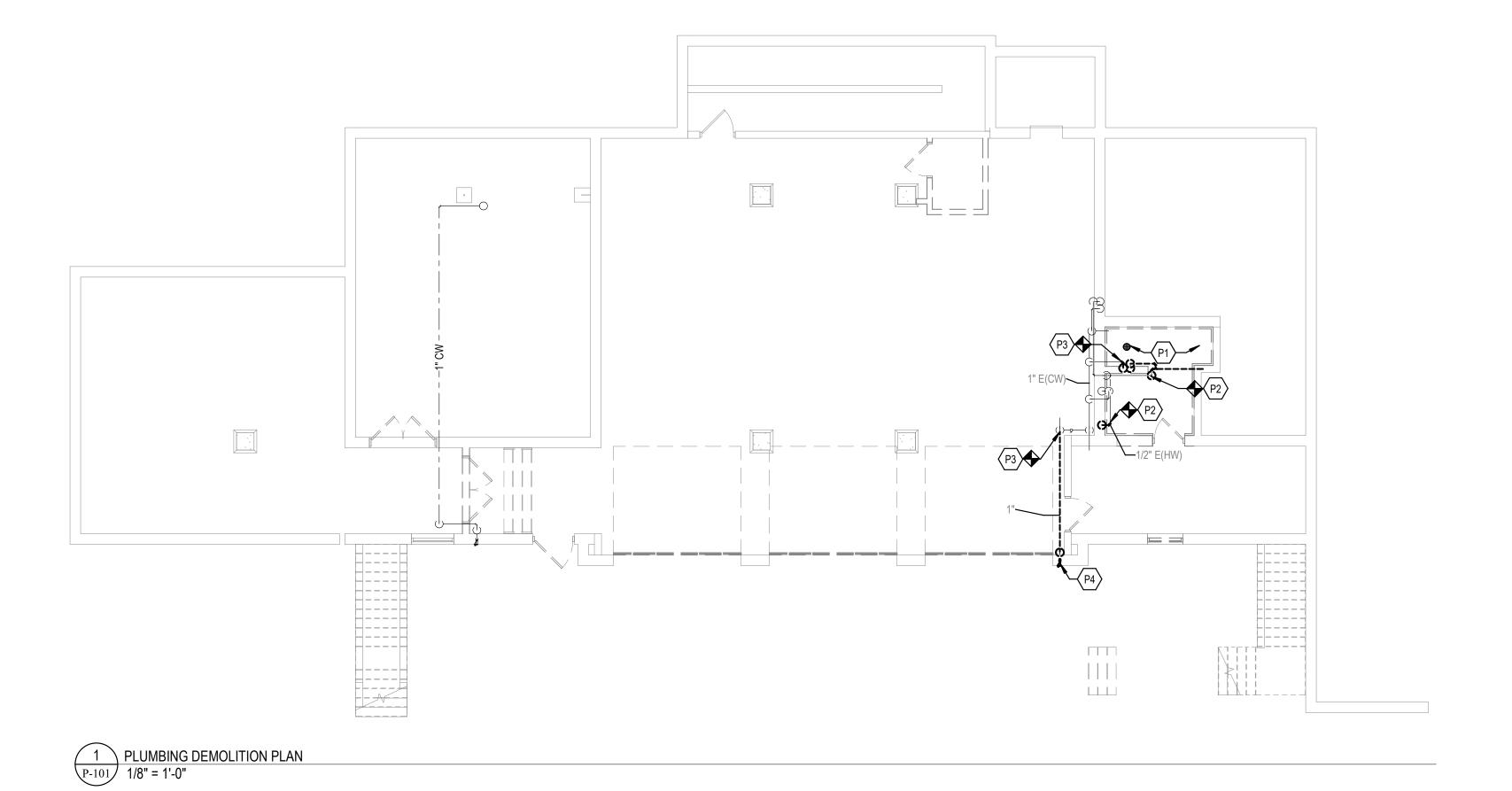
REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES

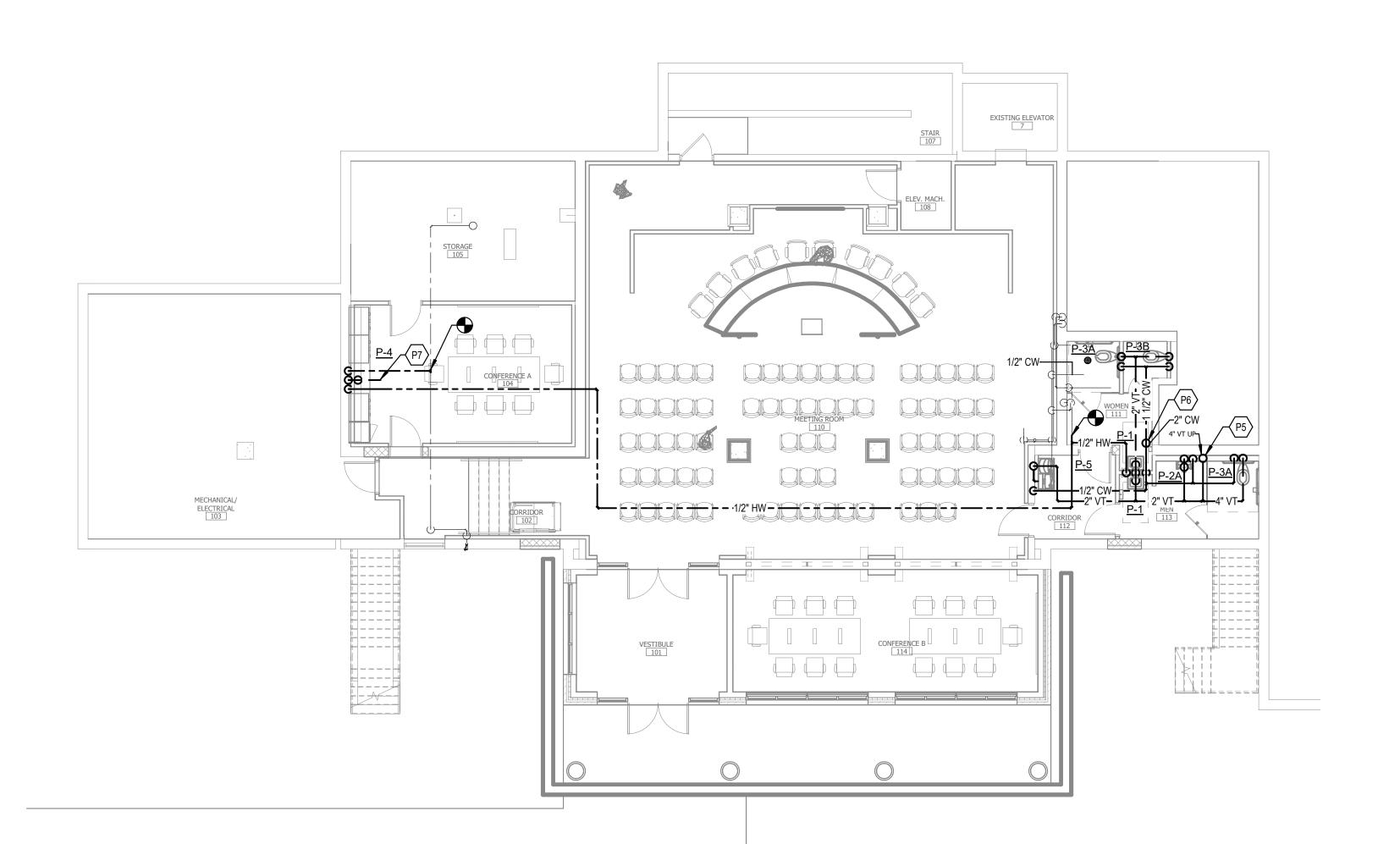




UNDERGROUND PLUMBING PLAN

**PROJECT** Fluvanna Co. 1/8" = 1'-0"





P-101 1/8" = 1'-0"

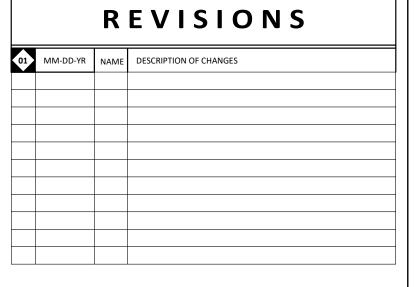
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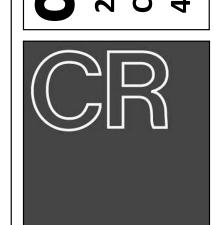


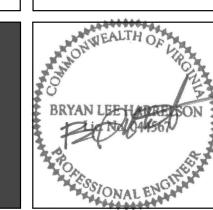
- P1 DEMOLISH EXISTING SHOWER AND WATER CLOSET. SHOWER DRAIN
- P2 REMOVE DOMESTIC HOT WATER PIPING BACK TO POINT INDICATED. SEE NEW WORK PLAN FOR NEW CONNECTION. P3 REMOVE DOMESTIC COLD WATER PIPING BACK TO POINT INDICATED.
- SEE NEW WORK PLAN FOR NEW CONNECTION. P4 REMOVE EXISTING WALL HYDRANT. SEAL EXTERIOR WALL TO MATCH EXISTING.
- P5 4" VENT GOING UP TO THE LEVEL ABOVE. COORDINATE VENTING CONNECTION LOCATION WITH THE EXISTING VENTING ABOVE.
- P6 ROUTE A NEW 2" DOMESTIC COLD WATER LINE FROM THE FIRST LEVEL DOWN TO THE BASEMENT LEVEL.
- P7 COORDINATE VENT CONNECTION WITH EXISTING VENTS ON THE LEVEL ABOVE.

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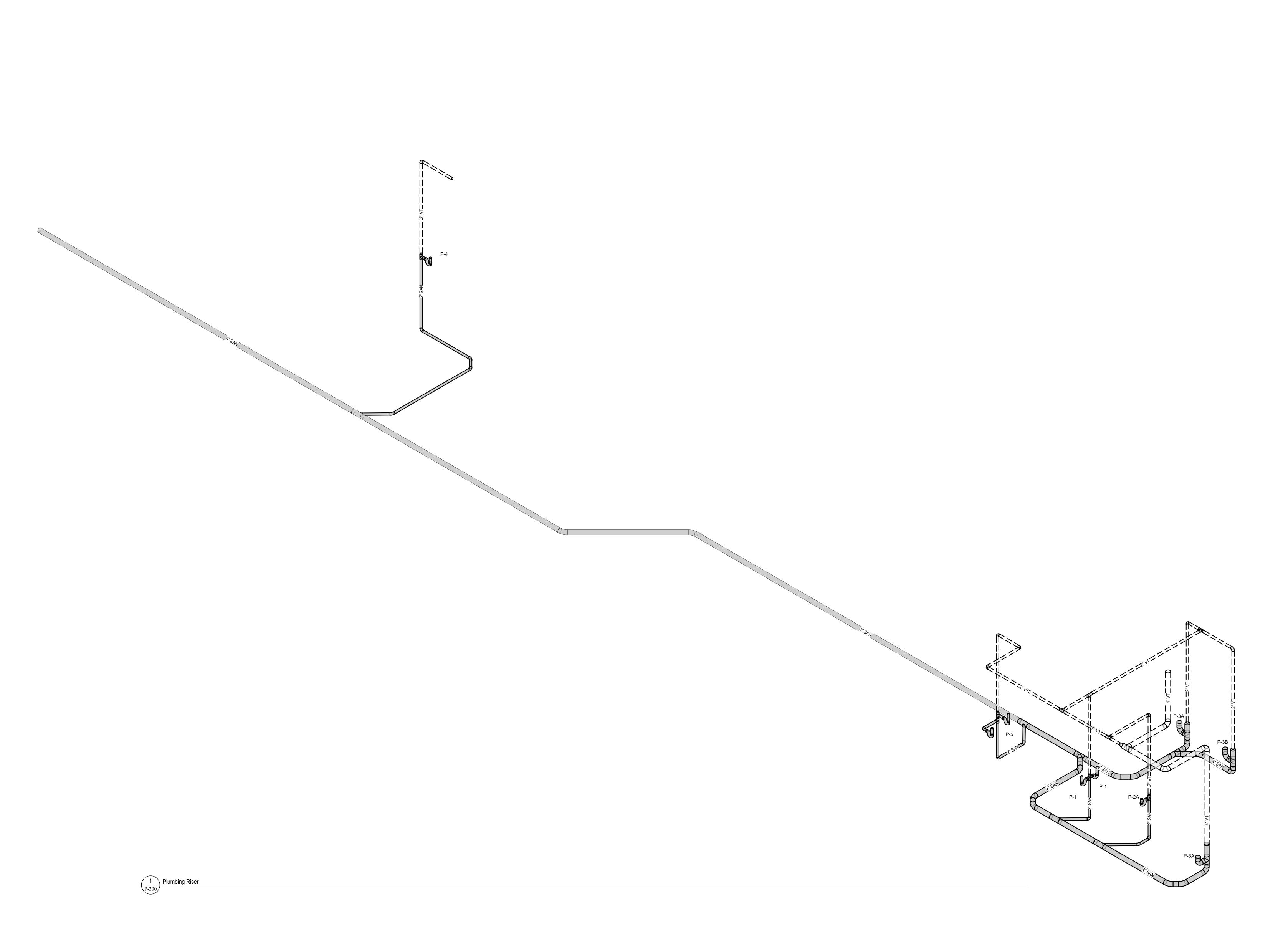
**PROJECT** 

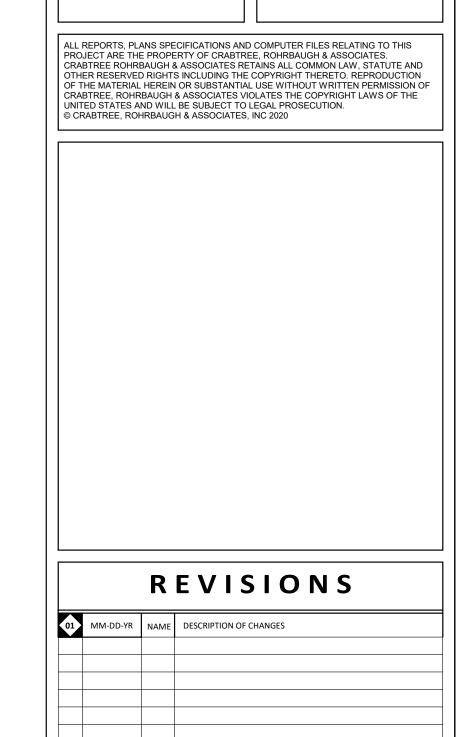
Fluvanna Co.

FIRST FLOOR PLUMBING PLAN

AUGUST 28, 2020

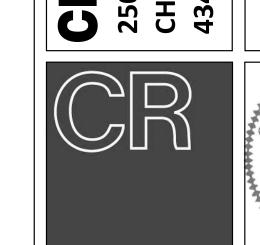
PLOT SCALE: 1/8" = 1'-0" FILENAME:

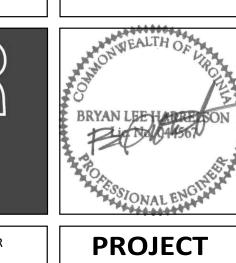




CRABTREE ROHRBAUGH & ASSOCIATES - A

250 WEST MAIN STREET, SUITE 200
CHARLOTTESVILLE VA 22902
434-975-7262
WHITE SULPHUR SPRINGS, WEST VIRGINIA





PLUMBING RISER Fluvanna Co. P-200 08/28/20

	AV EQL	JIPMENT SCHEDULE			
TAG	<u>DESCRIPTION</u>	<u>MANUFACTURER</u>	MODEL	MOUNT MODEL	QUANTITY
CAM-1	VIDEOTELECONFERENCING CAMERA	VADDIO		CEILING	4
CP-1	WALL MOUNTED CONTROL PANEL	KRAMER			3
FPD-55	55" 4K COMMERCIAL FLAT PANEL DISPLAY WITH RS-232 AND CEC CONTROL	LG	55UT640S0UA	CHIEF FUSION	6
FPD-75	75" 4K COMMERCIAL FLAT PANEL DISPLAY WITH RS-232 AND CEC CONTROL	LG	75UT640S0UA	CHIEF FUSION	2
FPD-86	86" 4K COMMERCIAL FLAT PANEL DISPLAY WITH RS-232 AND CEC CONTROL	LG	86UT640S0UA	CHIEF FUSION	2
IP-1	TABLE MOUNTED INPUT PLATE	KRAMER		TABLE	13
MIC-1	2' X 2' CEILING MOUNTED MICROPHONE ARRAY	SHURE	MXA910	CEILING	3
MIC-2	TABLE MOUNTED MICRPHONE	SHURE		TABLE	10
R-1	AUDIOVISUAL RACK	MIDDLE ATLANTIC PRODUCTS			1
SPK-1	CEILING MOUNTED LOUDSPEAKER	JBL	CONTROL 26CT	CEILING	10
WB-1	FLAT PANEL DISPLAY WALLBOX	CHIEF	PAC525F	N/A	4

DESCRIPTION  AUDIO / VISUAL FURNITURE	MOUNTING HEIGHT (TO CENTER OF BOX)	DRAWING SYMBOL
LECTERN		
AUDIO SYSTEMS		
CEILING MOUNTED SPEAKER	CLG	S
CEILING MOUNTED MICROPHONE ARRAY	CLG	M
CONTROL SYSTEMS		
TRANSMITTER		TX
WALL INPUT PLATE		
CONTROL PANEL		
ROOM SCHEDULING PANEL		
DISPLAY SYSTEMS		
FLAT PANEL DISPLAY		
PROJECTION SCREEN		
VIDEO SYSTEMS		
PROJECTOR	CLG	
VIDEO TELECONFERENCING CAMERA		C
RACK		
FLOOR MOUNTED DIGITAL SIGNAGE		
WALL BOX		
WALL BOX FOR FLAT PANEL DISPLAYS		WB

#### **GENERAL AV NOTES:**

#### 1. SCOPE

#### A. AUDIOVISUAL SCOPE OF WORK SHALL INCLUDE:

- A. INSTALLATION AND TESTING OF ALL AUDIOVISUAL CABLING AND EQUIPMENT, INCLUDING BUT NOT LIMITED TO MONITORS, AUDIO COMPONENTS, MATRIX SWITCHES, DISTRIBUTION AMPLIFIERS, EQUALIZERS, CENTRAL CONTROLLERS, INTERFACES, EQUIPMENT RACKS, AND HARDWARE. ANY ITEMS NOT CALLED OUT THAT ARE NECESSARY FOR A COMPLETE AND FUNCTIONING AV SYSTEM PER DESIGN INTENT SHALL BE INCLUDED.
- B. AUDIOVISUAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR POWER AND CONDUIT REQUIREMENTS.
- C. AUDIOVISUAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR FOR INSTALLATION OF WALL MOUNTED PLYWOOD FOR DEVICES AND MOUNTING OF DISPLAYS.
- D. AUDIOVISUAL CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR MOUNTING OF MONITORS AND DISPLAYS.
- E. AUDIOVISUAL CONTRACTOR SHALL PROVIDE AND INSTALL J-HOOKS OR SIMILAR CABLE MANAGEMENT IN AREAS THAT HAVE TILE CEILINGS.
- B. GENERAL CONTRACTOR SCOPE OF WORK SHALL INCLUDE:
- A. INSTALLATION OF ALL CONDUITS, BACK BOXES, CONDUIT STUB-UPS, GROUND BARS, GROUNDING EQUIPMENT, AND POWER FOR AUDIOVISUAL EQUIPMENT. COORDINATE WITH ELECTRICAL DRAWINGS.
- B. INSTALLATION OF FLOOR BOXES OR RACEWAY AS SHOWN ON DRAWINGS.
- C. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL AUDIOVISUAL INSTALLATION AND OVERSIGHT.

#### 2. GENERAL CONDITIONS

- A. ALL AUDIOVISUAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ANSI/TIA 568C "COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD", TIA 569B "COMMERCIAL BUILDING STANDARD FOR TELECOMMUNICATIONS PATHWAYS AND SPACES", EIA/TIA 606 "ADMINISTRATION STANDARD FOR THE TELECOMMUNICATIONS INFRASTRUCTURE OF COMMERCIAL BUILDINGS", EIA/TIA 607 "COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS", TIA/EIA 75 HORIZONTAL PATHWAYS, AND BICSI "TELECOMMUNICATIONS DISTRIBUTION MANUAL".
- B. THE DRAWINGS, WHICH CONSTITUTE A PART OF THIS CONTRACT, INDICATE THE GENERAL ARRANGEMENT OF CABLING AND OUTLETS, LOCATIONS OF EQUIPMENT, AND OTHER WORK. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN, WHICH ARE NECESSARY FOR A COMPLETE AUDIOVISUAL SYSTEM SHALL BE INCLUDED AT NO ADDITIONAL COST.
- C. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS TO BECOME FAMILIAR WITH ALL ASPECTS OF THESE DESIGNS AFFECTING THIS WORK. THE AUDIOVISUAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL OTHER TRADES AND IS REQUIRED TO ATTEND SCHEDULED WEEKLY MEETINGS.
- D. ALL AUDIOVISUAL MATERIAL SHALL BE NEW, DEFECTIVE EQUIPMENT OR EQUIPMENT THAT IS DAMAGED IN THE COURSE OF INSULATION OR TESTING SHALL BE REPLACED OR REPAIRED IN A MANNER MEETING THE APPROVAL OF THE OWNER. WHERE APPLICABLE, ALL EQUIPMENT SHE'LL BE IN ACCORDANCE WITH NEMA AND UL STANDARDS.
- E. ALL WORK SHALL BE SUBJECT TO APPROVAL OF THE OWNER OR THE OWNER'S AUTHORIZED REPRESENTATIVE.
- F. ALL WORK SHALL BE INSTALLED IN A NEED AND WORKMAN LIKE MANNER. ALL SPACES SHALL BE LEFT CLEAN, SWEPT AND FREE OF ANY DEBRIS, SCRATCHES, OR MARKINGS.
- G. WHERE CABLING AND OR CONDUIT PASSES THROUGH FIRE RATED PARTITIONS OR SLABS, INSTALL FIRE STOP MATERIALS RATED TO MEET OR EXCEED THE RATING OF THE STRUCTURE PENETRATED. FIRE STOP MATERIALS SHALL HAVE BEEN TESTED FOR UL 1479 AND ASTM E-814. FOR SLEEVES, INSTALL EITHER A MECHANICAL FIRE STOP, INTUMESCENT FIRE STOP PILLOWS OR A COMBINATION OF INTUMESCENT PUTTY AND MINERAL WOOD/CERAMIC FIBER. FOR SLOTS OR LARGER OPENINGS, INSTALL EITHER A MECHANICAL FIRE STOP OR A RATED ASSEMBLY SUITABLE FOR THE TYPE OF OPENING TO BE PROTECTED.

## 3. PATHWAY REQUIREMENTS

- A. INSTALL AUDIOVISUAL CABLES IN WALLS USING CONDUIT STUB UPS AS SHOWN ON DRAWINGS.
- B. INSTALL AUDIOVISUAL CABLES IN CEILING USING CONDUIT AND/OR J-HOOKS AS SHOWN ON DRAWINGS.
- C. ROUTE ALL CABLES INSIDE FURNITURE USING ACCESS AREAS PROVIDED BY THE MANUFACTURER. COORDINATE WITH FURNITURE INSTALLER.
- D. OBTAIN WRITTEN PERMISSION FROM STRUCTURAL ENGINEER PRIOR TO PENETRATING SLABS OR LOAD BEARING WALLS.

#### 4. INSTALLATION PRACTICES

- A. MANUFACTURER AND TIAA 568B RECOMMENDATIONS FOR CABLING BEND RADIUS SHALL BE FOLLOWED AT ALL TIMES.
- B. DO NOT EXCEED THE MAXIMUM PULLING TENSION SPECIFIED FOR COPPER CABLE BY ITS MANUFACTURER.
- C. ALL TIE WRAPS SHALL BE PLENUM RATED VELCRO WRAPS. PLASTIC TIE WRAPS ARE NOT PERMITTED.
- D. TIE WRAPS SHALL NOT INCREASE THE TENSION OF THE CABLE OR OF ANY INDIVIDUAL PAIRS WITH IN A CABLE. ANY TIE WRAPS CINCHED SO TIGHTLY AS TO CAUSE AN INDENTATION OR DECREASE IN CABLE DIAMETER SHALL BE REMOVED. ALL TIE WRAPS SHALL BE LOOSE ENOUGH TO MOVE OR SLIDE WITHOUT MOVING THE CABLE. EACH TIE WRAP SHALL HAVE 1/4 1/2 INCH SLACK, SO AS TO ALLOW A FINGER TO PASS UNDER IT. AMOUNT OF THE TIE WRAPS USED SHALL BE MINIMIZED AND PLACED WITH VARYING SPACING. EVENLY SPACED TIE WRAPS CAN REDUCE CABLE PLANT PERFORMANCE.
- E. MAINTAIN THE SHEATH OF EACH INDIVIDUAL CABLE UP TO THE POINT OF TERMINATION BY REMOVING ONLY AS MUCH CABLE SHEATH AS NECESSARY AND PRACTICAL TO TERMINATE THE CABLES.
- F. ALL AUDIOVISUAL CABLING INSTALLED IN CEILING SHALL BE PLENUM RATED.
- G. SUPPORT CABLE OFF THE FLOOR UNTIL TERMINATION. CABLING THAT HAS BEEN WALKED ON SHALL BE REPLACED.
- H. AUDIOVISUAL WORK SHALL BE SEQUENCED TO AVOID ANY WORK ABOVE INSTALLED CEILING TILES OR OVER INSTALLED FURNITURE/CASEWORK.

#### 5. CABLING

- A. SUPPORT ALL AV CABLES ON J HOOKS OR ROUTE IN CONDUIT AS SHOWN ON THE DRAWINGS.
- B. AUDIOVISUAL CONTRACTOR SHALL PROVIDE ADEQUATE LENGTH OF CABLING AT EQUIPMENT LOCATIONS TO FACILITATE MOVEMENT OF EQUIPMENT FOR MAINTENANCE WITHOUT REMOVING
- C. IN CONFERENCE AREAS, AUDIOVISUAL CONTRACTOR SHALL PROVIDE AND INSTALL CONNECTORS AND CABLES TO FLOOR BOXES, OUTLETS, AND POKE THRUS AS SHOWN ON DRAWINGS. PROVIDE INSERTS AND COORDINATE WITH TELECOM INSTALLER.
- D. COORDINATE ALL CABLE JACKET COLORS WITH THE OWNER AND OTHER TRADES.
- E. STRUCTURED CABLING CONTRACTOR MUST COORDINATE BACK BOXES, CONDUIT, SLEEVES, ETC.
- F. ALL DATA, VOICE AND CATV/SATV CABLING, FACE PLATES, CONNECTORS, JACKS AND PATCH CABLES REQUIRED FOR THE AUDIOVISUAL SYSTEM SHALL BE PROVIDED AND INSTALLED BY THE STRUCTURED CABLING CONTRACTOR.
- G. ALL CABLING SUPPORTS FOR THE DATA, VOICE AND CATV/SATV CABLING FOR AUDIOVISUAL SYSTEMS SHALL BE PROVIDED AND INSTALLED BY THE STRUCTURED CABLING CONTRACTOR.

#### 6. CONDUIT

- A. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL METALLIC CONDUIT WITH MY FLOORS AS SHOWN ON DRAWINGS.
- B. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL PULL BOXES AS SHOWN ON DRAWINGS.
- C. COORDINATE WITH THE INSTALLATION OF ELECTRICAL AND MECHANICAL CONDUITS AND HVAC DUCTWORK SHARING THE SAME CEILING AREA.
- D. REMOVE ALL SHARP EDGES AND BURRS FROM END OF CONDUITS AND FIT WITH BUSHINGS.

#### 7. GROUNDING

- A. THE AUDIOVISUAL CONTRACTOR SHALL GROUND ALL EQUIPMENT RACKS TO ELECTRICAL CONTRACTOR SUPPLIED GROUND BUS BAR.
- B. ALL GROUND WIRES AND CABLES SHALL BE TERMINATED IN CONNECTORS PER EXCEPTED PRACTICES. UNDER NO CIRCUMSTANCES SHALL DRAIN WIRES BE CUT. ANY DIFFICULTIES DUE TO GROUND POTENTIAL DIFFERENCES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER.

#### 8. SYSTEM AND PROGRAMMING

- A. THE AUDIOVISUAL CONTRACTOR SHALL PROVIDE COMPLETE SYSTEM PROGRAMMING FOR THE CONTROLLERS AND ALL DEVICES INSTALLED. PROGRAMMING SHALL BE ACCOMPLISHED IN COORDINATION WITH TENANTS. PROJECT SHOULD NOT BE DEEMED COMPLETE AND EXCEPTED WITHOUT TENANT APPROVAL OF THE PROGRAMMING AND INTERFACES.
- B. THE AV CONTRACTOR SHALL PROVIDE ALL PROGRAMMING SOURCE CODE TO THE OWNER UPON COMPLETION OF THE PROJECTION.
- C. THE AV CONTRACTOR SHALL CREATE AND PROVIDE FIVE ELECTRONIC USB THUMB DRIVE COPIES OF USER MANUALS DESCRIBING THE OPERATION OF EACH TYPE OF SYSTEM.
- D. THE AV CONTRACTOR SHALL PROVIDE TRAINING FOR AT LEAST FIVE REPRESENTATIVES OF THE OWNER FOR EACH TYPE OF SYSTEM. TRAINING SHALL BE A MINIMUM OF FOUR (4) HOURS PER PERSON.
- E. OWNER WILL REQUIRE A FULL-FUNCTIONAL COMMISSIONING TEST DEMONSTRATING OPERATION OF ALL DEVICES PRIOR TO SYSTEM ACCEPTANCE.
- F. ALL PROJECTORS SHALL HAVE A SCHEDULED SHUT OFF PROGRAM TO PRESERVE LIFE. COORDINATE WITH TENANT FOR SHUT OFF SCHEDULE.
- G. ALL NETWORK SWITCHES, ROUTERS, PATCHING AND CONFIGURATION OF THE OWNERS NETWORK (FOR THE AUDIOVISUAL SYSTEMS) SHALL BE PROVIDED, INSTALLED AND CONFIGURED BY THE OWNER.
- H. ALL VOIP INTEGRATION AND CONFIGURATION WITH THE OWNERS VOIP SERVER/PBX AND THE AUDIOVISUAL CONFERENCING SIP ENDPOINTS SHALL BE PROVIDED BY THE OWNER.
- I. THE OWNER SHALL PROVIDE A RANGE (QTY TBD) OF STATIC IP ADDRESSES WITH A DEDICATED AUDIOVISUAL VLANS (QTY TBD) FOR THE AUDIOVISUAL SYSTEMS.

# 9. SITE VISIT

A. PRIOR TO SUBMITTING BIDS, THE AUDIOVISUAL CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS. THE AUDIOVISUAL CONTRACTOR SHALL NOTIFY THE ARCHITECT AND/OR THE ENGINEER IN ADVANCE OF ANY CONDITION THAT EXISTS THAT WOULD PREVENT THE WORK HEREIN SPECIFIED OR SHOWN ON THE DRAWINGS FROM BEING PERFORMED. FAILURE TO SURVEY THE SITE PRIOR TO BID AND START OF CONSTRUCTION WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO INSTALL DESIGN WITHIN THE CONFINES OF EXISTING CONDITIONS.

#### 10. GUARANTEE

- A. THE AUDIOVISUAL CONTRACTOR SHALL LEAVE THE ENTIRE AUDIOVISUAL SYSTEM INSTALLED UNDER THIS CONTRACT IN PROPER WORKING ORDER AND SHALL, WITHOUT CHARGE, REPLACE ANY WORK OR MATERIALS WHICH DEVELOP DEFECTS, EXCEPT FROM ORDINARY WEAR AND TEAR, WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. BENEFICIAL USE SHALL NOT BE CONSTRUED AS FINAL ACCEPTANCE.
- B. THE AUDIOVISUAL CONTRACTOR SHALL, DURING THE ONE-YEAR GUARANTEE, BE RESPONSIBLE FOR THE PROPER REPAIR AND ADJUSTMENTS OF ALL AUDIOVISUAL SYSTEMS AND EQUIPMENT, APPARATUS, DEVICES, ETC., INSTALLED BY HIM, AND DO ALL WORK NECESSARY TO ENSURE EFFICIENT AND PROPER FUNCTIONING.
- C. PRIOR TO THE EXPIRATION OF THE GUARANTEE, APPROXIMATELY 11 MONTHS AFTER FINAL ACCEPTANCE OF THIS PROJECT, A POST-CONSTRUCTION REVIEW OF THE PROJECT WILL BE MADE. THE CONTRACTOR SHALL FURNISH PERSONNEL TO ASSIST THE OWNER IN THIS REVIEW. ANY ADJUSTMENTS, REPAIRS, OR REPLACEMENTS FOUND NECESSARY DURING REVIEW SHALL BE DONE BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER.
- D. THE AUDIOVISUAL CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL INCUR FINANCIAL RESPONSIBILITY FOR ANY DAMAGES CAUSED BY, OR RELATING FROM, DEFECTS IN HIS WORK.

#### 11. RECORD DRAWINGS

A. THE A/V CONTRACTOR SHALL MAINTAIN AT THE SITE, FOR THE OWNER, ONE COPY OF ALL DRAWINGS, ADDENDA, APPROVED SHOP DRAWINGS, REVISIONS AND OTHER MODIFICATIONS, IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION. ONE SET OF DRAWINGS AND ANY OTHER INFORMATION SHALL BE DELIVERED TO THE OWNER VIA USB THUMB DRIVE UPON COMPLETION OF WORK.

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CRABTREE, ROHRBAUGH & ASSOCIATES, INC 2020

		R	EVISIONS
01	MM-DD-YR	NAME	DESCRIPTION OF CHANGES

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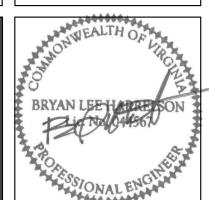
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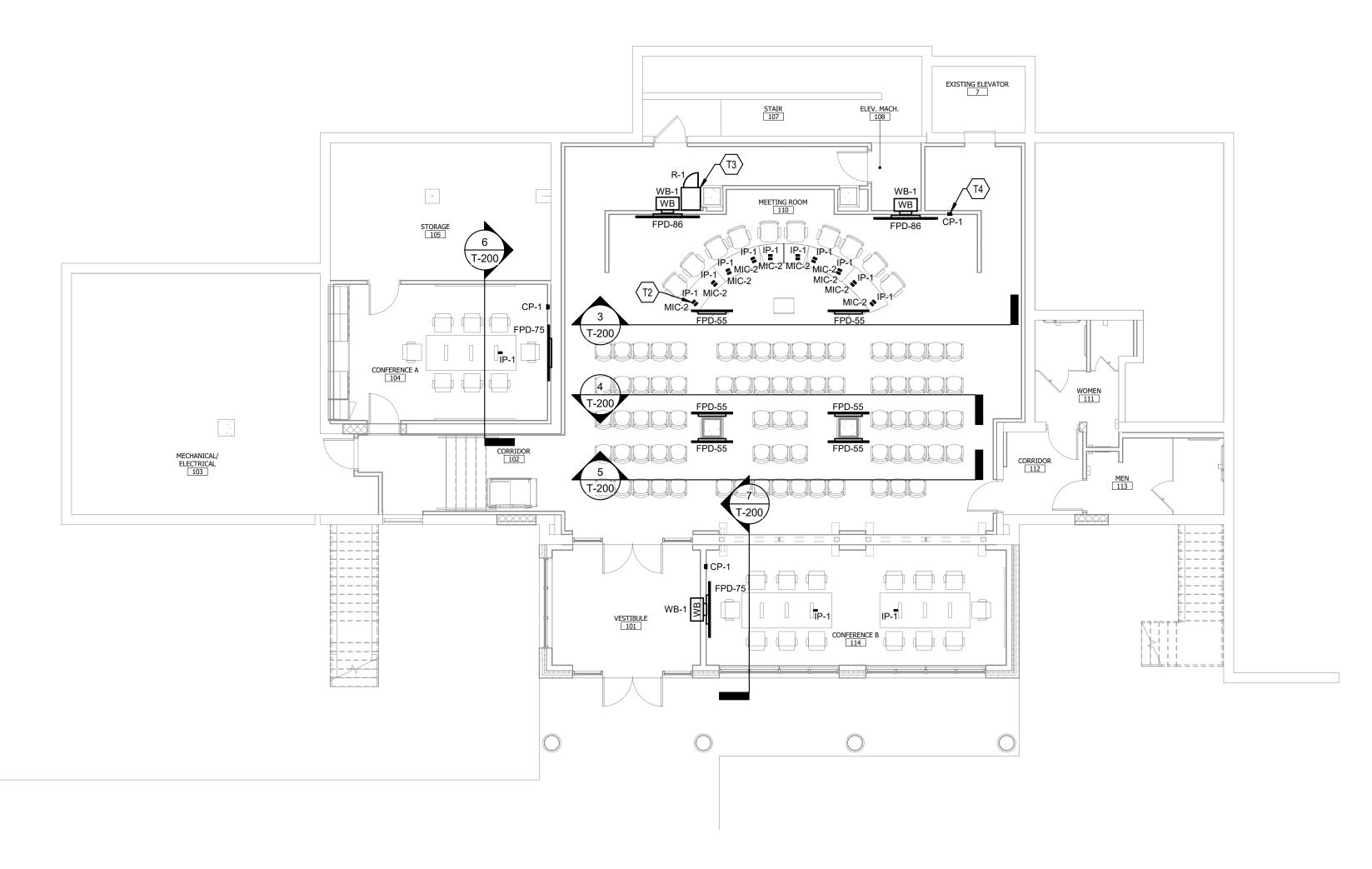


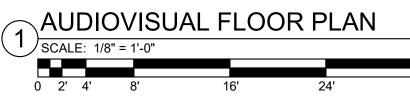
**PROJECT** 

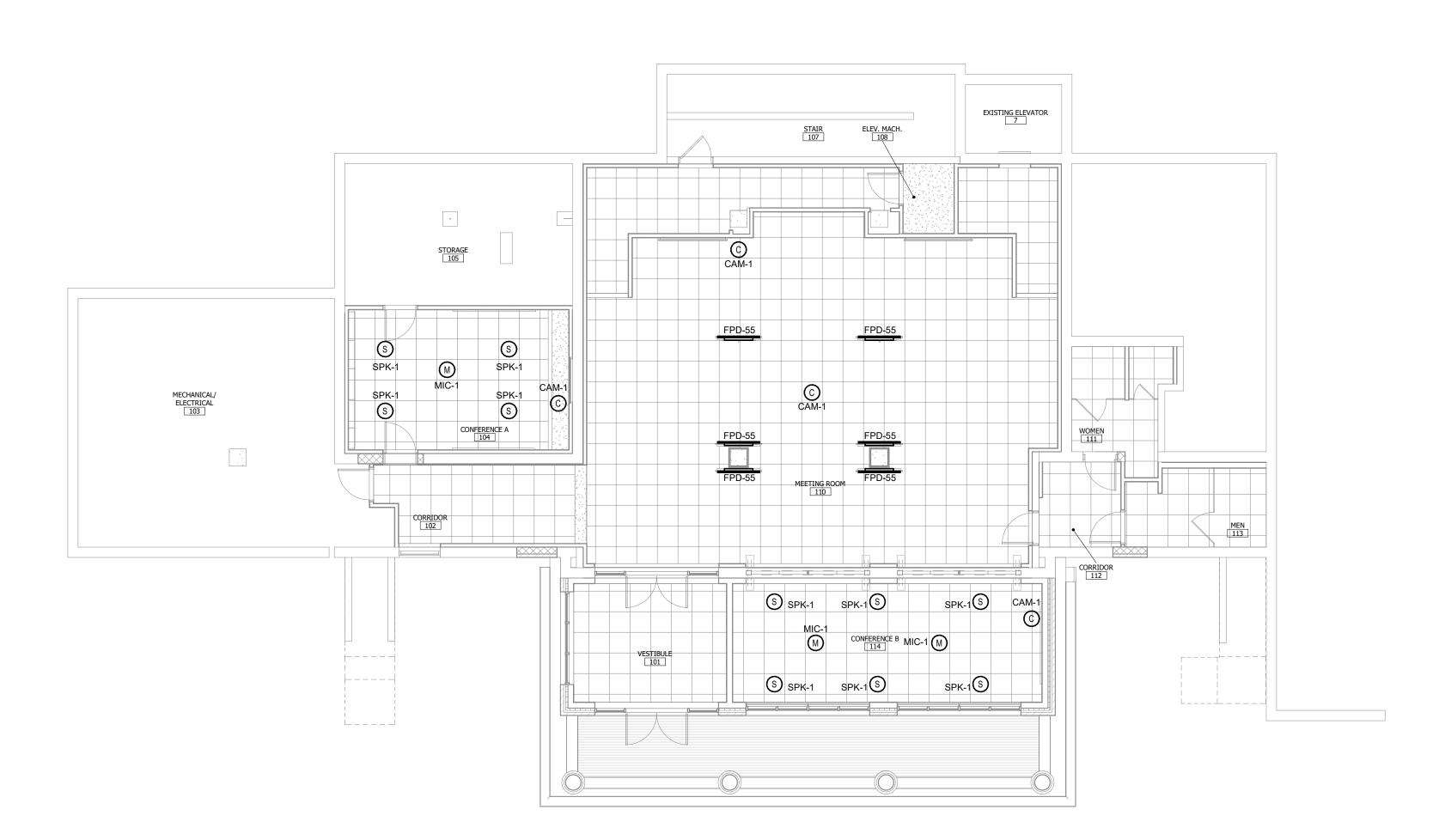
Fluvanna Co.

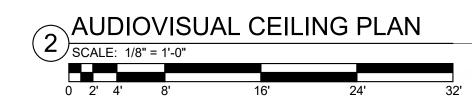
COMMUNICATIONS LEGEND

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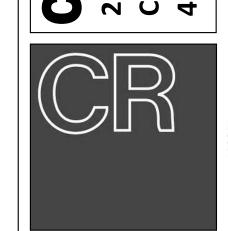
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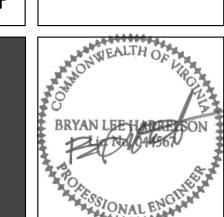
- T2 TYPICAL: PROVIDE HDMI INPUT AND MICRPHONE AT EACH CHAIR AT DESKS IN THE FRONT OF THE ROOM.
- T3 PROVIDE AUDIOVISUAL RACK AT THIS LOCATION. SEE AUDIOVISUAL EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL
- INFORMATION. T4 TYPICAL: PROVIDE CONTROL PANEL AT THIS LOCATION. SEE AUDIOVISUAL EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES



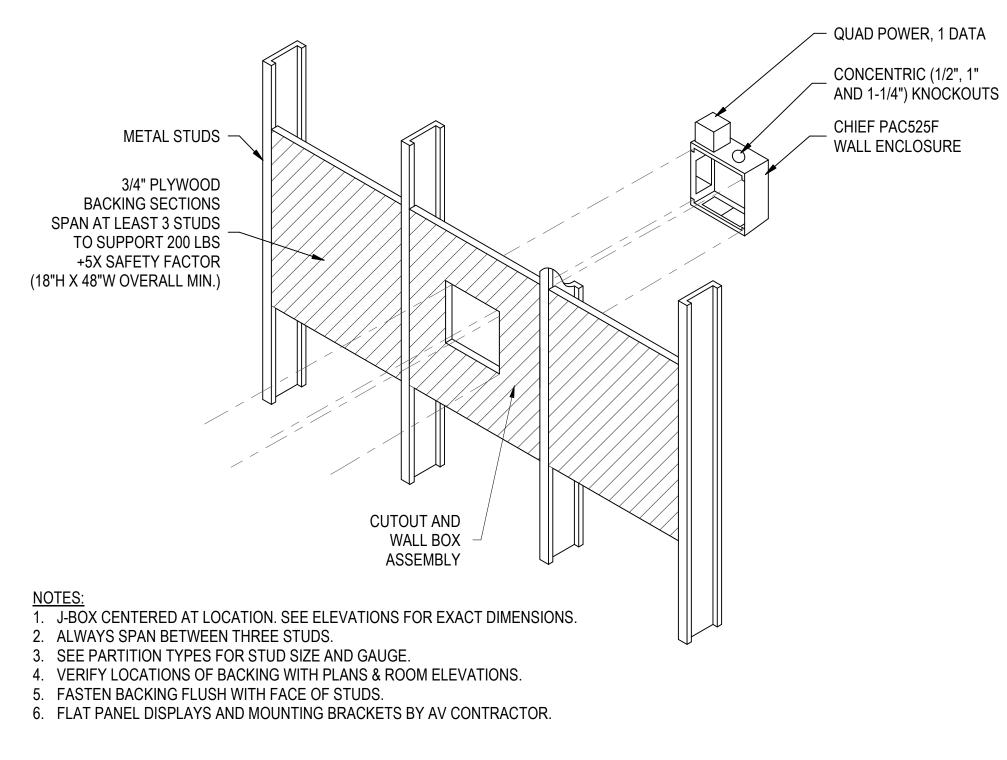


AUDIOVISUAL PLANS

**PROJECT** Fluvanna Co.

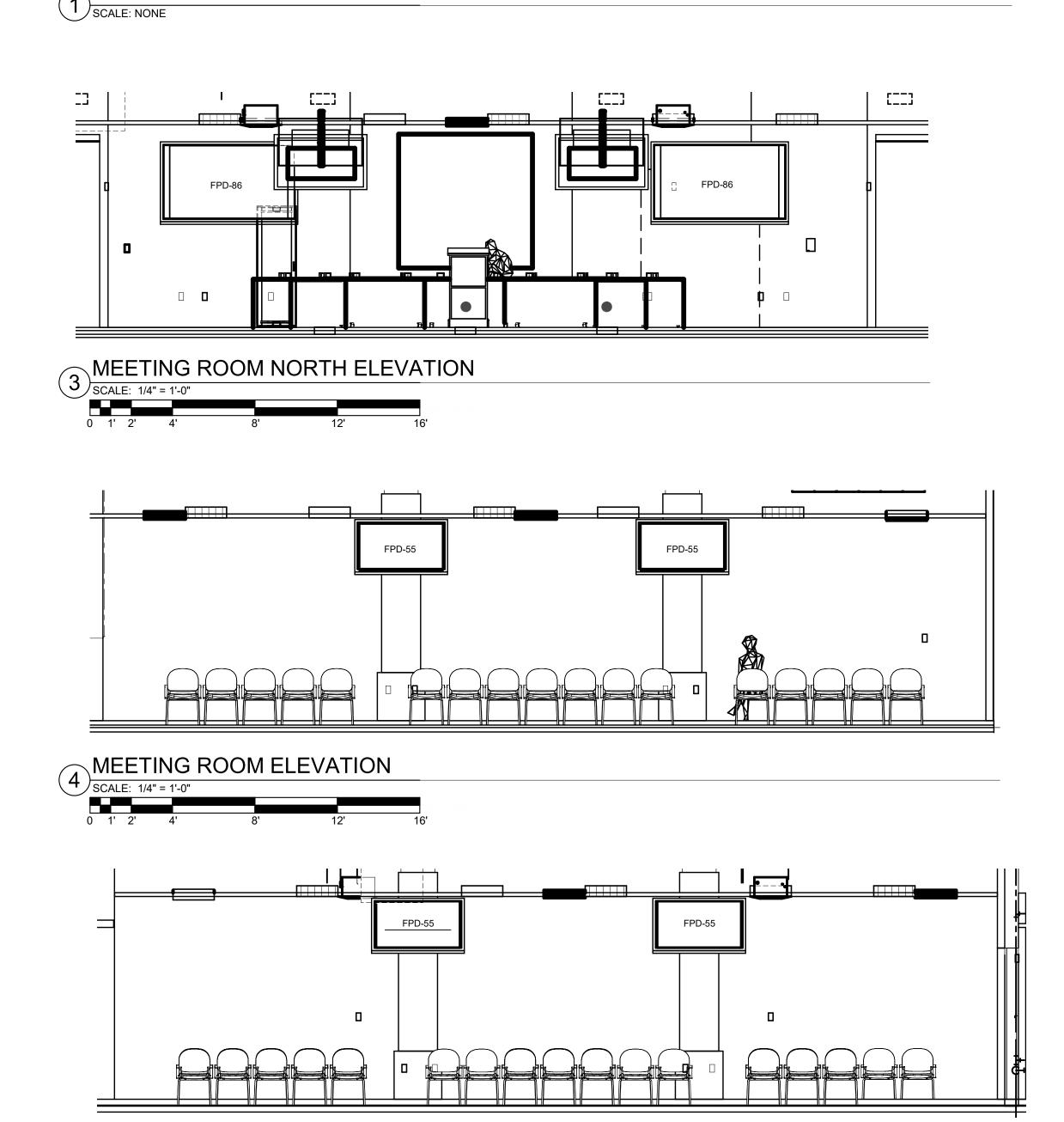
AUGUST 28, 2020

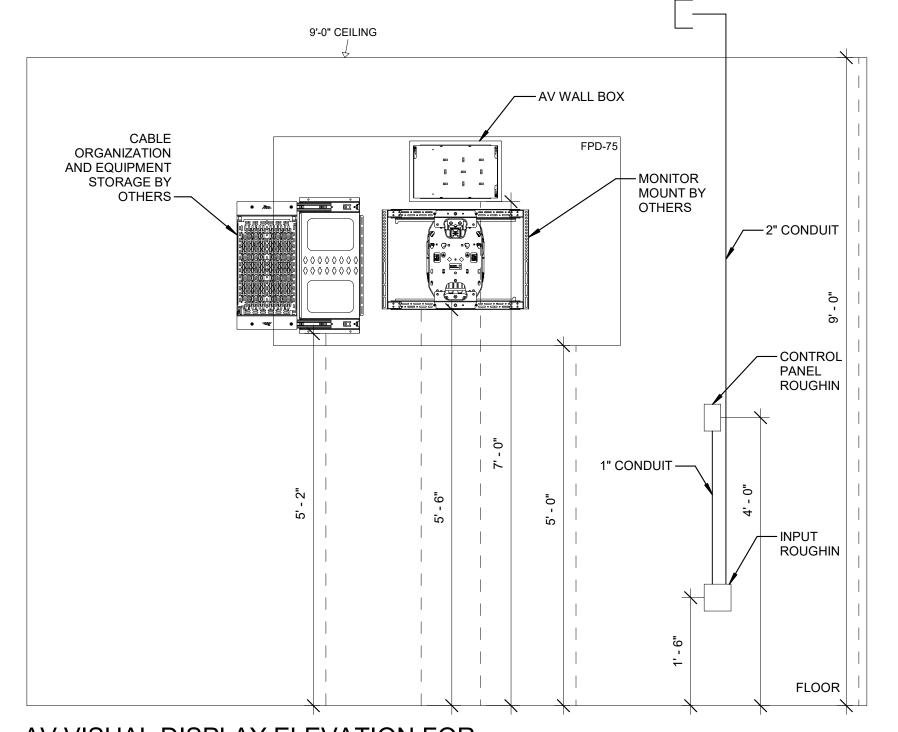
1/8" = 1'-0"



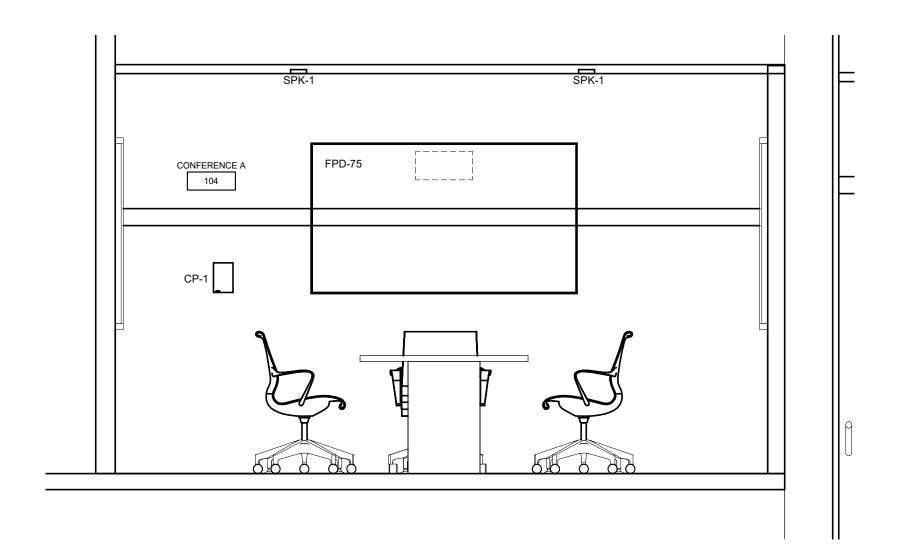
# CHIEF PAC525F WALLBOX ROUGH-IN

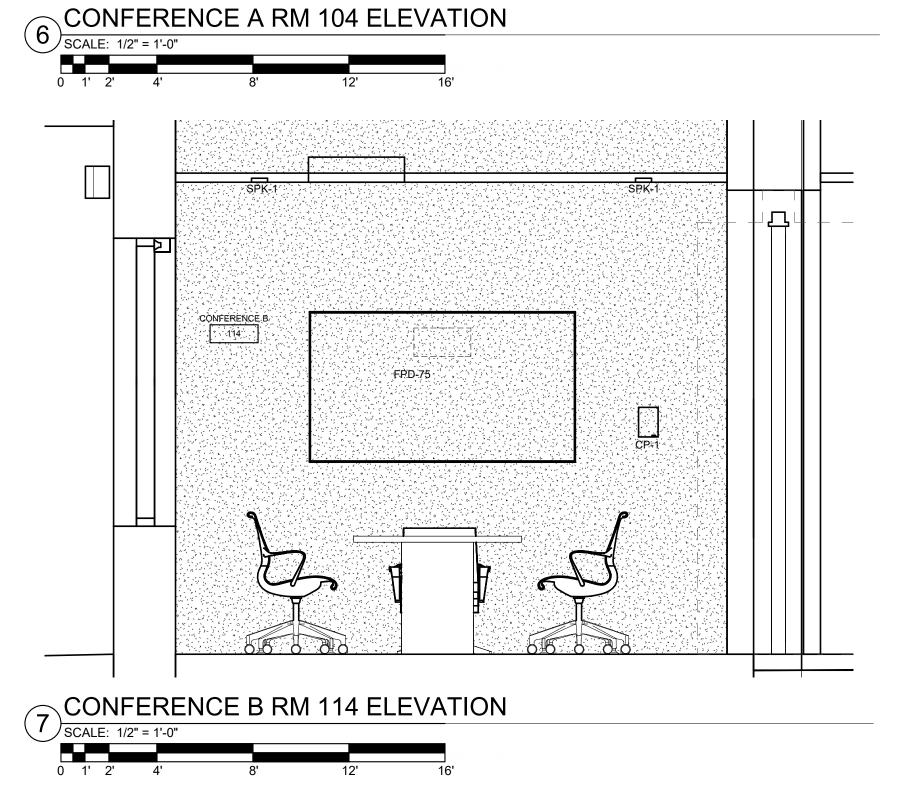
MEETING ROOM SOUTH ELEVATION





AV VISUAL DISPLAY ELEVATION FOR CONFERENCE ROOMS
SCALE: NONE





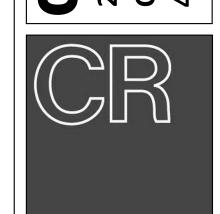


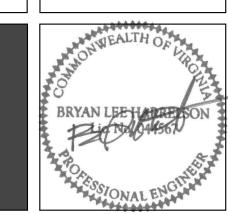
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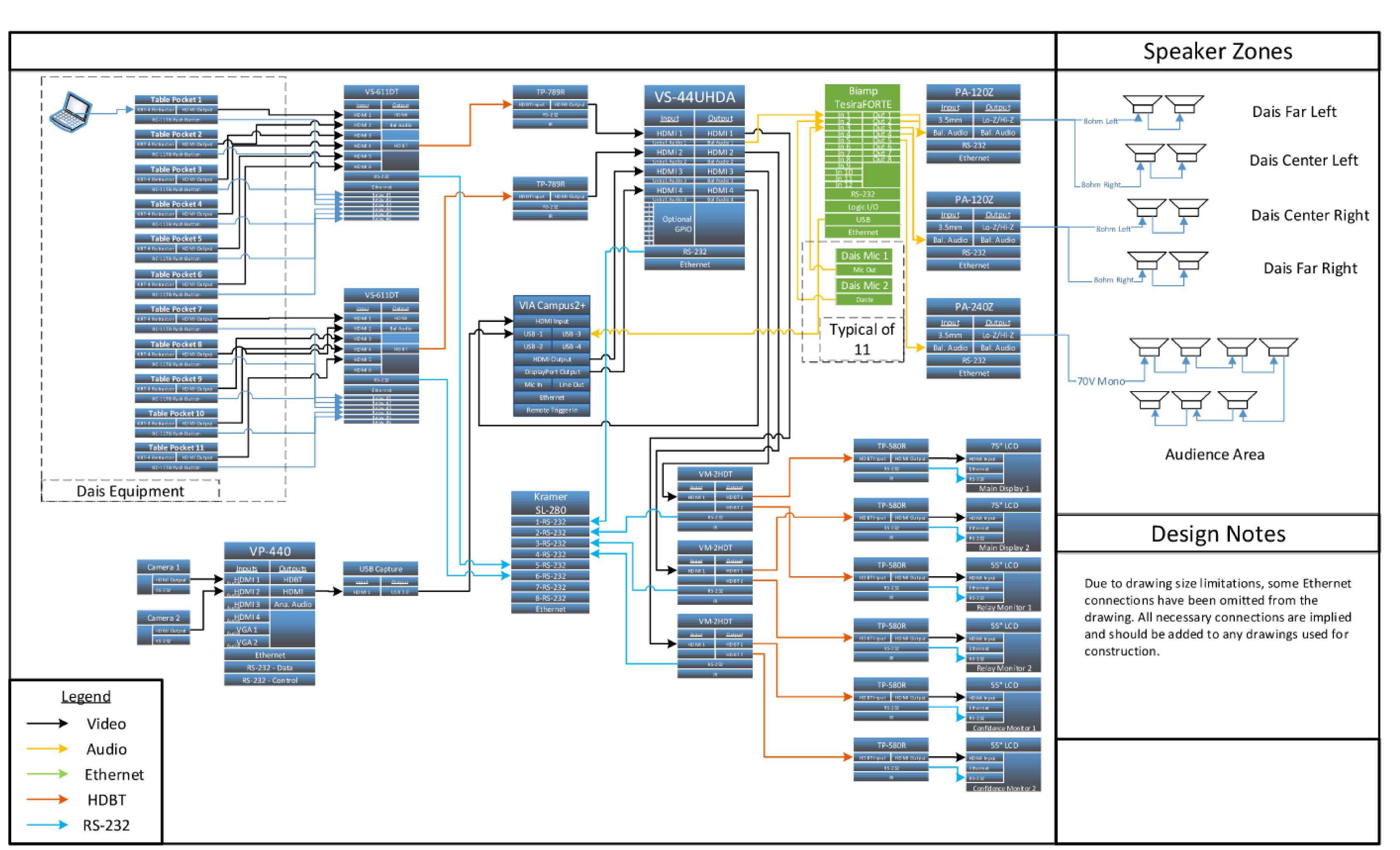




**PROJECT** 

AUDIOVISUAL DETAILS

Fluvanna Co.

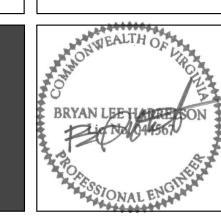


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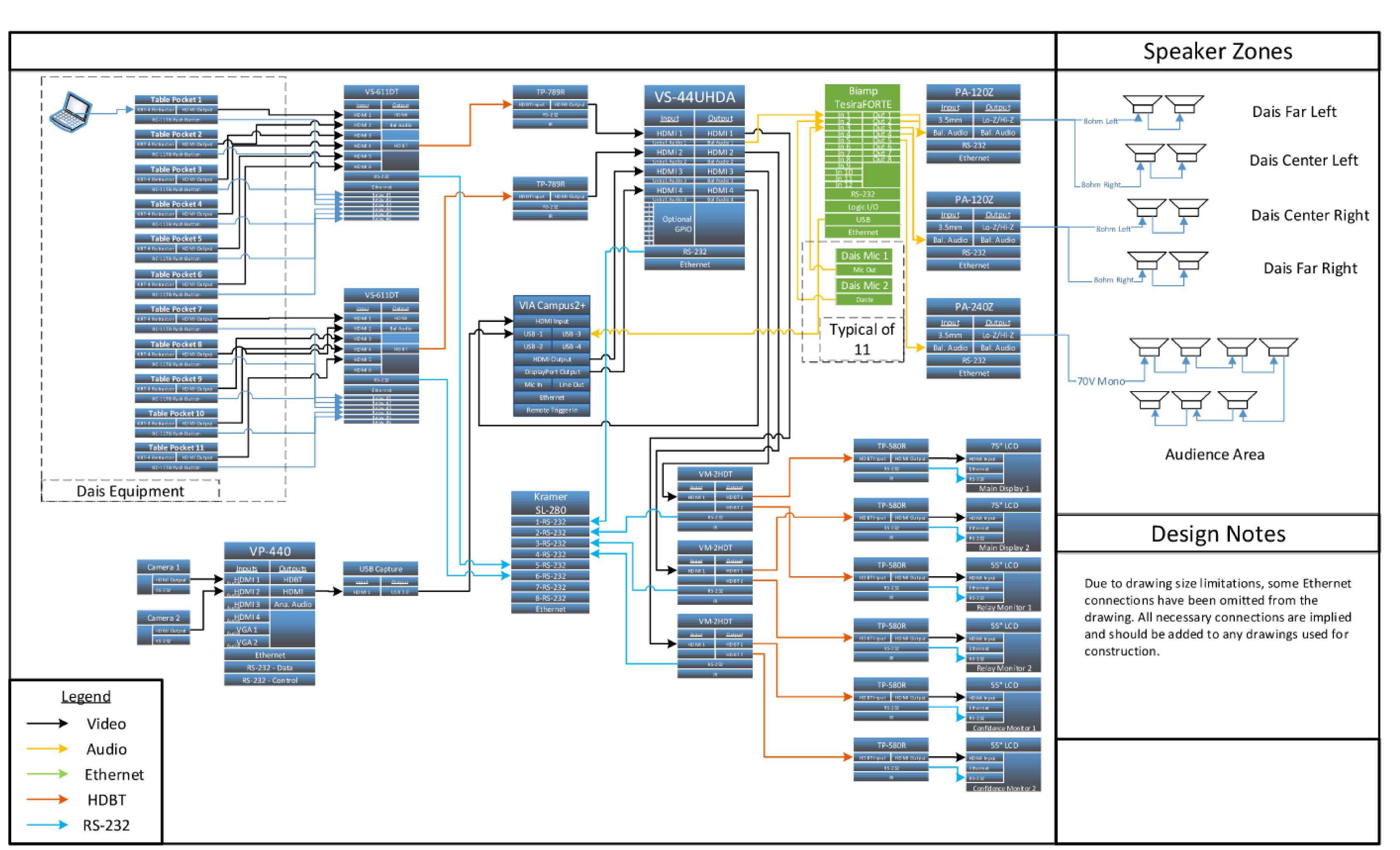
REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES

JOVATIONS E ROOM ADDITION CRABTREE ROHRBAUG
250 WEST MAIN STREET, SUITE 200
CHARLOTTESVILLE VA 22902
434-975-7262



AUDIOVISUAL FLOW

**PROJECT** Fluvanna Co.

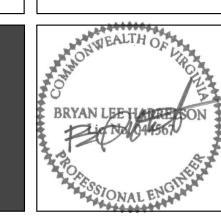


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434-975-7262



AUDIOVISUAL FLOW

**PROJECT** Fluvanna Co.

#### **ELECTRICAL GENERAL NOTES**

OF WORK RESIDES WITH THE ENGINEER

- A EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO ENSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICT WITH ANY OTHER BUILDINGS SYSTEMS. VERIFY SAME WITH SHOP DRAWINGS.
- B ADDITIONAL ELECTRICAL REQUIREMENTS MAY BE SHOWN ON PLANS FROM OTHER DISCIPLINES IN THIS SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL PLANS AND SPECIFICATIONS FOR A COMPLETE UNDERSTANDING OF THE PROJECT REQUIREMENTS. WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ALL LOCAL, STATE, AND NATIONAL CODES. INCLUDING BUT NOT
- LIMITED TO NFPA 70 (NEC), NFPA 72, INTERNATIONAL BUILDING CODES, ETC. D CONTRACTOR SHALL FOLLOW SEISMIC RESTRAINT AND DESIGN REQUIREMENTS CONTAINED IN LATEST ADOPTED STATE AND INTERNATIONAL BUILDING CODES, WITH ALL AMENDMENTS AS ADOPTED BY THE CURRENT LEGISLATION. REFER TO ELECTRICAL AND
- STRUCTURAL SPECIFICATIONS FOR ADDITIONAL INFORMATION. E ALL OFFSETS, TURNS, FITTINGS, TRIM, DETAIL, ETC. MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL
- ALLOWANCES SHALL BE INCLUDED FOR SAME AT EACH PROPOSER'S DISCRETION. F INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC. IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING OR THE COLLECTION
- OF CONDENSATION THEREON. IF IN DOUBT, CONTACT THE ENGINEER. G ADVISE THE ENGINEER OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC. AT LEAST TEN DAYS PRIOR TO BID DATE, TO ALLOW
- CLARIFICATION BY WRITTEN ADDENDUM. H WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL
- APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING. I DEVIATION FROM SPECIFICATIONS OR PLANS REQUIRES PRIOR WRITTEN APPROVAL FROM THE ENGINEERS AND MUST BE SUBMITTED IN
- WRITING NO LATER THAN TEN DAYS PRIOR TO THE BID DATE. J OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY,
- LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC.). K MOUNTING HEIGHTS FOR WALL MOUNTED DEVICES INDICATED ABOVE FINISHED FLOOR ARE TO CENTER OF DEVICE UON. MOUNTING
- HEIGHTS TO CEILING SUSPENDED DEVICES ARE TO BOTTOM OF DEVICE UON. L INSTALL EQUIPMENT, MATERIALS, ETC. IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DIRECTIONS. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEER PRIOR TO INSTALLATION FOR
- CLARIFICATION. M DO NOT RECESS PANELBOARD TUBS OR OTHER FLUSH-MOUNTED EQUIPMENT IN WALLS THAT HAVE A FIRE RATING. NO INSTALLATION
- SHALL DIMINISH OR VOID FIRE RESISTIVE RATINGS IN ANYWAY. N THE PURPOSE AND INTENT OF ALL OF THE DOCUMENTS PERTAINING TO THIS PROJECT IS TO PROVIDE A COMPLETE, FUNCTIONAL,
- SAFE, LIKE-NEW FACILITY. ANYTHING LESS SHALL BE UNACCEPTABLE. O ALL SYSTEMS, EQUIPMENT AND MATERIALS ARE TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. WORK NOT MEETING THIS CRITERION SHALL BE REMOVED AND REINSTALLED SATISFACTORILY. FINAL DETERMINATION OF THE ACCEPTABILITY OF THE QUALITY
- P ALL WORK, MATERIALS, EQUIPMENT, ETC. SHALL BE FULLY GUARANTEED FOR ONE FULL CALENDAR YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AS DOCUMENTED BY THE ENGINEER, UNLESS LONGER WARRANTY PERIODS FOR EQUIPMENT ARE SPECIFIED. O UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED SO AS TO COMPLEMENT ADJACENT SURFACE, UNLESS OTHERWISE
- NOTED. COORDINATE WORK AND COLORS WITH ARCHITECT. R WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATION IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL
- SUCH PENETRATIONS WITH THE ROOFING MANUFACTURER AND ARCHITECT. S THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES, CASH CONTRIBUTIONS OR OTHER COSTS THAT THE UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (ELECTRIC, TELEPHONE, TELEVISION, DATA, ETC.).
- T COORDINATE WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND CASEWORK DETAILS FOR LOCATION OF ADDITIONAL RECEPTACLES, UTILITY OUTLETS, ELECTRICAL DEVICES, ETC.
- U CEILING-MOUNTED ELECTRICAL DEVICES SHALL BE CENTERED IN 2'X2' CEILING TILE AND INSTALLED CENTERED ON 2' DIMENSION OF 2'X4' TILE AND ON CENTERLINE OR A QUARTER POINT ON 4' DIMENSION. V ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTORS' EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S
- ACCEPTABILITY SHALL BE THAT OF THE ENGINEER. W CHECK ALL THREE PHASE MOTORS WITH A PHASE ROTATION METER, PRIOR TO PLACING IN SERVICE.
- X PROVIDE DETAILED SHOP DRAWINGS TO ENGINEER PRIOR TO PURCHASING OR INSTALLING ANY EQUIPMENT Y DEVIATIONS IN SIZES, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE
- ENGINEER OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER. Z THE CONSTRUCTION MANAGER, GENERAL CONTRACTOR, OR WHOMEVER HOLDS THE PRIME CONTRACT(S) FOR THIS CONSTRUCTION IS RESPONSIBLE FOR THE COORDINATION, APPEARANCE, SCHEDULING AND TIMELINESS OF THE WORK OF ALL TRADES, CONTRACTORS, SUPPLIERS, INSTALLERS, ETC. POOR OR UNTIMELY WORK ON THE PART OF ANY SUBCONTRACTOR SHALL BE RESOLVED BY THE PARTY
- WHO ENGAGED THEM ON THIS PROJECT. AA WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEER BEFORE AFFECTING INSTALLATION. REFER ALSO TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS, CEILING HEIGHTS AND OTHER DETAILS OF THESE DOCUMENTS, AS APPLICABLE.
- AB WHERE FIRE-RATED CEILING ASSEMBLIES ARE NOTED, PROVIDE UL-LISTED FIRE-RATED GYPSUM BOARD OR PRE-MANUFACTURED ENCLOSURES ABOVE LUMINAIRES, CEILING DEVICES, ETC. IN OR ON CEILING, AS REQUIRED TO MAINTAIN CEILING RATINGS.
- AC COORDINATE THE LOCATION OF DRAINS, ELECTRICAL OUTLETS, GAS OUTLETS, ETC. WITH ALL CASEWORK, KITCHEN EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC. PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR(S).
- AD ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITER'S LABORATORIES OR OTHER APPROVED LISTING AGENCY. APPROVAL AND LABELING OF INDIVIDUAL COMPONENTS ON AN ASSEMBLY IS NOT ACCEPTABLE AS MEETING THIS REQUIREMENT, UNLESS WAIVED BY THE ENGINEER IN WRITING.
- AE ALL WIRING SYSTEMS SHALL BE INSTALLED WITH A MINIMUM OF SPLICES. CONDUCTORS, WHETHER SINGLE OR MULTI-PAIR, SHALL BE INSTALLED CONTINUOUS INSOFAR AS POSSIBLE FROM TERMINAL POINT TO TERMINAL POINT. AF NO CONDUIT, SUPPORTS, ETC. SHALL BE RUN THROUGH ACCESS CLEARANCES OF EQUIPMENT BY OTHER TRADES (I.E. VAV BOXES).
- COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION. AG ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT
- ANY EXISTING SERVICE OR SUB-SERVICE FOR SAFETY PURPOSES. PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. AH ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, DIRECTLY FROM THE BUILDING STRUCTURE. DO NOT
- SUPPORT WORK FROM OTHER TRADES EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER AND CONSENT AI WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY, THE RESPONSIBLE CONTRACTOR SHALL
- WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME, PROVIDING PREMIUM TIME AS NEEDED. AJ REFER TO ARCHITECTURAL WALL ELEVATIONS (WHERE GIVEN) FOR HEIGHTS AND MOUNTING RELATIONSHIP OF OUTLETS AND
- EQUIPMENT. IF IN DOUBT, CONTACT ENGINEER FOR DIRECTION PRIOR TO ROUGH IN.
- AK FLUSH OR PEDESTAL TYPE FLOOR OUTLETS/BOXES, AS INDICATED ON PLAN, SHALL BE LOCATED BY DIMENSIONS PROVIDED BY THE ARCHITECT, UNLESS OTHERWISE SHOWN ON PLANS. IF IN DOUBT, CONTACT THE ENGINEER PRIOR TO ROUGHING-IN ANY WORK. AL AS APPLICABLE, REFER TO ARCHITECTURAL PHASING PLANS AND PHASING BOUNDARIES ON THESE DRAWINGS FOR SEQUENCING OF WORK, FULL EXTENT OF AREAS INVOLVED, EXTENT OF CEILING WORK, ETC. PROVIDE TEMPORARY CONNECTIONS FOR CIRCUITS AND
- WORK AS REQUIRED TO MAINTAIN SEQUENCE OF THE WORK FROM PHASE TO PHASE. AM THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR HIS WORK. ALL CUTTING AND PATCHING SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S STANDARDS FOR SUCH WORK.
- AN ALL WORK SHALL BE CONCEALED UNLESS SPECIFICALLY INDICATED TO BE EXPOSED, OR REQUIRED TO BE EXPOSED. IF IN DOUBT, CONTACT THE ENGINEER FOR CLARIFICATIONS PRIOR TO INSTALLING ANY SUCH WORK.
- AO INTERRUPTION OF ANY EXISTING SERVICES SHALL BE COORDINATED WITH THE OWNER, GENERAL CONTRACTOR, UTILITY COMPANY AS NECESSARY, AND THE ARCHITECT, AT LEAST TWO WEEKS IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED TWO WEEKS IN
- ADVANCE, IN WRITING. IF UTILITY COMPANY REQUIRES A LONGER NOTIFICATION PERIOD, SO PROVIDE. AP WHERE BACKBOXES ARE LOCATED IN THE SAME VERTICAL CHANNEL/STUD SPACE ON OPPOSITE SIDES OF THE SAME WALL, PROVIDE
- SOUND-INSULATING PUTTY AROUND BOXES AS REQUIRED TO ELIMINATE SOUND TRANSMISSION FROM ROOM TO ROOM. AQ JUNCTION BOXES LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE LOCATED NO MORE THAN 36" ABOVE CEILING LEVEL. LABEL EACH BOX IN AREA OF WORK WITH A PERMANENT MARKER OR IN ACCORDANCE WITH SPECIFICATIONS, WHICHEVER IS MORE STRINGENT. AR ALL MATERIALS FURNISHED AND ALL WORK INSTALLED SHALL COMPLY WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL
- CODES, NATIONAL FIRE CODES OF THE NATIONAL FIRE PROTECTION ASSOCIATION, THE REQUIREMENTS OF LOCAL UTILITY COMPANIES, AND WITH THE REQUIREMENTS OF ALL GOVERNMENTAL AGENCIES OR DEPARTMENTS HAVING JURISDICTION. IF ANY CONFLICTS OR DISCREPANCIES OCCUR THE MOST STRINGENT SHALL APPLY.
- DIMENSIONS SUPPLIED TO THE CONTRACTOR. AT NOISY WORK, WORK OUTSIDE CONSTRUCTION BARRIERS, WORK IN OCCUPIED AREAS, ETC. SHALL BE PERFORMED AFTER HOURS OR ON
- WEEKENDS. COORDINATE EXACT SCHEDULING WITH FACILITY PRIOR TO CONSTRUCTION. AU ALL ITEMS HAVING KEYED LOCKS/OPERATORS SHALL HAVE CORED LOCKS/OPERATORS. ALL KEYING SHALL MATCH THE OWNER'S

AS DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR

- EXISTING KEY-WAYS. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO CONSTRUCTION. AV REFER TO ARCHITECTURAL PLANS FOR PHASING REQUIREMENTS. WORK SHALL BE COMPLETED IN PHASES PER THE PHASING PLAN AND
- AS COORDINATED WITH OWNER AND GENERAL CONTRACTOR. PROVIDE ALL REQUIRED INCREMENTAL INSPECTIONS, CERTIFICATIONS, ETC. AND ALL TEMPORARY SERVICES AS REQUIRED BY OWNER TO ACCOMPLISH THE PHASING PLAN.

#### **ELECTRICAL DEMOLITION NOTES**

- A DOTTED LINES INDICATE ITEMS FOR REMOVAL (UON) AND SOLID HALFTONE LINES INDICATE EXISTING ITEMS TO REMAIN. B THE CONTRACTOR SHALL MAINTIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS: THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.
- C LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.
- D REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS).
- E COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED
- F COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- G PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED. H CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS / CEILINGS AS REQUIRED WHERE DEVICES ARE BEING REMOVED OR
- I UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC
- J EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS. K CONTRACTOR SHALL SEAL ALL EXISTING AND NEW PENETRATIONS OF BUILDING ENVELOPE (EXTERIOR WALLS, ROOF, ETC.) WATER-TIGHT AND AS APPROVED BY ARCHITECT AND ENGINEER. ROOFING SHALL BE RESTORED BY A LICENSED ROOFING CONTRACTOR
- REFER TO ARCHITECTURAL AND ENGINEERING PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS. L ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION

BASED ON WRITTEN INSTRUCTIONS AND DETAILS FROM ROOFING MANUFACTURER AS REQUIRED TO MAINTAIN ROOF WARRANTY.

DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION. M CONTRACTOR TO VERIFY THAT THERE ARE NO ELECTRICAL CIRCUITS IN CHASES BEING REMOVED UNDER DEMOLITION WHICH REMAIN IN SERVICE AND CANNOT BE REMOVED. SHOULD SUCH CIRCUITS BE ENCOUNTERED, THE CONTRACTOR IS TO REROUTE AND RECONNECT AS REQUIRED TO MAINTAIN SERVICE.

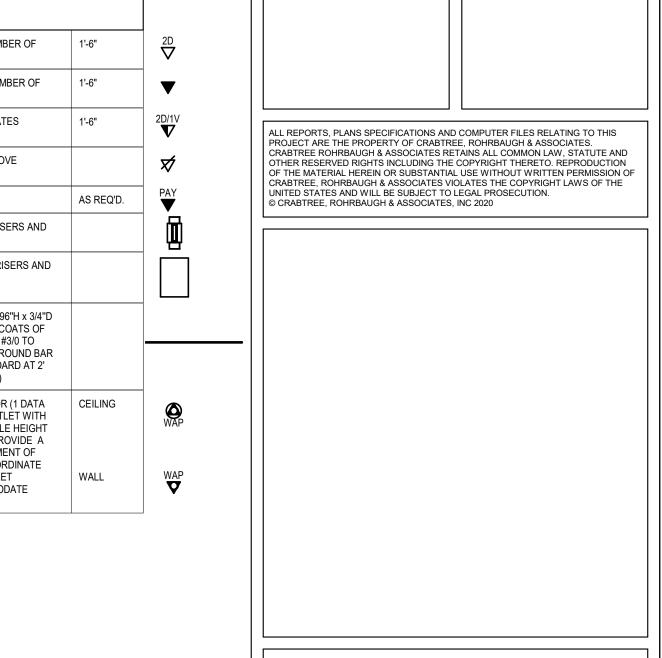
DESCRIPTION	MOUNTING HEIGHT	SYMBOL
LIGHTING CONTROLS	HEIGHT	STMBOL
LIGHT SWITCH: LOW VOLTAGE (WHEN PRESENT, # INDICATES	46"	]   <b>\$</b>
QUANTITY OF CHANNELS)	40"	\$ N
NIGHT LIGHT SWITCH WITH CONSTANTLY ILLUMINATED HANDLE SURGICAL LIGHT INTENSITY CONTROL	46"	\$ SL
OW VOLTAGE DIMMER SWITCH (WHEN PRESENT, # INDICATES	46"	\$ D#
QUANTITY OF CHANNELS)	46"	\$ <sup>G</sup>
GRAPHIC TOUCHSCREEN CONTROL STATION  INE VOLTAGE SWITCH	46"	\$ LV
INE VOLTAGE THREE-WAY, FOUR-WAY SWITCH	46"	\$ LV3 \$ LV4
INE VOLTAGE THREE-WAY, FOUR-WAY DIMMER SWITCH	46"	\$ LV3D \$ LV4
KEYED SWITCH	46"	<b>\$</b> <sup>K</sup>
OCCUPANCY OR VACANCY SENSOR SWITCH	46"	\$ OS \$ VS
OCCUPANCY OR VACANCY SENSOR SWITCH WITH DIMMING	46"	\$ DOS \$ T
CCUPANCY OR VACANCY SENSOR, CEILING MOUNT	46" CLG	1
OCCUPANCY SENSOR, CORNER MOUNT	CLG	
DAYLIGHT SENSOR	AS NOTED	<u></u>
PHOTOCELL	AS NOTED	<b>©</b>
IGHTING RELAY	AS NOTED	LR I
POWER OUTLETS		]
SIMPLEX RECEPTACLE (TEXT INDICATES NEMA TYPE)	1'-6"	φφ
DUPLEX RECEPTACLE	1'-6"	ф
SLASH THROUGH ANY DEVICE INDICATES MOUNTING ABOVE COUNTERTOP 4" ABOVE BACKSPLASH		<i>₽</i> <del>₽</del>
ILLED CENTER BAR INDICATES INTEGRAL GROUND FAULT PROTECTION (GFCI)	1'-6"	8
DEAD FRONT GFCI DEVICE, LABEL AND INSTALL IN READILY		୍ର ତ୍ର
DUPLEX RECEPTACLE WITH TWO INTEGRAL USB CHARGING PORTS	1'-6"	<u> Р</u>
USB CHARGING OUTLET WITH FOUR INTEGRAL USB PORTS	1'-6"	-
SB CHARGING OUTLET WITH FOUR INTEGRAL USB PORTS	1-0	0
GANG RECEPTACLE IN COMBINATION WITH SWITCH (PROVIDE DIVIDER IF LIGHTING CIRCUIT IS 277V)	46"	<b>ф</b> c/s
OUPLEX RECEPTACLE, CEILING MOUNTED	CLG	ф
QUADRUPLEX RECEPTACLE	1'-6"	<b>₩</b>
UNCTION BOX, CEILING OR WALL		Φ Ψ   •• ••
/OLTAGE/2 POLE RECEPTACLE, TEXT INDICATES NEMA TYPE //OLTAGE/3 POLE RECEPTACLE, TEXT INDICATES NEMA TYPE	1'-6"	Ů ♥ ♣ ♥
T' INDICATES SAFETY TYPE, TAMPER RESISTANT OUTLET(S)		
SS INDICATES SURGE SUPPRESION TYPE OUTLET(S)		фss
GROUND FAULT PROTECTED DUPLEX WITH WEATHER-PROOF WHILE IN USE" TYPE DIE-CAST METAL COVERPLATE WITH	2'-2"	WP WP
OCKABLE ENCLOSURE AT OUTLET - SEE SPECIFICATIONS		-
DUPLEX FOR ELECTRIC WATER COOLER: COORDINATE EXACT  OCATION WITH PLUMBING CONTRACTOR TO CONCEAL OUTLET  BEHIND COOLER, PROVIDE READILY ACCESSIBLE GFI DEVICE AT 18"		<b>G</b> EWC
ADJACENT TO WATER COOLER		ļ.,
BOX ON ANY DEVICE INDICATES SURFACE MOUNTED BACKBOX/WIREMOLD		Ф
CIRCLE ON ANY DEVICE INDICATES DEVICE FED FROM STUB UP CONDUIT		ф
FIRE ALARM		1
MAIN CONTROL PANEL CENTRAL PROCESSING UNIT (CPU)	6'-6" TO TOP	FACP
REMOTE L.C.D. FIRE ALARM ANNUNCIATOR	54"	FAA
REMOTE FIRE ALARM ANNUNCIATOR W/ MICROPHONE	54"	FAAM
OCAL OPERATOR CONSOLE  POWER SUPPLY/CONTROL FOR AUDIO/VISUAL DEVICES	46"	NAC
FIRE ALARM CONTROL EXTENDER	40	EXT
POST INDICATOR VALVE		PIV
PULL STATION : DOUBLE ACTION	46" TO LEVER	E
EYED, LOCKED PULL STATION : DOUBLE ACTION. STATION SHALL	46" TO	FK
ONLY BE OPERABLE VIA KEY IN POSSESSION OF STAFF.	LEVER	
AUDIO/VISUAL NOTIFICATION APPLIANCE	WALL, CLG WALL, CLG	
/ISUAL-ONLY NOTIFICATION APPLIANCE	WALL, CLG	
BELL / LIGHT	80"	BL
BELL ONLY	80"	В
PHOTO-ELECTRIC SMOKE DETECTOR	CLG	SD
PHOTO-ELECTRIC SMOKE DETECTOR FOR PATIENT ROOM MONITORING (SEE RISER)	CLG	SDP
HEAT DETECTOR	CLG	HD
CARBON MONOXIDE DUCT DETECTOR	ABOVE CEILING	CD
CARBON MONOXIDE ALARM: SINGLE STATION W/SOUNDER BASE	CLG	СМ
CARBON MONOXIDE AUDIO/VISUAL NOTIFICATION APPLIANCE	WALL	FCM
DOOR HOLDER: WALL TYPE	WALL ARY DOOR	
DOOR HOLDER : CLOSURE TYPE  DUCT SMOKE DETECTOR	ABV DOOR ABV CLG	DH C
CONNECTION TO SPRINKLER FLOW SWITCH WITH ADDRESSABLE	MDV OLG	1=
MODULE		FS
CONNECTION TO SPRINKLER TAMPER SWITCH WITH ADDRESSABLE MODULE		TS
H.V.A.C. SMOKE DAMPER CONNECTION		SM
FLUSH MOUNTED REMOTE ALARM INDICATING STATION/TEST SWITCH	7'-6"	RI
ADDRESSABLE RELAY MODULE		R
		СН

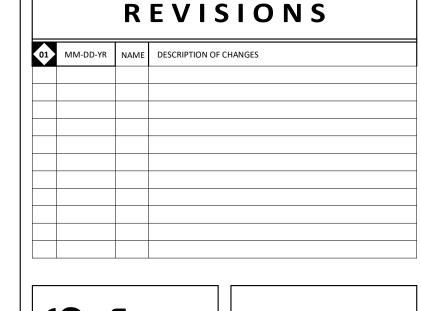
DEVICE USED FOR ELEVATOR CONTROL

DESCRIPTION	MOUNTING HEIGHT	SYMBOL
LIGHTING FIXTURES AND EQUIPMENT	-	
REFER TO LUMINAIRE SCHEDULE FOR EXACT FIXTURE		
SPECIFICATIONS, MOUNTING HEIGHTS, ETC.  SURFACE OR SUSPENDED CEILING FIXTURE		
SURFACE OR SUSPENDED CEILING FIXTURE		
RECESSED CEILING FIXTURE		
RECESSED CEILING FIXTURE		
POLE MOUNTED AREA LIGHT WITH CONCRETE BASE		어 <u></u>
		$\sim$
LIGHTED BOLLARD WITH CONCRETE BASE		<b>©</b>
EMERGENCY BATTERY WALL-PACK		
WALL MOUNT FIXTURE		—————————————————————————————————————
TRACK COMPLETE WITH DOWER CHIRDLES AND FIVEHER HEADS		
TRACK COMPLETE WITH POWER SUPPLIES AND FIXTURE HEADS  FLOODLIGHT		<u> </u>
EXIT LIGHT (CEILING, END, WALL MOUNT) WITH OR WITHOUT		_
DIRECTIONAL ARROWS		$\Theta \Theta $
STRIP FIXTURE		Ю
CROSS-HATCHING INDICATES LIGHT IS POWERED FROM THE EMERGENCY-CRITICAL BRANCH		
PARALLEL-HATCHING INDICATES LIGHT IS POWERED FROM THE		
EMERGENCY-LIFE SAFETY BRANCH		
REMOTE LIGHT FIXTURE DRIVER	AS NOTED	RD
REMOTE BATTERY BACKUP	AS NOTED	RB INV
CENTRAL BATTERY INVERTER	AS NOTED	PHASE
MISCELLANEOUS		NEUTRAL GROUND
CONDUIT CONCEALED IN WALLS OR IN CEILING SPACE: ARROW(S) INDICATE(S) HOME RUN & # OF CIRCUITS: HASHMARKS INDICATE # OF CONDUCTORS.		
NON-REVERSING MOTOR STARTER SNAP SWITCH	AS NOTED	\$ <sup>M</sup>
MOMENTARY CONTACT SWITCH	46"	\$ MC
HAND-OFF-AUTO 3-POSTION SWITCH	46"	\$ <sup>HOA</sup>
DISCONNECT SWITCH	5'-0"	<b>'</b> □
MAGNETIC STARTER	5'-0"	⊠
MAGNETIC COMBINATION STARTER	5'-0"	<b>'</b>
VARIABLE FREQUENCY DRIVE	5'-0"	<b>=</b>
ENCLOSED FLUSH MTD. CIRCUIT BREAKER	5'-0"	
MUSHROOM SWITCH	46"	<u> </u>
PUSHBUTTON STATION WITH 1, 2, OR 3 BUTTONS.	46"	
PANELBOARD, SURFACE OR FLUSH MOUNTED, HATCHING INDICATES EMERGENCY	6'-6" TO TOP	
TRANSFORMER	AS NOTED	
		ا کا
EQUIPMENT HARDWIRE CONNECTION (SEE DETAIL)		8
KITCHEN EQUIPMENT OUTLET COUPLING CONNECTION (SEE DETAIL)		<b>Q</b>
MOTOR CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE		<b>∼</b>
PLUMBING FIXTURE SOLENOID VALVE/ELECTRIC EYE SENSOR CONNECTION. COORDINATE EXACT CONNECTION REQUIREMENTS		<b>⊕</b>
PLUMBING FIXTURE ELECTRIC EYE TRANSFORMER CONNECTION.		
TRANSFORMER SHALL BE 120V-24V. MOUNT ABOVE SUSPENDED ACCESSIBLE CEILING IN J-BOX. PROVIDE ADDITIONAL TRANSFORMERS OF SAME TYPE AS/IF NEEDED		⊗
PROVIDE CONNECTION TO HAND DRYER (SEE ARCHITECTURAL SPECIFICATIONS)	VERIFY WITH ARCHITECT	8
SURGE PROTECTION DEVICE (SURFACE OR FLUSH MOUNTED)		□ <del>□</del> SPD
GENERATOR ANNUNCIATOR PANEL (SURFACE OR FLUSH MOUNTED)	46"	□ च GEN-A
- SEE SPECIFICATIONS		
CONDUIT UP		0
CONDUIT DOWN		
FLEXIBLE CONDUIT  GROUND BUS BAR ON INSULATED STANDOFFS	2'-0"	
EQUIPMENT TAG, REFER TO EQUIPMENT SCHEDULE	4-0	EQUIP-#
MECHANICAL EQUIPMENT DESIGNATOR (SEE MECH. SCHEDULES)		EQUIP-#
TAGGED NOTE		
DEWOOD TAG		<u> </u>
REVISION TAG		

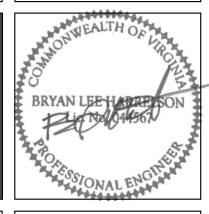
ABBREVIATIONS	HEIGHT	SYMB
UNLESS OTHERWISE NOTED		UON
OWNER FURNISHED CONTRACTOR INSTALLED		OFCI
OWNER FURNISHED OWNER INSTALLED		OFOI
CONTRACTOR FURNISHED CONTRACTOR INSTALLED		CFCI
CONTRACTOR FURNISHED OWNER INSTALLED		CFOI
INDICATES EMERGENCY POWER		EM
WIREGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED		WG
WEATHERPROOF - NEMA-3R, WET LOCATION LISTED. PROVIDE COVERS, RATINGS, ETC, AS SUITABLE FOR OUTDOORS.		WP
EXPLOSION PROOF - PROVIDE WIRING METHODS, ENCLOSURES, RATINGS, ETC. AS SUITABLE FOR HAZARDOUS LOCATION.		XP
SPECIAL OUTLETS		
FLOORBOX, AS SCHEDULED	FLOOR	FB#
POKE-THRU, AS SCHEDULED	FLOOR	<b>P</b> #
WALLBOX, AS SCHEDULED	WALL	WB#
AUDIO/VISUAL SYSTEM OUTLET WITH DUPLEX RECEPTACLE, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION	1'-6"	<b>⊘</b> AV
COMBINATION POWER AND DATA OUTLET LOCATION, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION	1'-6"	<b>©</b>
COMBINATION POWER AND DATA OUTLET LOCATION, GFCI DUPLEX RECEPTACLE, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION	1'-6"	
OVERHEAD PROJECTOR: PROVIDE DUPLEX RECEPTACLE, ONE DATA, HDMI, 3.5mm AUDIO, AND VGA OUTLET ON (3) PLATES	CLG	<b>å</b>
SPECIAL VIDEO SYSTEM SIGNAL INPUT		-NA-
SURFACE PLUG-MOLD		
SURFACE WIRE-MOLD		
POWER POLE AS NOTED		PP
TELEVISION		
TELEVISION HEADEND (SPLITTERS/AMPLIFIERS/DISTRIBUTION)	46"	TV
TELEVISION SYSTEM OUTLET WITH DUPLEX RECEPTACLE, COORDINATE LOCATION WITH WALL BRACKET WHERE APPLICABLE	7'-0"	<b>⊘</b> <sup>™</sup>
AV SYSTEMS		
	REFER TO	<b>金</b> 金
PROJECTOR WITH MOUNT (CEILING OR WALL AS INDICATED)		<b>Φ</b> Υ
	DRAWINGS	( )
LOCAL SOUND SPEAKER: CEILING	CLG	(S)
	CLG CLG	(MA)
LOCAL SOUND SPEAKER: CEILING WIRELESS MICROPHONE ANTENNA PAGING SPEAKER: WALL	CLG CLG 8'-0"	(MA)
LOCAL SOUND SPEAKER: CEILING WIRELESS MICROPHONE ANTENNA PAGING SPEAKER: WALL MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.	CLG CLG	
LOCAL SOUND SPEAKER: CEILING WIRELESS MICROPHONE ANTENNA PAGING SPEAKER: WALL	CLG CLG 8'-0"	(E)
LOCAL SOUND SPEAKER: CEILING WIRELESS MICROPHONE ANTENNA PAGING SPEAKER: WALL MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.	CLG CLG 8'-0" 1'-6" REFER TO	(S) (S) (S) (S)
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6"	(S) (S) (S) (S)
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.  BLUETOOTH INPUT MODULE  AV TOUCHSCREEN CONTROL STATION	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6" 1'-6"	(A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.  BLUETOOTH INPUT MODULE	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6"	(S) (S) (S) (S)
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.  BLUETOOTH INPUT MODULE  AV TOUCHSCREEN CONTROL STATION	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6" 1'-6" 46" REFER TO	(A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.  BLUETOOTH INPUT MODULE  AV TOUCHSCREEN CONTROL STATION  LOCAL SOUND SYSTEM HEADEND	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6" 1'-6" 46" REFER TO	(A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.  BLUETOOTH INPUT MODULE  AV TOUCHSCREEN CONTROL STATION  LOCAL SOUND SYSTEM HEADEND  PANEL FURNITURE  PANEL FURNITURE DUPLEX RECEPTACLE. PROVIDE ALL WIRING AS REQUIRED, COORDINATE EXACT INSTALLATION REQUIREMENTS	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6" 1'-6" 46" REFER TO	(S)
LOCAL SOUND SPEAKER: CEILING  WIRELESS MICROPHONE ANTENNA  PAGING SPEAKER: WALL  MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS.  WIRELESS MICROPHONE ANTENNA, WALL MOUNT  AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.  BLUETOOTH INPUT MODULE  AV TOUCHSCREEN CONTROL STATION  LOCAL SOUND SYSTEM HEADEND  PANEL FURNITURE  PANEL FURNITURE DUPLEX RECEPTACLE. PROVIDE ALL WIRING AS REQUIRED, COORDINATE EXACT INSTALLATION REQUIREMENTS AND LOCATIONS WITH OWNER'S PANEL FURNITURE VENDOR  PANEL FURNITURE DATA/VOICE OUTLET. PROVIDE ALL WIRING AS REQUIRED, COORDINATE EXACT INSTALLATION REQUIREMENTS	CLG CLG 8'-0" 1'-6" REFER TO SPECS. 1'-6" 1'-6" 46" REFER TO	(S)

DESCRIPTION	MOUNTING HEIGHT	SYMBO
DATA / VOICE		
DATA OUTLET: NUMBER BESIDE OUTLET INDICATES NUMBER OF DATA JACKS. NO NUMBER INDICATES 1 JACK.	1'-6"	<sup>2D</sup> ✓
VOICE OUTLET: NUMBER BESIDE OUTLET INDICATES NUMBER OF VOICE JACKS. NO NUMBER INDICATES 1 JACK.	1'-6"	•
COMBINATION OUTLET : NUMBER BESIDE OUTLET INDICATES NUMBER OF DATA/VOICE JACKS	1'-6"	2D/1V
SLASH THROUGH ANY DEVICE INDICATES MOUNTING ABOVE COUNTERTOP 4" ABOVE BACKSPLASH		Ø
OUTLET (VOICE ONLY): PAYPHONE TYPE	AS REQ'D.	PAY
DATA RACK: TWO POST. REFER TO COMMUNICATIONS RISERS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.		<u> </u>
DATA RACK: FOUR POST. REFER TO COMMUNICATIONS RISERS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.		
TELECOMMUNICATIONS SYSTEM BACKBOARD. PROVIDE 96"H x 3/4"D FIRE-RETARDENT PLYWOOD BACKBOARD WITH TWO (2) COATS OF NON-CONDUCTIVE, FIRE-RETARDANT LIGHT GRAY PAINT, #3/0 TO GROUND BAR AT MAIN SERVICE SWITCHBOARD, 30-PT GROUND BAR AND A 6'-0", #3 AWG PIGTAIL AT BACKBOARD. INSTALL BOARD AT 2' AFF. (LENGTH OF BOARD AS INDICATED ON FLOOR PLAN)		
WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1 DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACEPLATE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE A 20" COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE	CEILING	WAP
EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.	WALL	WAP









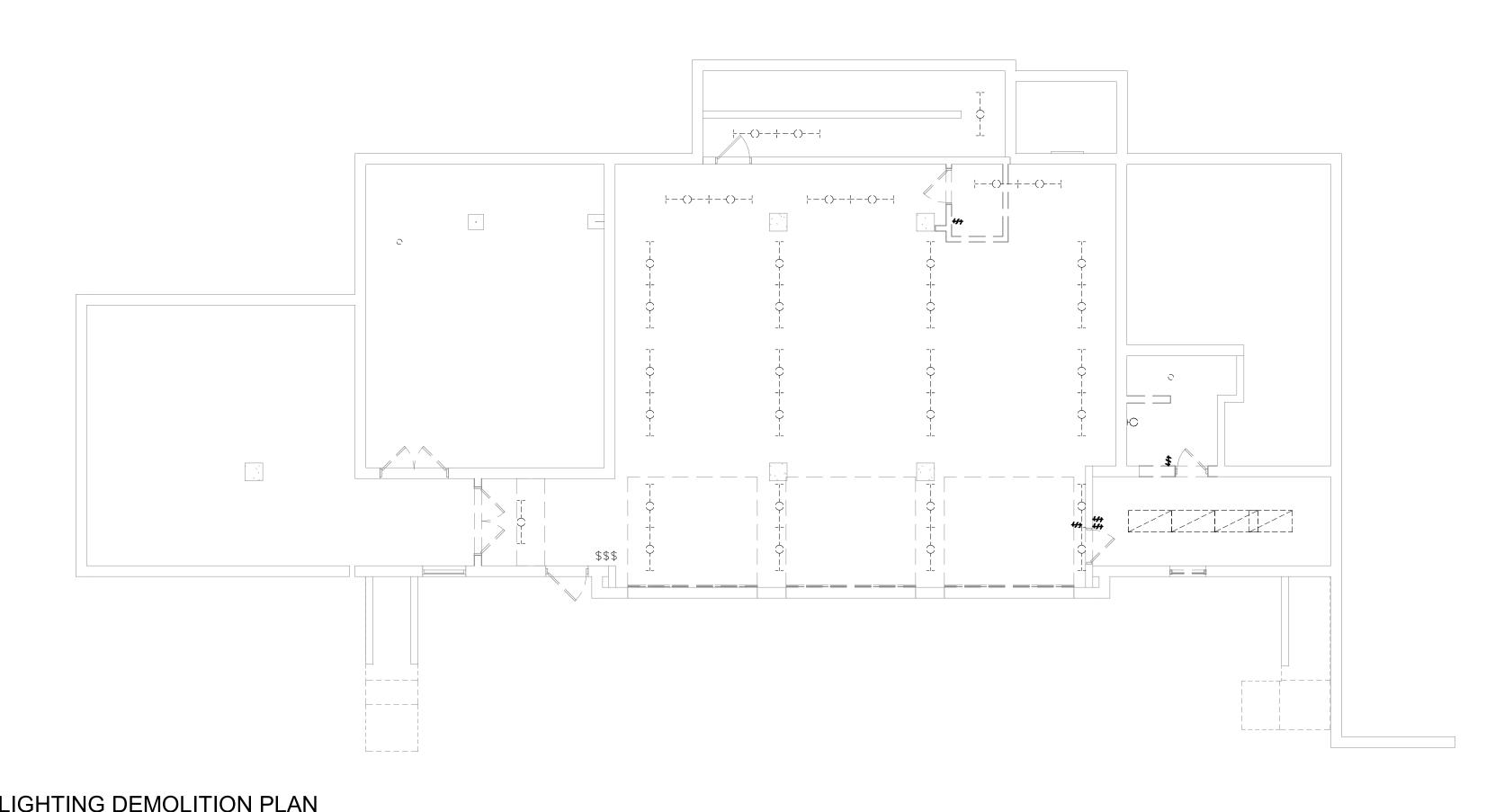
**PROJECT** 

ELECTRICAL LEGEND

Fluvanna Co. AUGUST 28, 2020

#### ELEC - LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	BASIS OF DESIGN	EQUALS	MOUNTING	LAMPS / CCT	MINIMUM LUMENS	MAXIMUM WATTAGE	VOLTAGE	REMARKS
A1	2X2 RECESSED FIXTURE	LITHONIA EPANL 22 34L 40K M4	METALUX, DABRITE EQUIVALENT	LAY IN	4000K	3270	31	120	
A1E	2X2 RECESSED FIXTURE	LITHONIA EPANL 22 34L 40K M4	METALUX, DABRITE EQUIVALENT	LAY IN	4000K	3270	31	120	SHALL BE EQUIPPED WITH EMERGENCY BATTERY PACK.
A2	6" RECESSED CAN LIGHT FIXTURE	LITHONIA LDN6 40/15 L06 MVOLT	PRESCOLITE, PORTFOLIO, EQUIVALENT	RECESSED	4000K	1500	18	120	DAMP LOCATION LISTED.
A3	AREA LIGHT T2M, 15FT POLE	LITHONIA DSX1 LED P8 40K T2M MVOLT	KIM, GARDCO EQUIVALENT	POLE	4000K	24635	207	120	
A4E	EXTERIOR EMERGENCY WALLPACK	LITHONIA WST LED P2 40K MVOLT	DUALITE, EMERGILITIE EQUIVALENT	WALL	4000K	3000	25	120	
X1	SINGLE FACE EXIT SIGN. REFER TO LIGHTING PLANS AND ARCHITECTURAL PLANS TO DETERMINE MOUNTING SURFACE WITH NICKEL-CAMDIUM BATTERY BACKUP.	LITHONIA EDGC EL	DUALITE, EMERGILITIE EQUIVALENT	UNIVERSAL	N/A	N/A	2	120	SHALL BE EQUIPPED WITH EMERGENCY BATTERY PACK.



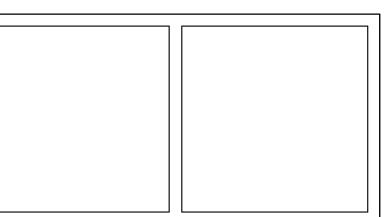
#### **ELECTRICAL LIGHTING NOTES**

- A REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE
- C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. ALSO, MARK
- INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER. D LOCATE CHAIN-HUNG INDUSTRIAL FIXTURES IN MECHANICAL ROOMS TO AVOID DUCTWORK AND PIPING, TO MAXIMIZE AVAILABLE LIGHT. SPACE AROUND EQUIPMENT, AIR HANDLERS, ETC. TO PROVIDE ADEQUATE LIGHTING TO ALL AREAS OF ROOM. PROVIDE ADDITIONAL FIXTURES OF SAME TYPE AS NEEDED TO FULFILL THIS REQUIREMENT.
- E LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.
- F LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.
- G ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGERPRINTS OR DIRT DEPOSITS. IT IS PREFERRED THAT FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AIR FILTERS ARE CHANGED, REMOVE BAGS. ANY LOUVER OR CONE SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.
- H RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE FORCE REQUIRED INSERTING LAMPS, TRIMS, LENSES, LOUVERS, OR DOOR FRAMES DOES NOT SHIFT HOUSING. ALL TRIMS SHALL BE COMPLETELY FLUSH WITH FINISHED CEILINGS AT COMPLETION OF CONSTRUCTION. I CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO UL924 LISTED

BLTC THEN TO EXIT SIGNS.

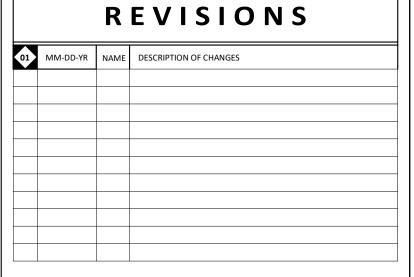
#### **TAGGED NOTES**

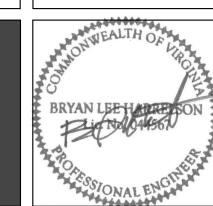
E13 EXISTING LIGHTING AND SWITCHING IN ROOM TO REMAIN. E14 PROVIDE NEW LINE VOLTAGE SWITCH AND CONNECT TO EXISTING FIXTURES TO REMAIN IN THIS ROOM.



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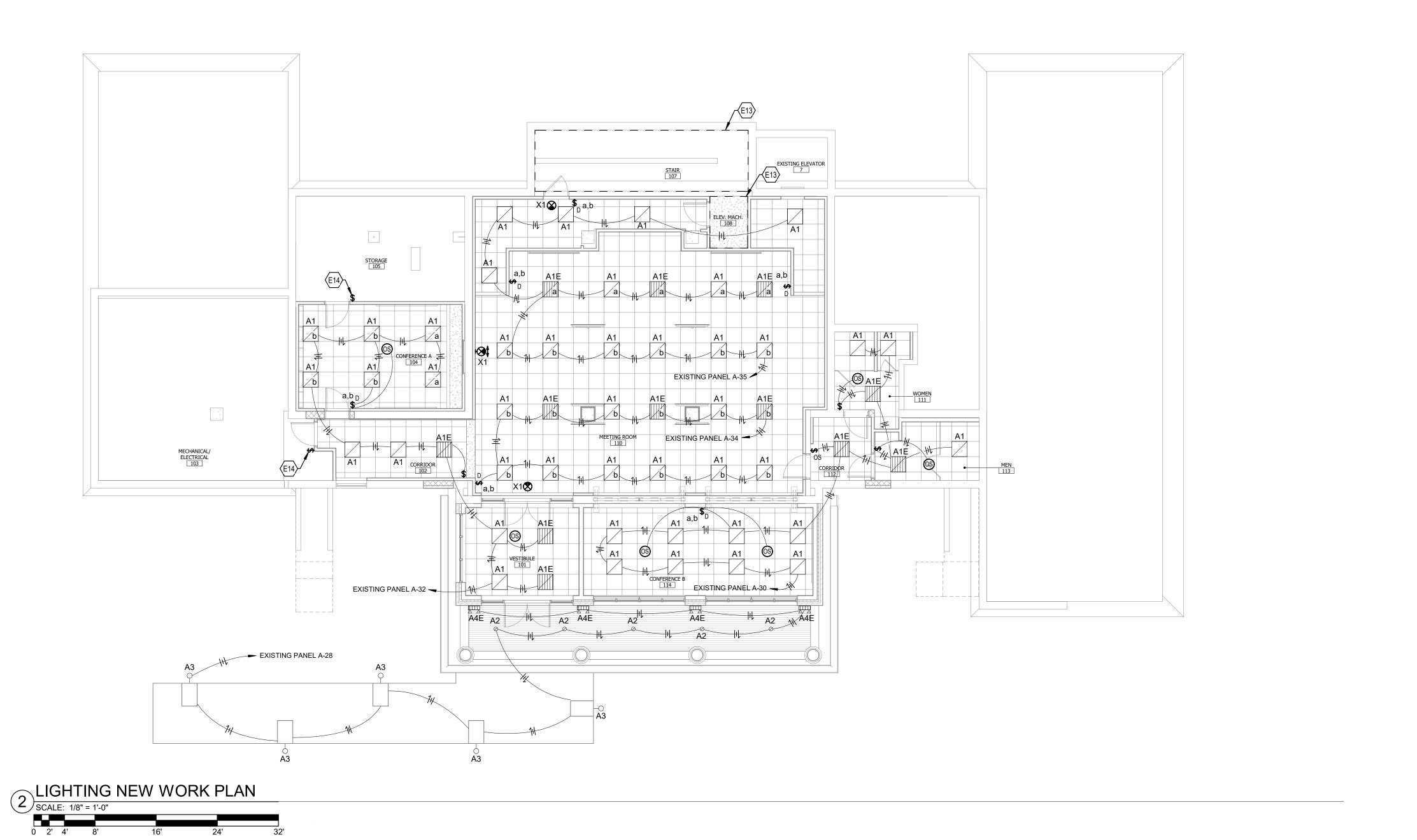


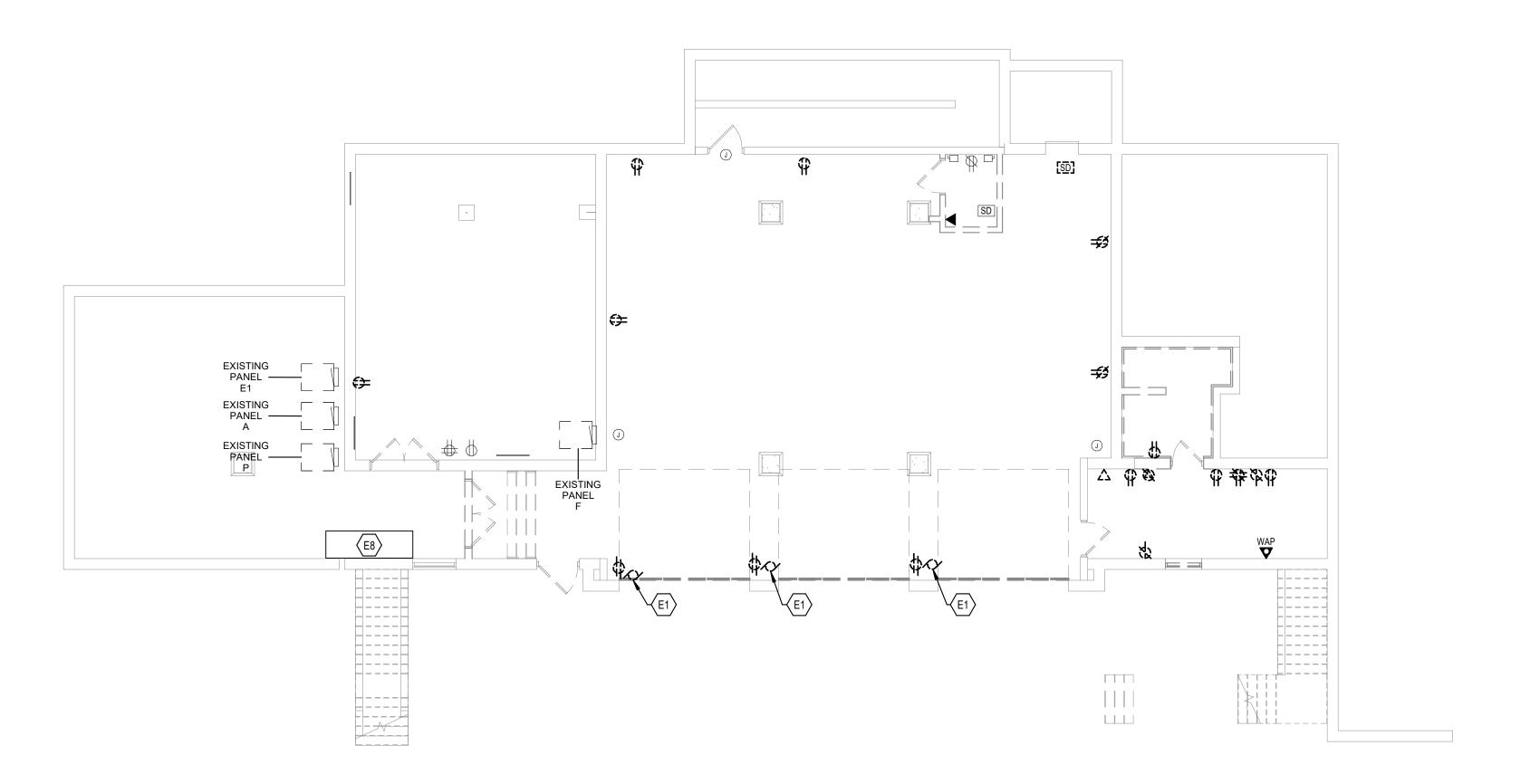
**PROJECT** 

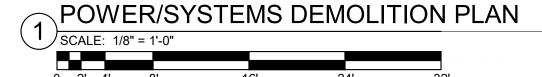
Fluvanna Co.

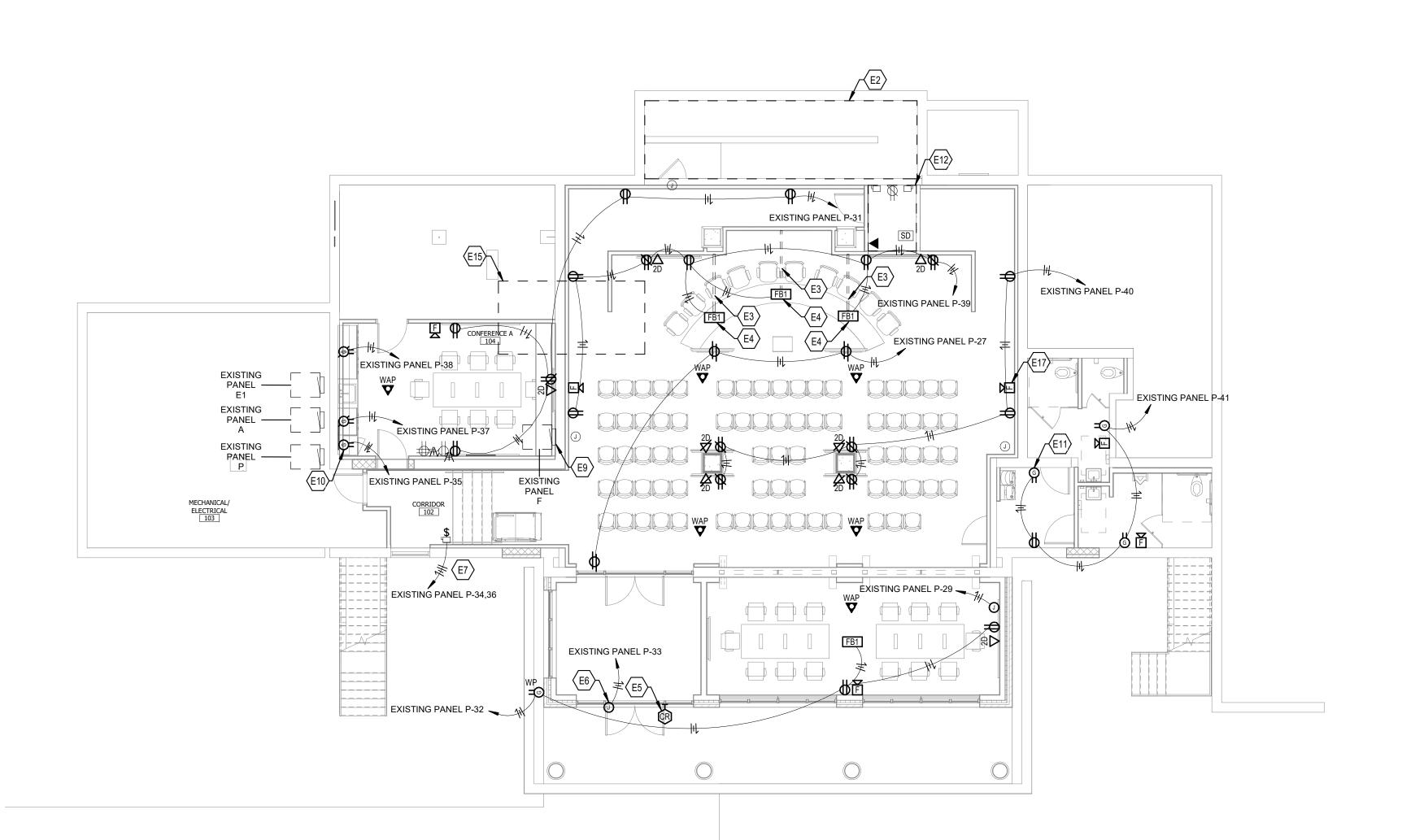
LIGHTING PLANS

1/8" = 1'-0"









POWER/SYSTEMS NEW WORK PLAN

SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16' 24' 32'

#### ELECTRICAL POWER NOTES

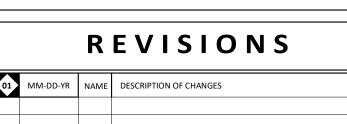
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- B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS
- C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES. SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- OCCUPANCY SENSOR OR ENERGY MANAGEMENT SYSTEM SHALL BE MARKED IN ACCORDANCE WITH NEC 406.3(E). E LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL
- BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL

#### **ELECTRICAL SYSTEMS NOTES**

- MOUNTED ELECTRICAL DEVICES.
- B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- AND SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS OF EACH SYSTEM. E THE CONTRACTOR SHALL ROUTE ALL "SYSTEM CONDUIT STUB-UPS" TO THE NEAREST CORRIDOR CABLING PATH (SEE "STUB-UP" DETAILS). REFER TO CABLING PATH INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.
- FOR SYSTEMS CABLING INTO THE CORRIDOR CABLING PATH. PROVIDE PULL STRINGS IN ALL NEW CONDUIT RUNS FOR SYSTEM CABLING INSTALLATION. G ALL DATA DROPS ARE TO BE TERMINATED IN THE IT CLOSET ON THE SECOND FLOOR IN A NEW PATCH PANEL.

#### **TAGGED NOTES**

- E1 DEMO EXISTING OVERHEAD DOOR CONTROLS AND POWER
- INFRASTRUCTURE BACK TO THE SOURCE. E2 NO NEW ELECTRICAL WORK IN THIS AREA.
- E3 TRENCH SLAB AND PROVIDE FLOORBOX FOR POWER, DATA AND AUDIOVISUAL CONNECTIONS. E4 PROVIDE FLOORBOX (WIREMOLD EVOLUTION OR EQUAL) FLUSH WITH FLOOR WITH THE FOLLOWING CONNECTIONS: (2) DUPLEX RECTPACLES, (4) DATA DROPS IN 2" CONDUIT AND 1-1/2" CONDUIT TO AV RACK STUBED OUT ADJACENT TO RACK.
- BY CONTRACTOR. E6 PROVIDE POWER AT DOOR FOR ACCESS CONTROL POWER SUPPLY.
- E7 PROVIDE DEDICATED 208V, 2P, 20A CIRCUIT FOR PLATFORM LIFT. E8 EXISTING ELECTRICAL EQUIPMENT TO REMAIN. E9 PANELBOARD IS EXISTING TO REMAIN. FACE OF PANEL SHALL BE
- FLUSH WITH NEW WALL. PROVIDE ALL PANEL ACCESSORIES TO ACCOMODATE THIS WORK. INCLUDING CONDUIT SUPPORTS, FITTINGS, EXTENSIONS, ETC. E10 PROVIDE GFI RECEPTACLE FOR UNDER-COUNTER REFRIGERATOR.
- E11 PROVIDE GFI RECEPTACLE FOR DRINKING FOUNTAIN/BOTTLE FILLER. COORDINATE EXACT LOCATION WITH APPROVED WATER COOLER SHOP DRAWINGS PRIOR TO ROUGHIN.
- E12 EXISTING ELECTRICAL EQUIPMENT IN ELEVATOR MACHINE ROOM TO REMAIN.
- E15 SERVER ROOM ON FLOOR ABOVE ROUTE ALL DATA CABLING TO THIS LOCATION ABOVE. PROVIDE 4" EZ PATH FIRE RATED SLEEVES AS NECESSARY.
- E17 PROVIDE NEW FIRE ALARM HORN/STROBE AND ALL REQUIRED EQUIPMENT TO TIE IN TO EXISTING SYSTEM.



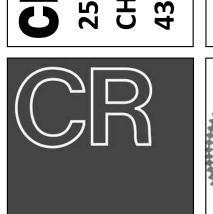
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01 MM-DD-YR NAME DESCRIPTION OF CHANGES





POWER/SYSTEMS PLANS

1/8" = 1'-0"

**PROJECT** Fluvanna Co.

AUGUST 28, 2020

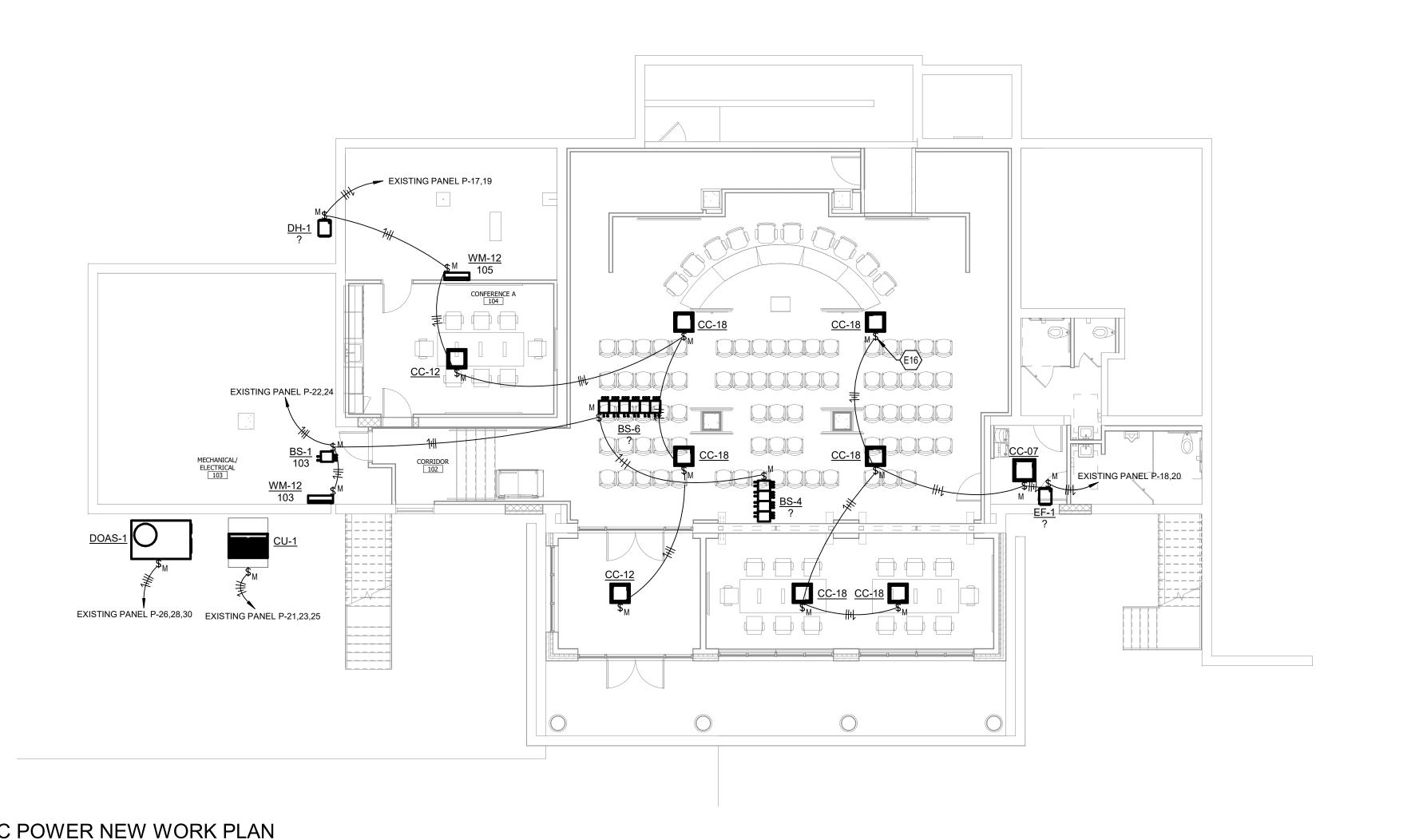
E5 MULLION MOUNT CARD READER BY OWNER, CABLING AND ROUGH IN

SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES D RECEPTACLES THAT ARE CONTROLLED BY AN AUTOMATIC MEANS SUCH AS

ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER

- A REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING
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- C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES,
- D REFER TO "SYSTEM INSTALLATION MATRIX" (ON SYSTEMS LEGEND SHEET)
- F CONTRACTOR SHALL PAINT ALL SYSTEMS CONDUIT STUB-UPS LIGHT BLUE



### **ELECTRICAL POWER NOTES**

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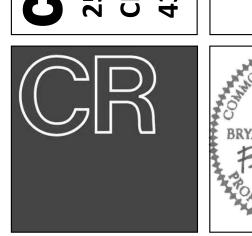
#### **TAGGED NOTES**

E16 TYPICAL: PROVIDE 2 POLE MOTORIZED SAFETY SWITCH MOUNTED ADJACENT TO HVAC EQUIPMENT TO SERVE AS DISCONNECTING MEANS, LABEL APPROPRIATELY.

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# REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES

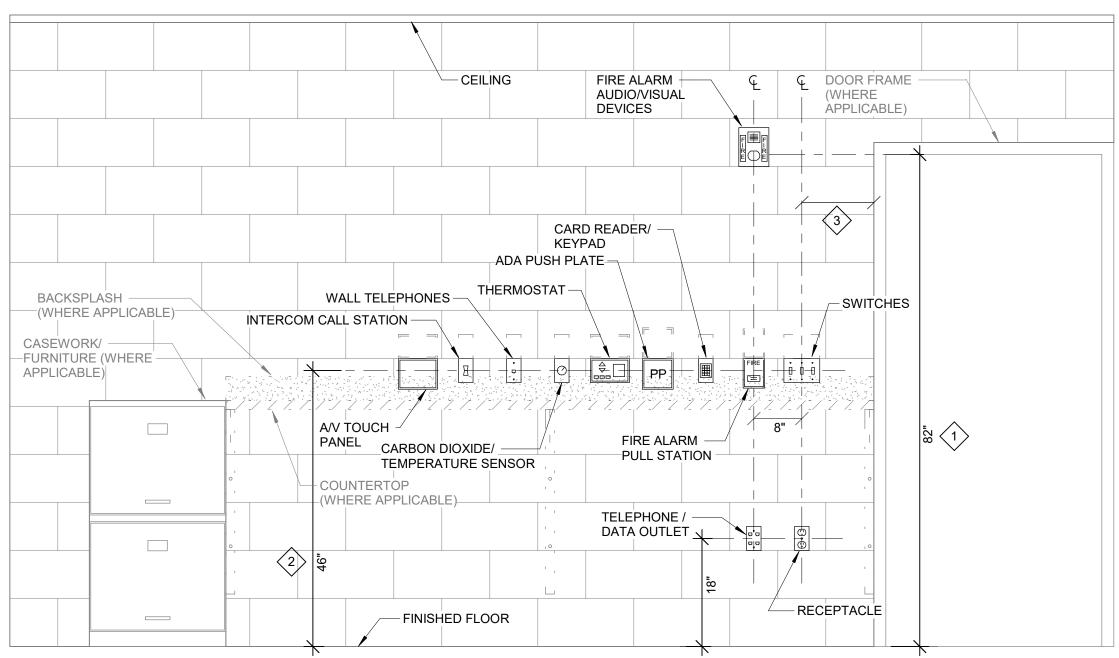


HVAC POWER PLAN

**PROJECT** Fluvanna Co.

AUGUST 28, 2020

1/8" = 1'-0"



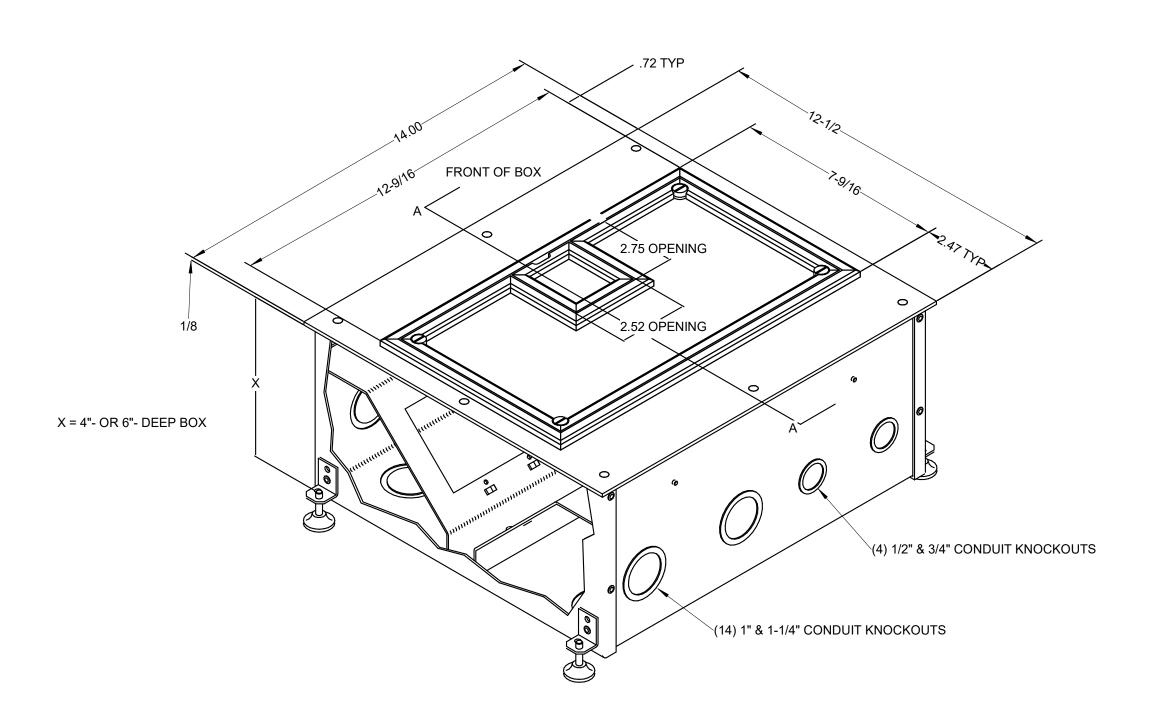
#### DEVICE MOUNTING DETAIL - GENERAL NOTES:

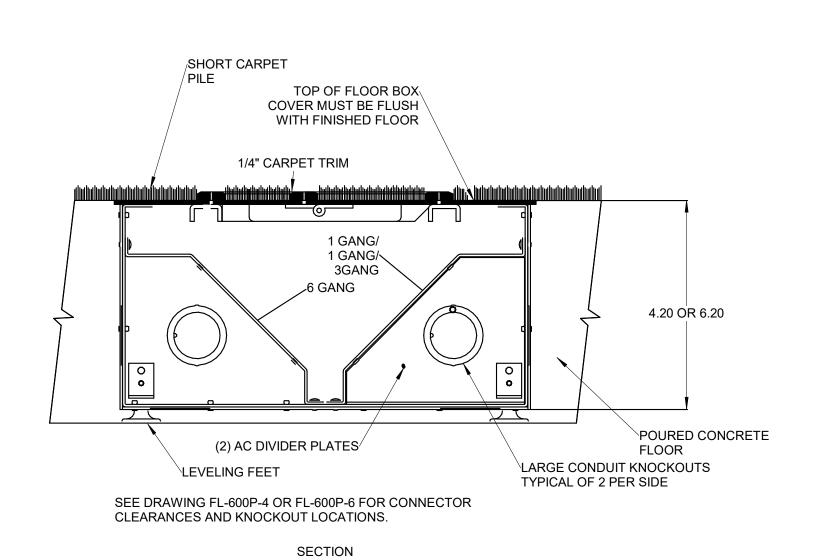
- A. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN TO BE MOUNTED AT A SIMILAR HEIGHT, ALIGN HORIZONTALLY ALONG CENTERLINE OF DEVICE BACKBOX (AS SHOWN IN DETAIL AND DESCRIBED IN KEY NOTE #2).
- B. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN MOUNTED AT DIFFERENT HEIGHTS,
- ALIGN VERTICALLY ALONG THE CENTERLINE OF THE DEVICE BACKBOX (AS SHOWN IN DETAIL). C. FOR ANY WALL OTHER THAN PAINTED GYPSUM BOARD OR CMU, DEVICE LOCATIONS MUST BÉ FIELD APPROVED BY ENGINEER OR ARCHITECT PRIOR TO INSTALLATION OF FINISHES.

#### DEVICE MOUNTING DETAIL - KEY NOTES: X

- MOUNT VISUAL NOTIFICATION APPLIANCES SO THAT ENTIRE LENS IS BETWEEN 80" AND 96" AFF. IF CEILING IS TOO LOW FOR DEVICE TO BE MOUNTED ABOVE 80", MOUNT SO THAT THE LENS IS WITHIN 6" OF FINISHED CEILING.
- THE CONTRACTOR IS TO COORDINATE ALL ROUGH-INS WITH ANY COUNTERTOPS/BACKSPLASHES TO AVOID CONFLICT. WHENEVER THE TYPICAL DEVICE MOUNTING HEIGHT SHOWN CAUSES CONFLICT WITH A COUNTERTOP/BACKSPLASH, ALIGN DEVICE BACKBOXES IN THE BOTTOM OF THE NEXT FULL BLOCK ABOVE THE BACKSPLASH AS SHOWN BY THE DOTTED LINES. FOR NON-BLOCK WALLS ALIGN CENTERLINE OF DEVICE BACKBOXES 4" ABOVE BACKSPLASH. COORDINATE WORK WITH CASEWORK AND KITCHEN SHOP DRAWINGS ACCORDINGLY. IF CONFLICT STILL
- ARISES CONTACT THE ENGINEER FOR DIRECTION ON HOW TO PROCEED. MOUNTING HEIGHTS SHOWN ILLUSTRATE DESIGN INTENT AND ARE TO BE FOLLOWED UNLESS CONTRADICTED BY APPLICABLE CODE. WHERE DEVICES ARE SHOWN ADJACENT TO DOOR FRAMES ON PLANS INSTALL 12" FROM FRAME TO AVOID SLUSHED SECTIONS. SPECIFIC DEVICES ARE SHOWN IN RELATIVE ORDER FROM DOOR FRAME; WHERE THESE DEVICES ARE NOT PRESENT AT A PARTICULAR LOCATION, ADJUST LOCATIONS CLOSER TO DOOR ACCORDINGLY.

# TYPICAL WALL DEVICE MOUNTING DETAIL SCALE: NONE



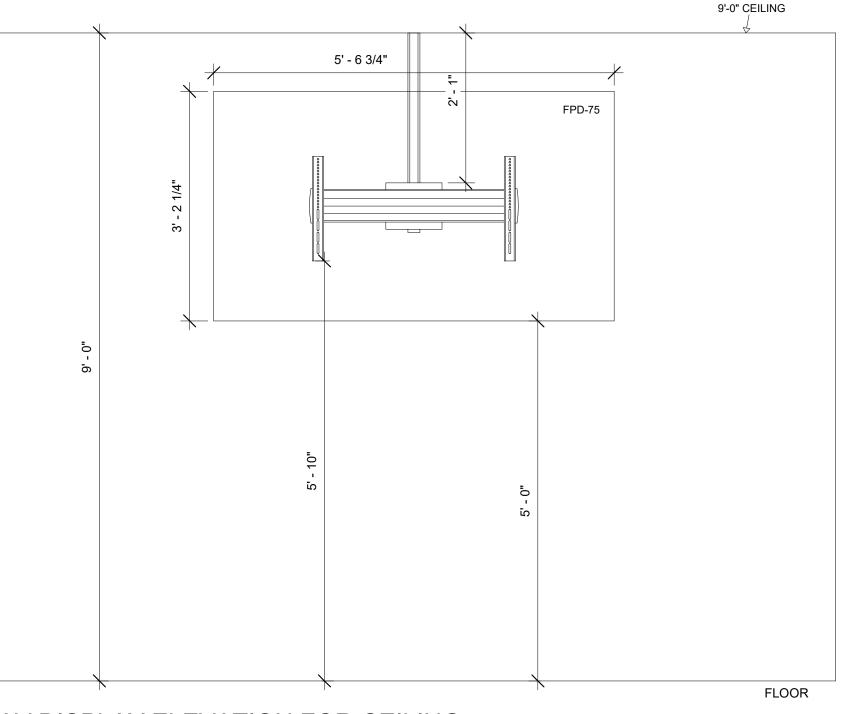


FLOORBOX DETAIL

SCALE: NONE



AV DISPLAY ELEVATION FOR CEILING MOUNTED DISPLAY IN MEETING ROOM
SCALE: NONE



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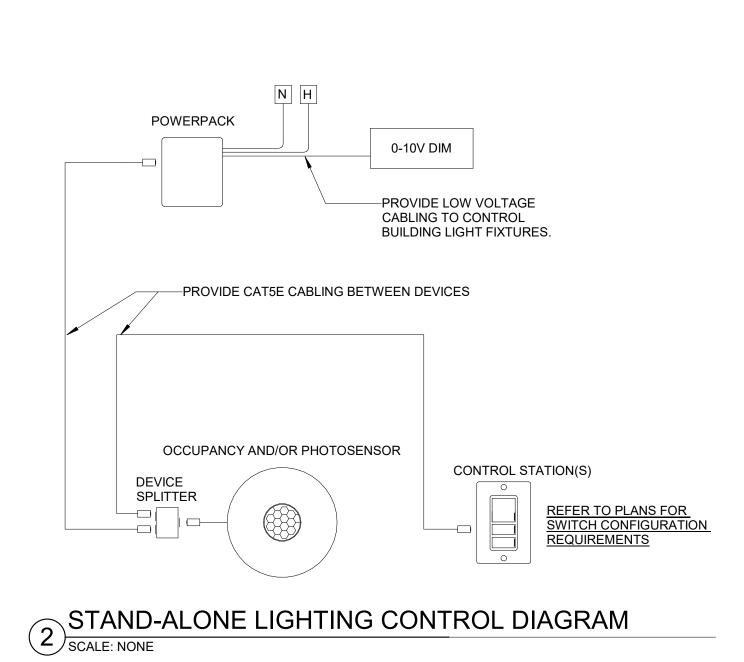
**PROJECT** 

**ELECTRICAL DETAILS** 

AUGUST 28, 2020

Fluvanna Co.

As indicated



	PANEL: EXISTING VOLTAGE: 208Y/120V,3P,4W					MAIN	IS TYPI SPI	E: MCE D:	3			PANE	LIN	TERRU	JPTING RATING: EXI LOCATION: ME	STING CHANICAL/ ELECTRICAL 103	
	AMPERES: 1 A					MO	UNTIN	G: SUF	RFACE						SUPPLY FROM:		
NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	ОСР	P C	<b>KT</b>	-	A		В		C	СКТ	Р	ОСР	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NOTES
	LIGHTS		20	1	1	0.0	0.0					2	1	20		RECEPT	
	LIGHTS	-	20	1	3			0.0	0.0			4	1	20		RECEPT	
	LIGHTS		20	1	5					0.0	0.0	6	1	20		RECEPT	
	LIGHTS		20	1	7	0.0	0.0					8	1	20		FIRE HOUSE	
	CONTROL PANEL		20	1	9			0.0	0.0			10	1	20		FIRE HOUSE	
	DRYER		20	1 1	1					0.0	0.0	12	1	20		FIRE HOUSE	
	SPARE		20		3	0.0	0.0					14	1	20		BOILER ROOM RECEPT	
	TIME CLOCK		20	1 1	5			0.0	0.0			16	1	20		SPARE	
	PANEL 1A		20	1 1	7					0.0	0.0	18	1	20		SPARE	
	PANEL 1A		20	1 1	9	0.0	0.0					20	1	20		ELEVATOR PUMP	
	PANEL 1A		20	1 2	1			0.0	0.0			22	1	20		ELEVATOR PUMP	
	ELEVATOR LIGHTS		20	1 2	:3					0.0	0.0	24	1	20		ELEVATOR PUMP	
	ELEVATOR LIGHTS		20	1 2	.5	0.0	0.0					26	1	20		GENERATOR RECEPT	
	SMOKE DETECTOR		20	1 2	7			0.0	1.2			28	1	20	1-#10, 1-#10, 1-#10	LTNG EXTERIOR	
	SPARE	-	20	1 2	9					0.0	0.2	30	1	20	1-#12, 1-#12, 1-#12	LTNG RM 111-114	
	SERVER ROOM		20	1 3	1	0.0	0.4					32	1	20	1-#12, 1-#12, 1-#12	LTNG RM 101, 102, 104	
	CONDITIONER		20	1 3	3			0.0	0.4			34	1	20	1-#12, 1-#12, 1-#12	LTNG RM 110	
	LTNG RM 110	1-#12, 1-#12, 1-#12	20	1 3	5					0.5		36					
				3	7							38					
				3	9							40					
				4	.1							42					
						0.4	kVA	1.6	kVA	0.7	kVA				1		
					H		Α		1 A	6	A						
ΟΔΟ Ο	LASSIFICATION	CONNECTED LO	ΔD	DEMA	ND				MATED						ΡΔΝΙ	EL TOTALS	
TNG	LACCII IOATION	2711 VA	70		00.0			LOIII	2711		110					TOTAL CONNECTED LOAD: 271	1 \/Λ
ING		2/11 VA			00.0	<i>J</i> U /0			2/11	VA							
																OTAL ESTIMATED DEMAND: 271	1 VA
																AL CONNECTED CURRENT: 8 A	
															TOTAL ESTI	MATED DEMAND CURRENT: 8 A	
															25	5 % ADDITIONAL CAPACITY: 2 A	
																TOTAL PANEL CURRENT: 9 A	

	VOLTAGE: 000\//400\/ 2D 4\M	PANEL P				MAIN		E: MCE	3			PANE	L IN	IEKKU	PTING RATING: EXIS		
	<b>VOLTAGE</b> : 208Y/120V,3P,4W						SPI									CHANICAL/ ELECTRICAL 103	
	AMPERES: 1 A		1	_				S: SUR							SUPPLY FROM:	1	
OTES		HOT, NEUT, GND	_	-	СКТ		A	E	3	(	;	СКТ	P	OCP	HOT, NEUT, GND		NOTE
	ATTIC AIR HANDLER		20	1	1	0.0	0.0					2	1	20		PUMP "J"	
	SPARE		20	1	3			0.0	0.0			4	1	20		ELECTRIC HEATER FOR 2ND FLOOR	
	ELECTRIC HEATER		20	1	5					0.0	0.0	6	1	20		ATTIC AIR HANDLER	
	ATTIC AIR HANDLER		20	1	7	0.0	0.0					8	1	20		MORRIS ROOM CKT A ATTIC	
	AIR COMPRESSOR		20	1	9			0.0	0.0			10	1	20		PUMP "K"	
	PUMP		20	1	11					0.0	0.0	12	1	20		PUMP "G" HOT WATER	
	EXT 10kW ATTIC	-	20	1	13	0.0	0.0					14	1	20		PUMP "H" CHILLED WATER	
	TRANE REMOTE CONTROLLER	-	20	1	15			0.0	0.0			16	1	20		FCU	
	CC-12, CC-18, WM-12, DH-1 RM 104, 105, 110	2-#12, 1-#12, 1-#12	20	2	17 19	1.5	1.5			1.5	1.5	18 20	2	20	2-#12, 1-#12, 1-#12	CC-07, CC-18, EF-1 RM 110, 112, 114	
					21			0.2	1.0			22	2	20	2-#12, 1-#12, 1-#12	BS-1, BS-4, BS-6, WM-12 RM 103, 110	
	CU-1	3-#12, 1-#12, 1-#12	20	3	23 25	0.2	0.2			0.2	1.0	24 26		20	Z-#1Z, I-#1Z, I-#1Z	B3-1, B3-4, B3-0, WWI-12 RW 103, 110	
	CEILING RECEPTS RM 110	1-#12, 1-#12, 1-#12	20	1	27			0.4	0.2			28	3	20	3-#12, 1-#12, 1-#12	DOAS-1	
	J BOX RM 114	1-#12, 1-#12, 1-#12	20	1	29					0.2	0.2	30	1				
	REC RM 104, 110	1-#10, 1-#10, 1-#10	20	1	31	1.3	0.9					32	1	20	1-#12, 1-#12, 1-#12	REC RM 114, EXTERIOR	
	ACCESS CONTROL POWER SUPPLY	1-#12, 1-#12, 1-#12	20	1	33			0.2	0.3			34			· · · · · · · · · · · · · · · · · · ·		
	FRIDGE REC RM 104	1-#12, 1-#12, 1-#12	20	1	35					0.2	0.3	36	2	20	2-#12, 1-#12, 1-#12	HYDRAULIC LIFT	
	REC RM 104	1-#12, 1-#12, 1-#12	20	1	37	0.2	0.2					38	1	20	1-#12, 1-#12, 1-#12	REC RM 104	
	REC RM 110	1-#8, 1-#8, 1-#8	20	1	39			2.2	1.1			40	1	20	1-#10, 1-#10, 1-#10	REC RM 110	
	REC RM 111-113	1-#12, 1-#12, 1-#12	20	1	41					0.7		42					
					1	5.9	kVA	5.4	kVA	5.7	kVA						1
							9 A		i A	48							
MD (	CLASSIFICATION	CONNECTED LO	MD	DE	MANIC	FACT			MATED						DANE	EL TOTALS	
	CLASSIFICATION		AD	DL			OK	LOTIN			עוי						١/٨
UIP		10260 VA				.00%			10260							TOTAL CONNECTED LOAD: 16920	
С		6660 VA			100	.00%			6660 \	VA						DTAL ESTIMATED DEMAND: 16920	VA
															TOTA	AL CONNECTED CURRENT: 47 A	
															TOTAL ESTIN	MATED DEMAND CURRENT: 47 A	
															25	% ADDITIONAL CAPACITY: 12 A	
																TOTAL PANEL CURRENT: 59 A	
																IUIAL PANEL CURRENT: 109 A	

	PANEL: <b>EXISTING</b> F	PANEL E1				MAIN	IS TYPE	E: MCE	3			PANE	L IN	TERRU	PTING RATING: EXIS	STING	
	<b>VOLTAGE</b> : 208Y/120V,3P,4W						SPI	):				LOCATION: MECHANICAL/ ELECTRICAL 103					
	AMPERES: 1 A					MO	UNTING	3: SUR	RFACE						SUPPLY FROM:		
NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	OCP	P	CKT	1	A	F	В	(	;	CKT	Р	OCP	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NO
	MAIN	-	30	1	1	0.0	0.0					2	1	20	<del></del>	SUBPANEL E-2	
	MAIN	-	30	1	3			0.0	0.0			4	1	20		TELEPHONE BACKBOARD	
$\longrightarrow$			<b></b>		5							6					
				<u></u>	7				13/4	0.0		8					
				0.0 kVA 0 A				0.0 kVA		0.0							
040.01	ACCIFICATION	OONNECTED LOA	- T		BA A NID			O A ESTIMATED		0		PANEL TOTALS					
OAD CL	ASSIFICATION	CONNECTED LOA	עט	DE	WANL	FACT	<u>UR</u>	ESTIN	MATED	DEMA	עוי						11/4
																TOTAL CONNECTED LOAD:	
																TAL ESTIMATED DEMAND:	
																AL CONNECTED CURRENT:	
			$\longrightarrow$				-									IATED DEMAND CURRENT:	
															25	% ADDITIONAL CAPACITY:	
							IFICATI									TOTAL PANEL CURRENT:	A

	PANEL: EXISTING	PANEL F				MAIN	IS TYPI	F: MCF	3			PANE	I IN	TFRRU	PTING RATING: EXIS	STING
	VOLTAGE: None, Not Compute						SPI		-						LOCATION: CON	
	AMPERES: 1 A	our ,riot computourr				МО	UNTING		FΔCF						SUPPLY FROM:	TI ENERGE / TO I
NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	ОСР	Р	СКТ		A		B	(	•	СКТ	Р	ОСР	HOT, NEUT, GND	CIRCUIT DESCRIPTION NOT
	2ND FLOOR AIR HANDLER		50	1	1	0.0	0.0					2	1	50		2ND FLOOR AIR HANDLER
	2ND FLOOR AIR HANDLER		50	1	3	0.0	0.0	0.0	0.0			4	1	50		2ND FLOOR AIR HANDLER
	2ND FLOOR HEAT PUMP		30	1	5			0.0	0.0	0.0	0.0	6	1	30		2ND FLOOR AIR HANDLER
	2ND FLOOR HEAT PUMP		30	1	7	0.0	0.0			0.0	0.0	8	1	30		2ND FLOOR AIR HANDLER
	SPARE		30	1	9	0.0	0.0	0.0	0.0			10	1	40		2ND FLOOR HEAT PUMP
	SPARE		30	1	11			0.0	0.0	0.0	0.0	12	1	40		2ND FLOOR HEAT PUMP
	INSPECTIONS OFFICE		20	1	13	0.0	0.0			0.0	0.0	14	1	20		SPARE
	INDOOR UNIT		20	1	15	0.0	3.0	0.0	0.0			16	1	30	<del></del>	INSPECTIONS OFFICE
	INSPECTIONS OFFICE		50	1	17			0.0	0.0	0.0	0.0	18	1	30	<b></b>	OUTDOOR UNIT
	INDOOR UNIT		50	1	19	0.0	0.0			0.0		20	1	25	<del></del>	2 TON EXTEN
	INSPECTIONS OFFICE	_	60	1	21	0.0	0.0	0.0	0.0			22	1	25	<del>-</del>	OFFICE
	INDOOR UNIT	_	60	1	23			-		0.0	0.0	24	1	45	<del>-</del>	MORRISS ROOM
	SPARE	_	30	1	25	0.0	0.0					26	1	45	-	4 TON
	KACK SYSTEM	_	20	1	27			0.0	0.0			28	1	30	-	OUTDOOR UNIT
	OUTDOOR	_	20	1	29					0.0	0.0	30	1	30	_	ADMIN
	UNIT ADMIN		20	1	31	0.0	0.0					32	1	30		INSPECTIONS OFFICE
	MORRIS ROOM	-	60	1	33			0.0	0.0			34	1	30		OUTDOOR UNIT
	CKT B ATTIC		60	1	35					0.0	0.0	36	1	20		1 1/2 TON EXTEN
	EXT AREA		30	1	37	0.0	0.0					38	1	20		AREA
	ATTIC	-	30	1	39			0.0	0.0			40	1	20		SPARE
	SPARE	-	20	1	41					0.0	0.0	42	1	20	-	SPARE
-			•			0.0	kVA	0.0	kVA	0.01	kVA		•			
LOAD C	LASSIFICATION	CONNECTED LO	AD	DF	MAND	FACT	OR	ESTIN	/ATFD	DEMAN	ND				ΡΔΝΕ	EL TOTALS
_3, 0		7525.25									-					TOTAL CONNECTED LOAD: 0 VA
																TAL ESTIMATED DEMAND: 0 VA
							_									AL CONNECTED CURRENT: Not Compute
							$\overline{}$									MATED DEMAND CURRENT: Not Compute
																% ADDITIONAL CAPACITY: 0 A
																TOTAL PANEL CURRENT: 0 A

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REVISIONS 01 MM-DD-YR NAME DESCRIPTION OF CHANGES

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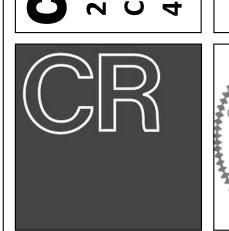
250 WEST MAIN STREET, SUITE 200

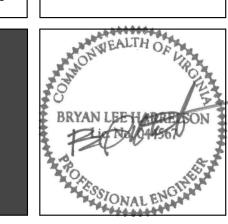
CHARLOTTESVILLE VA 22902

434-975-7262

WHITE SULPHUR SPRINGS, WEST VIRGINIA

ADDITION AND RENOVATIONS
MULTIPURPOSE ROOM
FLUVANNA COUNTY
132 MAIN STREET
PALMYRA, VA 22963





**PROJECT** 

PANEL SCHEDULES

Fluvanna Co.