

MEMORANDUM

TO: JRWA Board

~~PRIVILEGED & CONFIDENTIAL
ATTORNEY-CLIENT COMMUNICATION~~

FROM: Justin W. Curtis, Esq.

DATE: January 7, 2020

RE: Report of Findings and Conclusions to James River Water Authority Board
on Allegations in Eric Mai Declaration

I. Introduction and Executive Summary

On October 21, 2019, the Monacan Indian Nation, through its counsel, Marion Werkheiser, sent a letter to Steven VanderPloeg of the U.S. Army Corps of Engineers (USACE). Attached to the letter was a document titled “Declaration of Eric Mai” dated October 16, 2019 and signed by Eric V. Mai (“Mai Declaration”). Werkheiser forwarded the documents to numerous parties, including representatives of the James River Water Authority (JRWA), on October 21, 2019.

The Mai Declaration presents serious allegations of unethical and improper conduct by Circa~ Cultural Resource Management LLC (“Circa”) and its president, Carol D. Tyrer. The allegations relate to the Phase I/II archeological field study conducted by Circa on behalf of JRWA between May 2017 and January 2018 in connection with JRWA’s water supply project (the “Project”).

The JRWA Board directed that above-named Counsel conduct an internal investigation of the allegations for the purpose of informing the Board’s response. This report summarizes the allegations in the Mai Declaration, the information reviewed to evaluate those allegations, and Counsel’s reasonable findings and conclusions regarding the allegations.

This investigation is limited in scope to the allegations in the Mai Declaration for which Mai had first-hand knowledge. To investigate those allegations, Counsel has made a good faith effort to obtain all available relevant information. Because this is an internal investigation, Counsel could not compel any party to provide

information. However, all persons contacted by Counsel were forthcoming in responding to requests for interviews and documents. The information reviewed in the preparation of this report includes the JRWA project file; interviews with and documents provided by various witnesses; documents obtained from the Virginia Department of Historic Resources (DHR); and publicly available sources of information.

The allegations presented in the Mai Declaration were evaluated independently in light of the available information. Counsel has endeavored to carefully lay out the available information and inferences drawn in the process of reaching conclusions with respect to each allegation addressed in the report. The allegations and Counsel's conclusions are summarized as follows.

- The first group of allegations states that the Circa staff who participated in the Project's Phase I/II field study were not given adequate information to perform the study and were unqualified for the task. Counsel has concluded that those statements are not credible and, moreover, are presented in a misleading and exaggerated manner.
- The second group of allegations pertain to Circa's reported refusal to use appropriate technology and provide appropriate training to its employees necessary to conduct an accurate field survey for the Project. Those statements are largely contradicted by other contemporaneous documents and appear to be at best exaggerated, if not falsified.
- The third group of allegations relate to instances in which Tyrer allegedly provided false information to agency officials or directed Circa staff to do so. Those allegations either could not be corroborated or were directly contradicted by other evidence, including other statements by Mai.
- The fourth set of allegations indicate that Tyrer employed untrained construction workers to conduct archeological investigations in place of trained archeologists. These allegations are presented in a highly misleading manner. Although construction workers assisted trained archeologists in the investigation, Counsel did not identify any evidence supporting the allegation that their participation was improper.

- The fifth set of allegations is assertions that Circa's laboratory methods were improper and that statements in the Phase I/II report were incorrect. However, Mai provides no foundation for these allegations and they could not be corroborated.

In conclusion, Counsel does not find any specific allegations in the Mai Declaration sufficiently credible to justify a recommendation of further action by the Board with respect to Circa or Tyrer. Nevertheless, there are outstanding questions about Circa and Tyrer's qualifications that remain pending in other appropriate fora, namely circuit courts and the relevant state and federal agencies. Accordingly, Counsel recommends that the most reasonable and prudent course of action is to (1) retain Circa as a consultant on a limited on-call basis going forward so that JRWA does not lose the benefit of Circa's knowledge of the site and previous field studies and (2) proceed with the ongoing technical review of Circa's prior work product that is being conducted by GAI Consultants, Inc. ("GAI").

II. Conduct and Scope of Counsel's Investigation

Counsel conducted this investigation independently and without any oversight or restrictions by any other party, including the JRWA Board and its members, staff, and consultants. Counsel determined what documents to review and witnesses to interview. The findings, opinions, and conclusions stated herein are solely those of Counsel.

Counsel's review, and the findings and conclusions expressed in this report, are limited to the allegations of improper and/or unethical conduct by Circa and Tyrer as stated in the Mai Declaration. Counsel is not qualified to, and does not, offer any opinion on the quality of the work performed by Circa or Tyrer. Except where it appeared necessary to understand and evaluate specific allegations of improper conduct in the Mai Declaration, Counsel has not evaluated Circa and Tyrer's practices for conformity with accepted standards for professional conduct and practice for archeologists.

This report addresses only those allegations in the Mai Declaration that are based on Mai's first-hand knowledge about services performed by Circa or Tyrer on behalf of JRWA. The Mai Declaration includes a discussion of allegedly improper and unethical practices by Circa and Tyrer on projects unrelated to JRWA.¹ Counsel has

¹ *E.g.*, Mai Decl. ¶¶ 62–78.

no relevant information available to evaluate those allegations and has made no attempt to obtain such information. Those allegations have no bearing on whether Circa or Tyrer engaged in improper conduct in connection with the Project's Phase I/II field study. The Mai Declaration also references other alleged instances of improper conduct by Tyrer that, although related to work performed on behalf of JRWA, are based on public reports of which Mai has no first-hand knowledge.² Those allegations are being or have been addressed in other forums and are beyond the scope of this investigation.

III. Principal Parties

The principal parties referenced in this report are as follows:

A. Circa~ Cultural Resource Management

According to its marketing materials, Circa is “a certified small, 100% woman-owned business with expertise in archaeology, architectural history, historical research, education and exhibits, historic preservation planning, and historic preservation law.”³ Circa has been engaged on the Project as a sub-consultant to the Timmons Group.

B. Carol Tyrer

Tyrer founded Circa in 2005 and is its president. Tyrer stated that she has been practicing as a professional archeologist in Virginia since 1989 and that her archeological reports and qualifications have been accepted by Virginia DHR over 100 times. Tyrer was the Principal Investigator for the Phase I/II archeological field study conducted by Circa on behalf of JRWA between May 2017 and January 2018.

C. Timmons Group

The Timmons Group (“Timmons”) is a diversified consulting firm. Timmons has been engaged as an engineering and environmental consultant to JRWA. Timmons staff performed tasks for and related to the Phase I/II field study, including project management and surveying and marking the project boundaries.

² *E.g.*, Mai Decl. ¶ 29 (allegation regarding proper attribution); ¶ 61 (allegation of plagiarism); ¶¶ 40, 72 (allegation of falsified credentials).

³ <https://www.linkedin.com/in/carol-tyrer-2654561b/>.

D. Faulconer Construction Company

Faulconer Construction Company (“Faulconer”) is a diversified construction, engineering, and contracting firm. Faulconer has been engaged on the Project as a sub-consultant to Timmons. Faulconer staff performed tasks for and related to the Phase I/II field study, including operating heavy machinery to excavate trenches, hand-digging shovel test pits, and screening (i.e., sifting) soil from shovel test pits.

E. Eric Mai

Eric Mai was an employee of Circa from January 2012 to May 2018. He participated in numerous archeological field studies during that time, including the Project’s Phase I/II archeological field study. Mai holds a Bachelor of Arts degree in Art History from Christopher Newport University (2011) and a Master of Archeology and Heritage degree from the University of Leicester (2017). Mai stated that he resigned from Circa in May 2018 due to alleged concerns about Circa’s practices. Mai states he currently is a graduate student at Virginia Commonwealth University (VCU) studying Urban and Regional Studies and Planning.⁴

IV. Sources of Information

Counsel reviewed available and readily obtainable information that appeared relevant to evaluating the claims in the Mai Declaration. Counsel requested and received information from several sources. Because this is an internal investigation, Counsel had no authority to compel any party to give a statement or produce any records.

Relevant information was gathered from the following sources:⁵

⁴ Mai’s sworn statement is formatted consistent with the Uniform Recognition of Acknowledgments Act, Virginia Code § 55-118.1 et seq., in a manner and style typical of statements prepared by attorneys. Neither the statement nor the cover letter identifies Mai’s counsel. Although it is unknown if Mai is represented by Werkheiser or her firm, an email from Mai to DHR Director Langan dated September 16, 2019, affirms that he was “in talks” with Werkheiser’s firm prior to Werkheiser presenting the Mai Declaration to the USACE.

⁵ Counsel is not a witness to any of the incidents discussed in this report. The Phase I/II field study discussed in this report was completed prior to Counsel’s engagement by JRWA.

Circa/Carol Tyrer. Tyrer was cooperative and forthcoming in responding to requests for information relevant to the allegations in the Mai Declaration. Tyrer agreed to be interviewed by Counsel over the course of several hours on two dates (November 8, 2019 and November 27, 2019).⁶ Counsel requested a list of records from Tyrer and received information including records from Mai's employment file and hundreds of photographs, field notes, drafts, and other documents from the field study. Tyrer produced two written statements directly responding to the allegations,⁷ as well as several emails and additional documents in response to follow-up requests from Counsel. Tyrer stated that other Circa employees who participated in the Project study did not wish to speak to Counsel regarding this matter.

JRWA Project File. Counsel has reviewed pertinent documents in JRWA's project file. That includes the relevant applications and reports submitted to DHR and internal communications, notes, and memoranda.

Timmons/Joe Hines. Timmons project manager Joe Hines was cooperative and forthcoming and spoke at length to Counsel regarding the matter on November 8, 2019 and during several follow up requests for additional information. Hines provided all invoices from Timmons, Circa, and Faulconer generated during the Phase I/II archeological field study. Those invoices included valuable information such as daily entries of activities conducted at the site. Hines also provided numerous photographs and records of the surveys conducted by Timmons of the project site. Hines promptly responded by telephone and email to numerous requests from Counsel for additional information.

Faulconer Construction/Brandon Weaver. Counsel was instructed to direct questions regarding this investigation in writing to Faulconer's legal counsel. Counsel requested and was granted permission to interview the foreman for the Faulconer construction crew that primarily assisted with the study, Brandon Weaver. Counsel conducted a telephonic interview with Weaver on December 6, 2019, with Faulconer counsel (Brad Friend) present.

⁶ Tyrer is represented by attorneys on matters closely related to the Project. Counsel obtained consent from Tyrer's attorneys before contacting her for information regarding the Mai Declaration.

⁷ The written statements are dated November 6, 2019 and November 21, 2019. They are informal and prepared personally by Tyrer. Counsel has given those written statements the same weight as statements made verbally by Tyrer in interviews.

GAI Consultants. GAI was engaged by JRWA in October 2019 to provide archeological consulting services. Counsel consulted with GAI staff for contextual information regarding the archeological terminology and practices referenced in the Mai Declaration.

Freedom of Information Act (FOIA) Request. Counsel submitted a broad FOIA request to DHR on September 16, 2019 related to the JRWA project and received responsive documents on October 3, 2019. Although the request predated the Mai Declaration, the response included documents relating to incidents discussed in the Mai Declaration.

V. Findings and Conclusions

Counsel evaluated the allegations asserted in the Mai Declaration based on the available information. A summary of the primary allegations, and counsel's findings and conclusions regarding the same, are provided in this section.

A. Allegations Regarding Training, Preparation, and Qualifications of Circa's Employees (Mai Declaration Paragraphs 17–21)

The Mai Declaration states that the Circa staff who participated in the Project's Phase I/II field study were not given adequate information to perform the study and were unqualified for the task. These statements generally may be characterized as Mai's opinions, and therefore they cannot be proved or disproved as facts. Nevertheless, Counsel believes they warrant evaluation to determine if they reveal any improper or unethical conduct by Circa or Tyrer. Upon review, these allegations do not appear to be credible or reflective of any demonstrable misconduct.

1. Circa Staff Were Not Informed of the Historical Significance of the Project Site

Mai states that "Tyrer provided the field crew little background information on Point of Fork."⁸ More specifically, he states that field staff were not provided any of the following information:

- "[P]rior documentation of Point of Fork as the historical chief city of the Monacan Indian Nation";

⁸ Mai Decl. ¶ 17.

- “[M]ap showing the location of Rassewek at this location prepared by Captain John Smith”; or
- “[I]nformation related to the subsequent documentation by archaeologists associated with the Commonwealth of Virginia or the Smithsonian.”⁹

Mai acknowledges that Tyrer informed the staff that human burials had been documented in the vicinity of the site and that the site “might be of great importance to Native Americans.”¹⁰

Tyrer denies that Circa’s staff was not “fully aware of the significance of the site.” She states that a study work plan had been approved by USACE and DHR and that all members of the field staff, including Mai, were provided copies. Mai does not mention the work plan in the declaration. Mai states that Tyrer “handed us a map with markings indicating where we should conduct shovel test pits and instructed us to drive to the site and begin work.”¹¹

Counsel reviewed a copy of the referenced work plan in JRWA’s project file, titled, *James River Water Supply Project, Phase I Work Plan, Fluvanna County, Virginia* (“*Work Plan*”), dated March 2, 2017. Of relevance to Mai’s statements, the *Work Plan* includes the following statements:

- “The historic record indicates that this landform is where the Native American village of Rassewek [sic] was located.”
- “The pipeline right-of-way and pump station are in this area and the possibility of human remains is moderate to high.”
- “No shovel testing was completed of the area during the previous survey. The VCU surveyors walked the field and identified the sites based on surface finds within areas disturbed by heavy equipment. . . . The surveyor had indicated that although they divided the sites on the floodplain into separate

⁹ Mai Decl. ¶ 17. Counsel assumes the reference to “Commonwealth of Virginia” is in error, and that this was intended to reference a study by an archeology professor with *Virginia Commonwealth University*, Dan Mouer. Counsel is not aware of any relevant studies of the site by archeologists for the Commonwealth. As a current student at Virginia Commonwealth University, it is not likely Mai would make this error. This appears to be an obvious transcription error by an unidentified third party either copying or drafting the Mai Declaration.

¹⁰ Mai Decl. ¶ 17.

¹¹ Mai Decl. ¶ 21.

sites based on surface scatters, they believed that the whole floodplain consisted of one large site.”

It appears improbable that Mai was not provided a copy of the *Work Plan*. Mai acknowledges receiving the maps showing the location of the shovel test pits. Tyrer states that those maps were provided as attachments to the *Work Plan*. That statement is consistent with the text of the *Work Plan* (“The *attached maps* show the locations of the project area, previously-identified sites, and the *proposed locations of the shovel tests* and deep-testing cores and trenches.”). Mai also acknowledges receiving a copy of the Phase I/II field study’s anticipatory burial permit “[e]arly in the JRWA project” and being familiar with its requirements.¹² The permit expressly required that the field work be conducted in accordance with the “approved research design,” which Counsel understands to be a reference to the *Work Plan*.¹³ Given that Mai acknowledges (1) possessing the maps that were attached to the *Work Plan*, (2) receiving and reviewing the permit referring to and requiring compliance with the *Work Plan*, and (3) being aware of information stated in the *Work Plan* (i.e., presence of past burials discovered near the site and site’s importance to Native Americans), it does not appear to be plausible that Mai did not also have a copy of the *Work Plan*.

DHR approved the *Work Plan*, and there is no reason to conclude that the information it contained was insufficient to adequately provide the Circa staff with information necessary to complete the field work at the site. The specific information Mai states he was not provided included “prior documentation” about Rassawek, a copy of the John Smith map, and copies of studies previously completed by archeologists for the Smithsonian and the “Commonwealth of Virginia” (presumably intended to be Virginia Commonwealth University). Counsel has reviewed the referenced documents. Although these documents presumably were highly relevant to the Principal Investigator/Principal Author’s task of preparing a report based on the information obtained from the Phase I/II field study, the sources do not appear to provide any additional information that was not summarized in the *Work Plan* that would have been necessary to the tasks

¹² Mai Decl. ¶ 30. The anticipatory burial permit was issued by DHR to JRWA on October 4, 2017.

¹³ Notes to the file by Project staff and emails between JRWA and DHR staff in the Project file indicate that the *Work Plan* was the document reviewed and approved by DHR as part of the anticipatory burial permit application.

performed by Circa's field staff.¹⁴ Mai's statement that Circa's field staff were provided "little background information on Point of Fork" appears to be exaggerated and misleading.

2. Circa Staff Were Untrained and Unqualified

Mai states that the Circa staff were untrained and unqualified to perform the work at the Phase I/II field study. Mai supports this assertion by stating that he was the only member of the "initial crew" that possessed a "master's degree and a BA in archeology or a related field or any formal training investigating Native American sites."¹⁵ Mai further states that he had no experience or training excavating Native American archeological features.¹⁶

Tyrer states that the Circa staff that performed the first phase of work for the Phase I/II field study (April and May 2017) had 10 years, five years, and one year, respectively, of archeological field experience.¹⁷ This statement appears to be supported, at least in part, by the shovel test pit field forms.¹⁸ The initials on the forms indicate that the pits were recorded by Mai, Charlie Rutledge, and Matthew Carr—each of whom had been with Circa for at least five years at the time of the Phase I/II field study. Tyrer also states that an experienced geoarcheologist, Dan Hayes, was onsite for this first phase of field work to oversee deep test trenching and coring. This latter statement is supported by the billing records of Hayes and Faulconer. Lastly, Tyrer asserts that Circa had no formal training program, and that field crew members were typically trained on the job by more experienced staff.

There is insufficient evidence available to fully substantiate or discredit Mai's statement that the Circa staff were "untrained" and/or "unqualified." It appears that the staff who participated in the field study possessed relevant experience with archeological field studies of Native American sites, but Counsel has not identified

¹⁴ The purpose of a Phase II field study is to gather data necessary to (1) define a site's boundaries; (2) determine if the site is eligible for listing in the National Register of Historic Places; and (3) inform recommendations for future treatment of the site. DHR, *Guidelines for Conducting Historic Resources Survey in Virginia* 41 (Sept. 2017).

¹⁵ Mai Decl. 18.

¹⁶ Mai Decl. 20.

¹⁷ Tyrer states that the most junior staff members (one year of field experience) also had one year of laboratory experience.

¹⁸ Circa's invoices generally do not identify individual staff members.

any reliable information to form a conclusion as to whether staff could be deemed “untrained” or “unqualified” notwithstanding that experience.

However, there is reason to discount the credibility of Mai’s characterizations of his and other Circa staff members as unqualified and untrained. First, Mai offers these opinions without noting the years of field experience possessed by those staff members or explaining how that experience is not relevant—information that likely would be inconsistent with his assertion. Second, the failure to mention the key role of Hayes in managing the geoarcheological elements of the field study suggests an intent to mislead. Third, as detailed further below, Mai does not fairly portray his own past experience with Native American sites. Fourth, it is telling that Mai qualifies his statement about the crew’s educational qualifications by stating only that the “*initial crew*” (other than Mai himself) did not possess advanced degrees. Tyrer states that persons with additional experience, including advanced degrees, were subsequently added to the staff for the Phase I/II field study.

In conclusion, Counsel does not find Mai’s assertion that the Circa staff who participated in the Project’s Phase I/II field study were “untrained” or “unqualified” to be credible. The factual assertions presented to support those opinions appear to be highly selective, omitting highly relevant information that would have been known to Mai but which would be contrary to his assertions. Even if Mai’s statement that the staff was “untrained” or “unqualified” truthfully reflects his opinion, the highly selective nature of the facts presented to support that opinion nevertheless strongly suggests an intent to be misleading.

B. Allegations Regarding Use of Technology and Training to Conduct Accurate Surveys (Mai Declaration Paragraphs 22–29)

Mai alleges that Circa refused to use appropriate technology and provide appropriate training to its employees. Consequently, Mai states the opinion that the archeological surveys and resulting maps and figures generated for the Project’s Phase I/II report were inaccurate and unreliable. Although Mai’s stated conclusions could not be evaluated directly, several of the factual assertions Mai makes in support of that opinion are inconsistent with and/or omit pertinent details in documents and information prepared at the time of the study. Counsel therefore does not find these allegations to be credible.

1. Technology Used to Identify and Map Locations of Shovel Test Pit Transects

Mai states that the shovel test pit transects were not accurately located or mapped because (1) Tyrer refused Mai's request to purchase a Trimble GPS device and iPad technology; (2) Mai and other Circa staff had to rely on compasses and hand-drawn maps to locate transects without adequate training on how to do so; and (3) staff had to "guess" the location of Project boundaries.¹⁹ These assertions lead to Mai's conclusions that the "reports of shovel test pits on the site are inaccurate and the quality and usefulness of those shovel test pits is poor" and that the "site boundary delineation may be influenced by insufficiencies in the shovel test pit survey."²⁰

Tyrer denies each of the above-stated allegations, stating that Circa's staff had and were instructed to use GPS devices in the field to map the transects and positive shovel tests, that all base maps used in the field were generated by Timmons' GIS staff and land surveyors, and that the project boundaries were well-marked in the field by Timmons' surveyors prior to the study. Counsel is not aware of any documentation of whether GPS technology was used by Mai and other Circa field crew. However, available documents and information support Tyrer's position on the other allegations.

Mai's statement that Circa staff had to rely on compass and hand-drawn maps without adequate training to locate shovel test transects is inconsistent with other available information. Timmons provided GIS base maps of the entire Project site dated March 2017 that show the Project boundaries and locations of all deep test trenches. The March 2, 2017 *Work Plan* prepared by Circa and submitted to DHR and the USACE also contains GIS maps prepared by Timmons that show (1) the Project boundaries; (2) location and boundaries of all previously identified archeological sites; and (3) a shovel test pit grid and deep test trench locations for the entire Project area. As noted above, Tyrer states Mai had a copy of the plan. Mai's allegation that Circa's staff relied on hand-drawn maps of the shovel test pit locations instead of the GIS-based maps created by Timmons prior to the start of the study is not plausible.

Assuming Mai is truthful that he did not have access to GPS technology (contrary to Tyrer's statement), it is Counsel's understanding that the use of compasses and

¹⁹ Mai Decl. ¶ 23–24.

²⁰ Mai Decl. ¶ 25.

other such tools to locate survey transects in the field is an acceptable practice that had long been in use by archeologists prior to the advent of GPS technology. Moreover, in other documents prepared by Mai, he claims that he possessed the necessary skills to accurately locate resources in the field. In a resume prepared by Mai in 2017, he claimed to be skilled in “Preparation of accurate field notes, maps, and documentation” and “Mapping and land navigation.”²¹ In a resume prepared by Mai in 2019, he also claims to have experience creating “maps pre- and post-excavation utilizing GIS and *by hand*” and to be skilled at “Land survey and navigation” and “Hand/digital drawing.” Accordingly, Mai’s assertion that he was not capable of accurately mapping shovel test pit locations on the Project without the aid of GPS devices or mapping technology is contradicted by other statements made by Mai. The assertion is therefore unreliable.

Mai’s statement that Circa staff had to “guess” at the Project boundaries appears to be contradicted by other record evidence. Hines stated that the Project boundaries were delineated by Timmons’ surveyors and clearly marked in the field with survey stakes placed at regulator intervals on the water main centerline and edges of the limits of disturbance prior to the archeological survey. This statement was supported by a June 26, 2017, invoice previously submitted to JRWA, which reflects that Timmons’ survey staff staked out the Project’s limits of disturbance and deep trench test locations in April 2017. Numerous photographs taken during the Phase I/II study also show survey marker flags on the edges and centerline of the Project boundaries, consistent with Hines’ statement and the invoice.²²

It appears well-documented that the Project boundaries were survey-located and flagged in the field prior to the study. Mai omits any reference to the surveys or flagging performed for the study. He also appears to misrepresent his experience locating and mapping resources in the field. The survey-located markers would have provided reliable landmarks upon which to base the location and mapping of shovel test pits using the standard field location and mapping techniques referenced in Mai’s statement. Mai’s recitation of the facts omits important and relevant details that would be inconsistent with his assertions. This strongly suggests an intent to present a misleading picture and provides reasonable grounds to find Mai’s statements on this subject to be not credible.

²¹ The Mai resumes referenced in this section were received from Tyrer and from the DHR FOIA response as attachments to an email Mai sent to DHR Director Langan on September 17, 2019. These resumes are not the one Mai alleges was altered by Tyrer.

²² Metadata for photograph files reflect that they were taken prior to or during the Phase I/II field study.

2. The Shovel Test Pits Were Too Shallow for the Conditions

Mai asserts that the shovel test pits excavated by Circa were inadequate because the field crew was not informed that they were digging in a floodplain and/or that the excavations were not deep enough to reach a buried A horizon identified in some of the deep trench tests.²³ Tyrer denies the implication of the allegations, stating the shovel test pit protocol was detailed in the approved *Work Plan* and that deep test trenching and coring were conducted due to the limitations of shovel testing in a floodplain.

As stated by Tyrer, the March 2017 *Work Plan* references the fact that much of the Project site sits within a floodplain. It states shovel test pits would be completed to an arbitrary depth of 3 feet in all floodplain areas and to sterile soils only in areas outside of the floodplain. The study plan further discusses that deep tests (cores and trenches) would be completed to evaluate stratigraphic layers below the effective depth of the shovel test pits.

Mai's statement that a buried A horizon was not discovered by the shovel testing, and was only uncovered by the deep test trenching, is contradicted by other evidence. In particular, many of the shovel test pit field notes reference a buried A horizon—including shovel test pits that appear to have been recorded by Mai.

The purported concerns expressed in the Mai Declaration regarding the use of shovel test pits in a floodplain were acknowledged and addressed in the approved *Work Plan*. It is not reasonable to assume that Mai was unaware of the *Work Plan*, and he acknowledges that he participated in the deep trench testing. Even if Mai had not reviewed the *Work Plan*, his assertion that Tyrer failed to tell the crew they were working on a floodplain, and that they were therefore unaware of that fact, is not plausible. The site is located at the confluence of two rivers, which are visible from many areas of the Project site. Mai's statement that shovel pit testing failed to uncover a buried A horizon is contradicted by other evidence generated at the time of the study. Accordingly, Mai's assertions that Circa's crew was not aware that the site is situated within a floodplain and that shovel test pits were too shallow to be effective are not deemed credible.

²³ Mai Decl. ¶ 26.

3. Munsell Soil Color Charts Were Not Readily Available and Circa's Crew Was Not Trained on How to Use Them

Mai states that Circa possessed only one Munsell Soil Color Chart at the time the Project's Phase I/II field study began and that it was not always available at the site. A Munsell book includes a collection of color charts used by archeologists to accurately and consistently identify soil colors. Mai states that an "updated" Munsell book was purchased "in the latter half of 2017," but that it was "not consistently used at the Point of Forks [sic] site."²⁴ He also states Circa's staff was not properly trained on how to use it and was not given sufficient time in the field to conduct Munsell assessments.

According to Tyrer, use of Munsell books to record soil colors is a common task that all Circa field staff could perform.²⁵ Tyrer stated that Circa purchased four new Munsell books when the staff informed her that they were needed and that a copy was in each of Circa's work trucks at the time of the Project's Phase I/II field study. Tyrer could not provide a specific date or documentation of the purchase.

Upon request of Counsel, Tyrer provided the hand-written shovel test pit field notes that were generated during the Project's Phase I/II field survey. A total of 658 numbered shovel test pit locations (not including radials) are indicated in the field forms.²⁶ Tyrer explained that Circa staff sometimes recorded soil colors for every shovel test pit excavated and sometimes they used short-hand methods for closely spaced tests. That is, they would record the layer colors once and not repeat the notation in the field notes for nearby shovel test pits that contained the same soil layers and colors. She also stated that staff typically recorded the Munsell color notation (e.g., "10YR 4/3"), but sometimes they recorded only the color description (e.g., "brown") and sometimes they recorded both the notation and the description.

The shovel test pit field notes appear to be generally consistent with Tyrer's explanation. The recorded shovel test pits appear to have the Munsell notation and/or color documented narratively either for each pit or for a representative pit (without being repeated for each nearby pit)—with the majority reflecting a

²⁴ Mai Decl. ¶ 27.

²⁵ Other archeologists consulted by Counsel expressed that recording Munsell color notations is an elementary and common task for staff working on archeological excavations.

²⁶ Not all of the shovel test pit locations were excavated. A number were marked as not excavated due to the presence of obstacles such as slopes, trees, or impervious surfaces, and therefore no soil color is recorded for those locations.

recorded Munsell notation. Mai alleges that Tyrer directed staff to fabricate Munsell notations at a different site,²⁷ but no such allegation is stated with respect to this Project. In absence of any evidence or allegations to the contrary, it is therefore reasonable to assume that the Munsell notations recorded for the Project's Phase I/II field study were recorded properly with a Munsell book.

Three initials appear on the various shovel test pit field notes: "EM" for Eric Mai; "CR" or "CPR" for Charlie Rutledge; and "MC" for Matthew Carr. At the time of the Phase I/II field study, each of these individuals had been employed by Circa for at least five years and had participated in numerous field studies. As correctly stated in the Mai Declaration,²⁸ DHR's guidance requires the use of Munsell books when evaluating sites, so it is reasonable to credit Tyrer's statement that these three individuals—each of whom had at least five years of field experience—had the requisite experience and competence to do so for the Project's Phase I/II field study.

Munsell books typically include short instructions at the beginning, and tutorials are readily available online. The basic exercise is to hold color charts against a soil sample to identify the color chip that most closely matches the soil. Each color chip has an associated notation (e.g., "10YR 4/3"), which is then recorded in the archeologist's notes. The process is not unlike holding a hardware store paint swatch against a wall to identify the matching paint color.

Mai's statement that Circa's staff was not trained on how to use Munsell books and that they were not afforded adequate time to do so appears to be, at best, highly exaggerated. The Munsell system appears to be a simple tool that can be utilized easily and quickly with minimal training.²⁹ Mai's assertion that the three experienced Circa staff members who recorded the soil test pit excavations were not competent to use the Munsell books due to a lack of proper training implies that the system is much more complicated than it is.

Furthermore, the time required to use a Munsell book to identify and record soil color is minimal—roughly one minute per sample. Mai's statement that Circa's staff was not "allotted time in the field to conduct Munsell assessments" perhaps may

²⁷ Mai Decl. ¶ 66.

²⁸ Mai Decl. ¶ 27.

²⁹ Instructional sources consistently emphasize that the system is most accurate when the lighting conditions are optimum, the soil is moist but not saturated, and the evaluator is not wearing sunglasses. These are straightforward guidelines that do not appear to require a significant level of training or expertise to apply.

reflect a sincere opinion that he felt “rushed” during the study,³⁰ but taken on its own terms the definitive statement that staff was “not allotted time” for Munsell assessments appears to be an exaggeration.³¹

Lastly, there is conflicting evidence relating to Mai’s statement that the Munsell book was not “consistently used” during the Project’s Phase I/II field study. Tyrer and Mai’s statements are contradictory on this point. The field test notes indicate that the Munsell book was used for at least 75% of the shovel test pits, as signified by the number of test pits that appear to have a recorded Munsell notation. For test pits that appear to have only a recorded color, it is unclear whether the Munsell book was used but the color was written in lieu of the notation (as Tyrer states) or whether the Munsell book was not used at all (as Mai states). Viewed in isolation, Mai’s assertion that Munsell books were not used “consistently” is plausible in light of the available evidence. However, Mai’s other patently exaggerated statements related to the use of Munsell books during the study caution that this assertion may be exaggerated as well. Weighing these considerations, the most reasonable conclusion is that Munsell books were utilized for the vast majority of the shovel test pits but that use may have fallen short of 100%.

To a lay reader unfamiliar with Munsell assessments, Mai’s statements about improper training and inadequate time to perform those assessments are facially rational. Upon a closer examination of what Munsell assessments entail in practice, however, the only reasonable conclusion is that Mai’s statements on this issue are exaggerated and intended to be misleading.

4. Tyrer Did Not Invite Mai to Review the Phase I/II Report and Other Documents Prepared by Circa

Mai states that “Tyrer did not invite me to review or verify the maps of purported test areas created by Timmons for the Point of Fork site or to review for accuracy the report drawing conclusions from these tests.”³² Tyrer responded that she engaged the field crew in discussions about the site to “gain insights into field conditions,” but she does not dispute that Mai was not invited to review the maps and subsequent Phase I/II report. She does state that Mai was asked to make revisions to those maps in response to comments from DHR.

³⁰ Mai Decl. ¶ 75.

³¹ Mai Decl. ¶ 27.

³² Mai Decl. ¶ 28.

It does not appear that there is any applicable requirement or recommended guidance directing archeologists to submit draft reports or other documents to their field staff for review. DHR's *Guidelines for Conducting Historic Resources Survey in Virginia* (Sept. 2017) at 55 ("*DHR Guidelines*") recognize that the Principal Author of an archeological report need not be the same individual who served as the Principal Investigator for the field study. Nor do the *DHR Guidelines* appear to express the expectation that field staff be afforded the review opportunity Mai states he was denied. Accordingly, Mai's statement regarding Tyrer's preparation of the written materials for the Project without his involvement does not appear to indicate any improper conduct. Because Mai does not clarify that there was no obligation for Tyrer to afford him a review, Mai's statements about the lack of such review appear to be intended to convey a false insinuation of improper conduct by Tyrer.

C. Allegations That Tyrer Lied to State Officials and Directed Circa Staff to Do the Same in Relation to the Archeological Field Study (Mai Declaration Paragraphs 30–41)

Mai alleges several instances in which Tyrer failed to comply with applicable permit requirements, lied to agency officials about those alleged violations, and/or directed Circa staff to be untruthful with agency officials. Counsel believes these are the most troubling allegations in the Mai Declaration and that they warrant close scrutiny. The evidence that Tyrer directed staff to lie to officials is fairly characterized as inconclusive, with no reliable evidence to support or rebut the witness statements about the circumstances. However, there is persuasive reason to question the credibility of the allegation and version of events presented in the Mai Declaration. The specific allegation that Tyrer falsified Mai's resume appears to be directly contradicted by other reliable evidence, including documents prepared by Mai. For the remainder of the allegations relating to giving or inducing false statements to agency officials, Counsel does not believe the weight of the evidence is sufficient to recommend that the Board take action.

1. Tyrer Was "Largely Absent" for Initial Phase of Study

Mai states that Tyrer "did not travel to Point of Fork and was largely absent from the site for the first five months of our work."³³ It is important to note, however,

³³ Mai Decl. ¶ 31.

that there was no requirement for Tyrer to be continually present during this time (late April to October 2017). The burial permit was not issued until October 2017. The approved study *Work Plan* stated only that the survey would be “conducted under the direct supervision of an archeologist or architectural historian who meets the Secretary of Interior’s Professional Qualification Standards.” It did not specify that Tyrer would be solely responsible for supervising the field work.

Tyrer’s written response states that the initial phase of work consisting of shovel testing on the pipeline and laydown areas and coring and deep trench testing near the Rivanna River crossing lasted only from April 24 to June 2, 2017, at which time work was suspended because the burial permit had not been issued for the deep trench testing at the pump station site. Tyrer does not claim to have been at the site continuously during that initial six-week phase of the study. She states that she “visited” the site on “numerous occasions” during that phase of the study.

It must first be noted that Mai’s depiction of the initial phase of the study is factually incorrect. To reiterate, Mai states: “Tyrer did not travel to Point of Fork and *was largely absent from the site for the first five months of our work.*”³⁴ This characterization is repeated elsewhere in the document: “We rarely saw her [Tyrer] on site *for the first five months of our work on site.*”³⁵ As documented in the various invoices, the Project’s Phase I/II field study proceeded in two distinct stages:

- Stage 1: April 24, 2017 to June 2, 2017
- Stage 2: October 11, 2017 to January 19, 2018

Because Mai participated in both stages of study, it can be presumed that he is aware that work at the site took place for approximately six weeks and then was suspended for four months while Circa awaited issuance of the anticipatory burial permit. Mai’s characterization the first stage of the study appears to be deliberately misleading and intended to convey that Tyrer was “absent” for a full five months of ongoing field work when in fact no work took place for four of those months.³⁶

³⁴ Mai Decl. ¶ 31.

³⁵ Mai Decl. ¶ 21.

³⁶ The study timeline is misstated by Mai several times in the document. For example, Mai states: “For *nine months between May 2017 through January 2018*, I was assigned by Tyrer to conduct archaeological study and testing in advance of the James River Water Authority’s (“JRWA”) proposed construction project at Point of Fork in Fluvanna County, Virginia.” Mai Decl. ¶ 4. In response to a follow-up question from Counsel, Tyrer stated that

Notwithstanding Mai's misrepresentation of the initial phase of the study, Tyrer's statement that she "visited" the site during that time is not materially inconsistent with Mai's statement that she was "largely absent" during that period. The operative question is whether this fact evidences any misconduct by Tyrer or Circa.

Mai appears to satisfy the qualification standards to oversee the initial phase of study given that he had a master's degree in archeology and experience overseeing such studies.³⁷ Moreover, DHR staff acknowledged that Mai fulfilled the professional qualification standards in an email from Joanna Wilson Green to Steve Nichols dated November 22, 2017. Accordingly, Mai's assertion that Tyrer was "largely absent" during the initial phase of the study does not, without more information, demonstrate any improper conduct by Circa or Tyrer. Furthermore, the statement appears to be deliberately misleading.

2. Tyrer Directed Circa Staff to Lie to DHR Officials about Her Presence at the Site to Cover Up Noncompliance with the Burial Permit

Mai outlines incidents from October 12 and 13, 2017, in which Greg LaBudde of DHR visited the site each day and asked who was supervising. According to Mai, no Circa staff identified themselves as being the supervisor on October 12. Upon learning of LaBudde's October 12 visit, Mai states:

Tyrer was said to have become concerned and bothered. She demanded that a member of the crew inform LaBudde that Tyrer was typically at the site and that she had just left the site temporarily that day. I

Mai was assigned to several other projects (identified as "Walnut Solar," "Route 460," "Reeves Road," "Forest Glen," and "Cayden Ridge") during the four-month suspension of work on the JRWA Phase I/II field study. In another example, the Mai states: "*Early in the JRWA project*, Tyrer provided the crew with a burial permit issued by VDHR." Mai Decl. ¶ 30. The anticipatory burial permit was issued on October 4, 2017, toward the end of the four-month suspension and well over five months after the work commenced. It is not plausible that a person with first-hand knowledge of the study, such as Mai, would have *inadvertently* misconstrued the basic project timeline in multiple statements. There are two plausible explanations: either these statements were deliberately drafted by Mai to be misleading and paint Tyrer in a worse light, or they were drafted by a third party with a poor understanding of the basic facts.

³⁷ Mai's assertion that his qualifications were misrepresented is addressed below.

understood this to mean that Tyrer was asking the entire crew to lie on her behalf.³⁸

Mai states that LaBudde returned on October 13, and Tyrer was again not present. An unnamed “crew member” (believed to be Charlie Rutledge) allegedly “following Tyrer’s directive, told LaBudde that Tyrer had only temporarily left the site but that she was supervising our work closely—both false statements.”³⁹

The first question is whether Tyrer knew or believed that her absence from the site during LaBudde’s visits constituted noncompliance with the burial permit issued by DHR on October 4, 2017.⁴⁰ The permit itself did not expressly identify Tyrer as a person that must be present on site at all times. It stated only that “earthmoving activity within the project area take[] place at the direction and under the supervision of the supervising archaeologist.” Tyrer and Hines both stated that they assumed that the excavations should be conducted in accordance with a 2011 DHR guidance document stating that a supervising archeologist should be present on site at least 75% of the time.⁴¹ Tyrer and Hines both asserted that they did not understand the permit to require that Tyrer be present 100% of the time. They also stated they assumed Mai was qualified to fulfill the supervisory role, meaning that Tyrer’s presence was not specifically required. Following additional consultation, DHR determined that Mai was qualified to oversee shovel testing and that Tyrer and Dan Hayes should be onsite “at all times” to oversee any deep testing.⁴²

Whether Tyrer’s absence from the site on October 12 and 13 was not in compliance with the permit is not clear. Reading the permit language in light of DHR’s guidance, there is ambiguity as to whether the permit did or was intended to require that Tyrer be present for the entirety of the field work that took place following issuance of the October 2017 burial permit or, conversely, if Mai’s presence would satisfy the permit requirement. Assuming for the sake of argument that the permit did in fact require Tyrer’s onsite presence at all times, Tyrer and Hine’s statements that they did not understand the permit to require that Tyrer be present for all field work are plausible and consistent with a fair reading of the

³⁸ Mai Decl. ¶ 32.

³⁹ Mai Decl. ¶ 33.

⁴⁰ Whether Tyrer’s absence was not in compliance with the permit is not material to this report. The incident in question informally resolved at the time through discussions between JRWA and DHR, and corrective actions were taken.

⁴¹ DHR, *Guidelines for Conducting Historic Resources Survey in Virginia* 62 (Oct. 2011).

⁴² Email from Joanna Wilson Green to Steve Nichols (Nov. 22, 2017).

applicable requirements.⁴³ Thus, if Tyrer's absence was inconsistent with the permit, it is plausible to believe Tyrer and Hine's statements that they did not *believe* that the circumstances represented a permit violation. This conclusion is relevant because it has a direct bearing on whether Tyrer had a motive to provide false statements to DHR.

The next question is whether Tyrer instructed Circa staff to lie to DHR staff about her presence at the site. In evaluating Mai's summary of the October 12 and 13 incidents, it must be recognized that he does not claim to have personally heard Tyrer instructing Circa staff to lie to DHR. He states that Tyrer "*was said* to have become concerned" when she learned of LaBudde's first visit and that "she demanded" that an unnamed "member of the crew" make statements to LaBudde. Mai qualifies his statements further as stating that he "understood this to mean" that Tyrer had instructed the staff member to lie to LaBudde. Mai also does not state that he actually witnessed the unnamed staff member allegedly lying to LaBudde.

In a written statement provided to counsel, Tyrer denies instructing the employee to lie, stating: "At no time did I ask the crew members to lie to Mr. LaBudde." Tyrer summarizes her conversation with Circa staff member Charles Rutledge (presumably the same unnamed employee referenced in Mai's statement)⁴⁴ as follows:

I told the crew member that he could let Mr. Labudde that [sic] I had been out on site and that I was coming and going from the site. I went to the site to verify that the lock still worked, that the access road was available, the grass had been mowed in the field, and that the surveyors had marked the corners of the project area.

Tyrer states that Rutledge said that Tyrer "had not been there that day and that I [Tyrer] 'bebop' [sic] around to the job sites" and that she is "always available by phone if they have any questions." Neither the correspondence between DHR and JRWA nor the documents received from DHR through a FOIA request recount what

⁴³ To Counsel's knowledge, neither Hines nor Tyrer consulted legal counsel for advice on the construction of the permit.

⁴⁴ An October 17, 2017 letter from DHR Director Langan to Steve Nichols identifies Charles Rutledge as the Circa staff member who spoke to LaBudde.

statements, if any, Circa staff made to LaBudde regarding Tyrer's presence at the site.

Tyrer reports having a conversation with Rutledge at an unspecified date after the incident. She acknowledges in her written statement that Rutledge expressed to her during that conversation that he thought Tyrer was "implying for him to lie" about Tyrer's whereabouts and that he was caught off guard because it was "out of character." She states that Rutledge expressed that he was truthful with LaBudde nevertheless. Tyrer states that there was a misunderstanding and that it was not her intention to implicitly direct Rutledge to lie to DHR about her presence at the site. Counsel was unable to speak to Rutledge, who is no longer with Circa, to get his account of the October 2017 events or the more recent conversation with Tyrer.

The available evidence regarding Mai's allegation that Tyrer instructed Circa staff to lie to DHR in October 2017 is not sufficient and reliable to substantiate this very serious allegation. As noted above, Mai does not claim to have witnessed the alleged directive to lie to DHR staff. Mai is recounting a conversation with a third party, presumably Rutledge, who was expressing his impressions of statements allegedly made by Tyrer. Mai qualifies his recollection of that conversation by saying that he "*understood* [Tyrer's instructions] to mean that Tyrer was asking the entire crew to lie." This important qualification corroborates Tyrer's statement that she did not expressly instruct Rutledge to lie to LaBudde.

The only question is whether Tyrer intended to communicate an implied instruction for Rutledge and other Circa staff to be untruthful with DHR. Tyrer denies that she had this intent and states that Rutledge misunderstood her meaning. To disbelieve Tyrer's denial, and credit Mai's allegation, it is necessary to accept as true a chain of suppositions. First, it must be assumed that Mai is accurately portraying his conversation with Rutledge, and that Rutledge came away with a firm belief, and not a mere suspicion, that Tyrer directed him to lie. Second, we must assume, as a threshold matter, that the impression formed by Rutledge was an objectively reasonable conclusion to draw from the words actually spoken by Tyrer. Third, we must assume that Rutledge's impression of the conversation with Tyrer was sufficiently persuasive and probative of Tyrer's intent that it outweighs Tyrer's claim that the matter was the result of a misunderstanding. If any of these suppositions fail, there is no basis to discredit Tyrer's denial.

There is no reason to conclude that Rutledge or any other Circa staff in fact were untruthful with DHR staff during the October 2017 incident. Tyrer reports that Rutledge claims he was truthful about Tyrer's presence when LaBudde returned to the Project site on October 13, 2017, following Rutledge's conversation with Tyrer. Although Tyrer's statement is hearsay, it is corroborated by the fact that DHR's reports from that time do not mention any attempts by Circa staff to claim that Tyrer had only momentarily left the site. If a Circa staff member (Rutledge or other staff) had told LaBudde that "Tyrer had only temporarily left the site but that she was supervising our work closely,"⁴⁵ it appears highly unlikely that this statement would not have been mentioned in any of the communications between DHR staff or from DHR staff to JRWA. For example, DHR's letter to JRWA dated October 17, 2017, stated that the work was not being supervised by a qualified professional (i.e., Tyrer). If LaBudde had been told by a Circa employee that Tyrer was closely supervising the work, it is reasonable to assume that LaBudde would have construed that as a lie and it would have been reported in DHR's letter to JRWA.

The more difficult question is whether Tyrer attempted to cause her staff to lie to DHR staff. This is a serious allegation that warrants careful deliberation. At bottom, the question is whether Tyrer possessed the *intent* to direct her staff to lie. Tyrer's candid admission that Rutledge had the impression that she wanted him to be untruthful lends a degree of credibility to her explanation. Furthermore, that explanation is plausible and not inconsistent with any other available evidence. However, given that the allegation involves untruthfulness, Tyrer's denial cannot be relied upon too heavily to absolve her of wrongdoing.

The only way to evaluate intent is by weighing circumstantial evidence probative of Tyrer's state of mind. Counsel believes two pieces of evidence are particularly relevant to this evaluation. First, it does not appear that Tyrer had a motive to direct her staff to falsely state that she had been onsite regularly. As discussed above, Tyrer and Hines stated to Counsel that they did not believe at the time that the conditions in the October 2017 anticipatory burial permit required that Tyrer be onsite to directly supervise all field work. These statements are corroborated by a letter signed jointly by Hines and Tyrer to former Fluvanna County Administrator Steve Nichols dated October 20, 2017, which expressed their belief that there had been no violation of the permit. In short, the evidence supports the reasonable conclusion that Tyrer had no motive to cover up a permit violation because neither she nor Hines believed at the time that her actions constituted a violation. Second,

⁴⁵ Mai Decl. ¶ 33.

the only circumstantial evidence supporting Mai's allegation that Tyrer intended to direct her staff to lie is the reported impressions of a third party, Rutledge. Without additional reliable evidence about what Tyrer actual said to Rutledge, there is no basis to evaluate whether Rutledge's impression was reasonable and persuasive. That is too slender a reed to base a conclusion that Tyrer committed serious wrongdoing. The credibility of Mai's allegation is further diminished by his statement that Circa staff did in fact lie to DHR staff on October 13, 2017—which is not consistent with or supported by DHR's contemporaneous communications.

Weighing all available evidence and drawing reasonable conclusions therefrom, there is no reasonable basis to conclude that Tyrer intentionally instructed Circa staff to lie to DHR staff in October 2017. While that allegation cannot be disproven, the most plausible conclusion is that Tyrer is being truthful in her statement that her instruction to Rutledge was misunderstood.

3. Tyrer Failed to Supervise the Phase I/II Field Study Even After DHR Mandated that She Be Present for All Work

Mai states that "Tyrer was present more frequently on site, though she typically sat in her vehicle completing reports for other projects."⁴⁶ He adds, "Tyrer did not directly supervise the work we were doing."⁴⁷ If true, these allegations potentially indicate noncompliance with the anticipatory burial permit, which would be misconduct. In a November 22, 2017 email to JRWA representatives, DHR staff (Joanna Wilson Green) stated the "consulting parties agree that Ms. Carol Tyrer and Mr. Dan Hayes will be on site at all times during deep testing, and that all earthmoving conducted pursuant to this deep testing will be performed under their direct supervision."

Tyrer responded to Mai's statement as follows:

After VDHR explained that I was to be onsite every day, then I was onsite every day. The Geoarchaeologist, Faulconer team, and I were on site by 7:30 and Mr. Mai and the other team member arrived on site around 8:30 (they are paid travel time). . . . The Geoarchaeologist supervised all the deep-test trenches, and we discussed the excavations throughout the day. Mr. Mai was one of the team members who

⁴⁶ Mai Decl. ¶ 38.

⁴⁷ Mai Decl. ¶ 38.

excavated the features at the site. The other team member has over 30 years of experience and she excavated the complicated features. Mr. Mai excavated the hearth and other small pit features. . . . We discussed the feature types and the stratigraphy. The Geoarchaeologist also took notes of the features. The Geoarchaeologist and I did observe and photograph Mr. Mai's and the other team members excavations. At times, I was in my vehicle as we did not have a site trailer where I reviewed the shovel test maps, artifacts, feature forms, field notes, and photographs. In addition, I completed the shovel mapping for the positives, skipped, and negative shovel tests and wrote up the feature and shovel test data.

Tyrer's statement provides several details that cannot be independently verified but the statement, taken as a whole, is consistent with other evidence. The February 21, 2018 invoice from Timmons to JRWA stated: "Carol Tyrer (VDHR approved Archeologist) and Dan Hayes (VDHR approved GeoArcheologist) were required to be on site full time for the shovel testing and deep trench testing per the requirements of VDHR." The Faulconer foreman, Brandon Weaver, reported seeing Tyrer on site "every day." Faulconer also recorded notes of activity performed by its workers on a daily basis. The Faulconer invoice records for January 5, 2018 and January 8, 2018, are particularly informative. No billable time entries were made on those dates. Instead, there was a note stating: "No work due to Carol [Tyrer] not being present." These records support Tyrer's assertion that field work occurred at the Project site only on days and times when she was physically present.

Mai's statement that Tyrer was present "more frequently" implies that she was absent at times field work was ongoing. That implication is inconsistent with other evidence. Counsel finds it most persuasive that Faulconer's contemporaneous invoices reflected that work at the site did not proceed on days Tyrer was absent. Mai's statement that Tyrer was onsite "more frequently" is not categorically false; if Tyrer was present 100% of the days field work occurred, then she was present "more frequently" than before DHR's November 2017 email. However, by phrasing the statement in this manner, there appears to be a deliberate intent to be misleading and to give the false impression that Tyrer was not complying with DHR's directive or the anticipatory burial permit.

Mai's statement that Tyrer "typically sat in her vehicle completing reports for other projects" cannot be proved or disproved based on available information. Tyrer

admits Mai may have seen her in her vehicle “at times,” but claims she was performing tasks related to her oversight of the Phase I/II field study. Mai provides no foundation for how he could have known what tasks Tyrer was performing while she was in her vehicle—including whether she was completing tasks relating to the Phase I/II field study or other projects. Given the misleading nature of Mai’s related statement about the “frequency” of Tyrer’s presence at that site and the lack of support for the assertion, Counsel does not find Mai’s above-referenced statement to be credible.

4. Tyrer Altered the Mai Resume Submitted to DHR

Mai states that Tyrer submitted a version of his resume to DHR in October 2017 which was “substantially modified” and which “grossly mischaracterizes and exaggerates [Mai’s] experience with prehistoric sites.”⁴⁸ The purpose of the resume was to demonstrate that Mai was qualified to oversee the field work governed by JRWA’s 2017 burial permit. Mai claims that the resume submitted to DHR was incorrect in the following respects: (1) stating that Mai has experience with Native American sites of all periods when he does not; (2) claiming that Mai has “expertise” with Native American sites; and (3) identifying Mai as a “Field Supervisor” when he was never promoted or paid as a supervisor by Circa. Tyrer states that Circa reformatted Mai’s resume into a consistent “corporate format” like they did for all of their staff and that Mai was aware that she was “updating” it. She says that is a common practice in the industry. More to the point, Tyrer further states that the version of the Mai resume sent to DHR was correct based on his work for Circa.

Upon reviewing the available information, it does not appear that Mai’s resume was improperly exaggerated or falsified by Circa in October 2017. The version of the resume submitted to DHR at that time made the following statements regarding Mai’s experience with Native American sites:

Mr. Mia [sic] has experience dealing with both historic and Native American archeological resources. He has completed investigations for numerous projects that range from large-scale studies of archaeological and historical resources to detailed investigations of individual Native American and historic sites”

⁴⁸ Mai Decl. ¶ 36.

Mr. Mai's specialty is in the identification and analysis of archaeological sites of all periods. He has performed surveys and analyzed Native American sites of all periods (Paleoindian to Late Woodland)

In sum, the resume specifically states that Mai had "*experience*" with Native American sites. It does not state that he possessed any particular educational or academic expertise related Native American history.

Upon Counsel's request, Tyrer provided a list of archeological studies and reports Mai participated in during his tenure at Circa. Prior to October 2017, the number is in excess of 100. According to Tyrer, the studies Mai had participated in ran the gamut and included Native American sites from all periods.⁴⁹ That is wholly consistent with the statements on the October 2017 resume Tyrer submitted to DHR stating that Mai possessed "*experience*" with such sites.

Mai also has made statements reflecting his experience with Native American sites. Mai submitted a copy of his resume to DHR on September 17, 2019, which states that during his employment with Circa he "[c]atalogued and analyzed hundreds of artifacts in the field – *from prehistoric to 20th century.*" "*Prehistoric*" refers to pre-contact Native American artifacts. Mai also posted photographs to his Instagram page at least three times during the period of his employment with Circa showing Native American artifacts he recovered from sites.⁵⁰

The Mai Declaration states that Mai's resume was falsified to state that his "*expertise is . . . in Native American archeology.*" However, there does not appear to be any statement in the disputed resume that claims that Mai's "*expertise*" is in Native American archeology. As noted above, the resume states only that he has "*experience*" with such sites.

Lastly, the Mai Declaration asserts that Circa falsified Mai's resume by stating that he was a "Field Supervisor" despite the fact that he was never promoted to that position. This allegation is contradicted by other statements made by Mai. Mai sent a copy of his resume to DHR Director Langan on September 17, 2019, stating,

⁴⁹ The version of Mai's resume submitted to DHR in October 2017 included a selection of the studies he participated in as a Circa employee. Mai made no statements about the list being inaccurate.

⁵⁰ The posts were made under the handle @iamericmai and are dated November 6, 2013; January 2, 2015; and May 25, 2016. Screenshots of the posts have been saved.

“Attached is a current 2019 resume and the resume that I submitted to Carol.” On the attached 2019 resume, Mai lists his position at Circa as “Field Supervisor/Archaeologist.” The resume also states that during Mai’s tenure at Circa, he “*Managed* over 30 Phase I-III archaeological excavations throughout Virginia, North Carolina, Maryland, and Pennsylvania.” Because Mai resigned from Circa shortly after the Phase I/II survey, it is reasonable to assume that the many of the excavations Mai claims to have “managed” occurred in the years predating the study. Additionally, Mai’s LinkedIn page presently states that his position at Circa was “Field Technician.”⁵¹ However, that title reflects a very recent change to the page. Prior to publishing the Mai Declaration, Mai’s LinkedIn social media page listed his title at Circa as “Field Supervisor.”⁵² Mai also stated on his LinkedIn page—but recently deleted—“Individually, and as a team, I have helped manage all phases of cultural resources management (Phase I-III).” The fact that Mai changed the title and work description around the same time as the publication of the Mai Declaration suggests that Mai intentionally did so to conceal the fact that he had previously identified himself as a Field Supervisor for Circa.

In sum, Mai’s allegations that Circa doctored his resume in a submission to DHR to misrepresent his experience, education, and position is exaggerated in part and false in part. There does not appear to be any support for the contention that the version of Mai’s resume submitted to DHR did not fairly reflect Mai’s educational and work experience. Furthermore, the nature and timing of the revisions to Mai’s LinkedIn page suggest a deliberate intention to conceal evidence that contradicts statements in the Mai Declaration.

D. Allegations That Tyrer Used Untrained Construction Workers to Conduct Archeological Investigation (Mai Declaration Paragraphs 42–48)

Mai states that Tyrer “enlisted unoccupied construction workers from Faulconer Construction (vendors to JRWA engineering consultant, Timmons) to perform sensitive archaeological investigations.”⁵³ He states that the construction workers “dug shovel test pits and screened the soil for artifacts,” and that “there were many times when these construction crew were excavating or screening with no

⁵¹ <https://www.linkedin.com/in/ericvmai/>

⁵² Counsel has a screenshot of Mai’s LinkedIn page from October 4, 2019.

⁵³ Mai Decl. ¶ 42.

supervision whatsoever.”⁵⁴ He also asserts that Faulconer crew members “recorded” shovel test pits.⁵⁵

Tyrer and Hines acknowledge that Faulconer construction workers provided labor and assistance during Phase I/II field study, but they deny that any of that work was not directly supervised by a member of Circa’s staff. Tyrer’s written statement asserts:

The Faulconer crew members did assist intermittently the two archaeologist [sic] who completed the shovel testing at the site. The Faulconer crew members always worked with another trained Circa~team member and assisted with screening and some limited shovel testing excavation. In fact, Mr. Mai had one of the Faulconer crew members excavating shovel tests for him while he screened the soil and recorded the shovel test data. . . . They also assisted with the screening of feature fill if they were available.

Faulconer workers’ participation is recorded in their invoices on numerous dates. For example:

- May 15, 2017 invoice: “Dig and backfill DTT [deep test trench]. Clear a way to next DTT.”
- December 7, 2018: “Worked on hole 6 and hole 5. Backfilled some on hole 5. Helped hand dig and sift.”

There is no dispute that construction workers assisted the Phase I/II field study by operating heavy machinery to dig deep test trenches, dig shovel test pits, and screen (i.e., “sift”) soil samples. However, that fact is not per se evidence of misconduct. The DHR Guidelines do not mandate that all personnel participating an archeological field study be qualified archeologists. Rather, it states that “archeological investigations are to be conducted by *or under the direct supervision of* individuals meeting appropriate professional qualifications for archaeology.”⁵⁶ Regarding the specific qualifications necessary to assist in a study “under the direct supervision” of a qualified professional, the DHR Guidelines state only that the

⁵⁴ Mai Decl. ¶¶ 45, 47.

⁵⁵ Mai Decl. 45.

⁵⁶ DHR Guidelines 54. The guidance also states that the qualified professional, “whether the Principal Investigator or Field Supervisor, should be present on site at least 75% of the time.” *Id.* at 55.

“skills of all other investigative personnel *must be appropriate to the requested task*, the nature of the project, and to the goals and specifications delineated in the research design.”⁵⁷

Faulconer construction workers performed the following three tasks: (1) operating heavy machinery to dig trenches; (2) using shovels to dig test pits; and (3) shaking screens to sift soil. It appears likely that the skills of construction workers would be suitable and appropriate to these tasks. Additionally, Counsel consulted with other persons experienced in field archeology who stated that in their experience it is not unusual or improper for construction workers or other non-qualified staff (e.g., interns, laborers, new staff members) to assist with archeological excavations by performing these and similar tasks. Thus, for these three tasks, it appears that Faulconer construction workers’ role in the study was consistent with DHR’s Guidelines and standard practices, provided they were appropriately supervised.

That leaves two relevant questions: (1) Were Faulconer construction workers being appropriately supervised while performing the three tasks discussed above? (2) Were these workers also tasked with recording the results of shovel test pits (which presumably is not within the skill or competence of construction workers unfamiliar with archeological investigations)?

To gather additional information relevant to those questions, Counsel interviewed the foreman for the Faulconer construction crew that participated in the study, Brandon Weaver. Weaver stated that he was present every day that Faulconer’s crew was onsite and that he was responsible for the crew.⁵⁸ Weaver states that his crew initially worked primarily with Dan Hayes to operate heavy machinery for the deep test trenches. Weaver stated that all such activities were directly supervised by Hayes. Weaver stated that “later on” the Faulconer crew assisted with hand-digging shovel test pits and screening. He stated that this work was always conducted in concert with a Circa staff member, primarily Mai or Tyrer. He stated that Circa staff (usually Mai) “would take [his] guys and direct them what to do.” It

⁵⁷ DHR Guidelines 55.

⁵⁸ The Faulconer invoices reflect that Weaver was onsite during all work that occurred during the latter part of May 2017 until January 2018. However, the invoices reflect that the first two weeks of Faulconer’s work (May 1, 2017 to May 19, 2017) were overseen by a different foreman. There appears to be no reason for Weaver to give a false statement on this detail, and Counsel believes this inconsistency is most likely attributable to a misstatement or fault of memory about events that occurred more than two and a half years ago.

was Weaver's recollection, with respect to the directions given to his crew, that Hayes appeared to be in charge of the deep test trenching and Mai appeared to be in charge of the shovel testing.

Regarding shovel testing and screening, Weaver explained that a Faulconer crew member often worked in tandem with a Circa staff member. One would shovel dirt onto the screen and the other would sift. They would then trade places when they tired. Weaver clarified that his crew was never asked to identify or record any artifacts, soil layers, or other information. He states that those tasks were always performed by a Circa staff member, most often Mai, writing in notebooks they carried with them. This latter statement is consistent with the contemporaneous hand-written shovel test pit field notes provided by Tyrer, all of which appear to have been prepared by a Circa staff member.⁵⁹ Weaver stated that Faulconer's crew never conducted any excavation or screening activity that was not under the direct immediate supervision of a Circa staff member.⁶⁰

Weaver's recollection of Faulconer crew members' participation in the Phase I/II field study was materially consistent with the statements previously provided by Tyrer and Hines to Counsel.⁶¹ Counsel understands that Faulconer staff were instructed to direct any questions regarding the allegations in the Mai Declaration to Faulconer's counsel and to respond only with counsel present. Thus, Counsel has no reason to believe that Weaver coordinated his statements with Hines or Tyrer.

In sum, Mai's assertion that Faulconer construction workers assisted with certain tasks during the Phase I/II field study is not in question but is not necessarily improper. Mai's further assertion that construction workers were performing these

⁵⁹ If the field notes were fraudulently filled out by Circa staff members for shovel test pits that were in fact excavated and recorded by Faulconer crew members, it is not plausible that Mai would have omitted that assertion from this statement. Mai alleges that Circa falsified shovel test pits on *other* projects (Mai Decl. ¶ 65), but it is conspicuous that he does not make similar assertions with respect to this study. Accordingly, Counsel has no reason to question the authenticity of the field notes.

⁶⁰ Weaver also denied using, or witnessing any of this crew members using, a post-hole digging bar to excavate shovel test pits (Mai Decl. ¶ 45). He states he only witnessed his crew using shovels for this task.

⁶¹ For example, Tyrer stated in her written account: "The Faulconer crew members always worked with another trained Circa~ team member and assisted with screening and some limited shovel testing excavation. In fact, Mr. Mai had one of the Faulconer crew members excavating shovel tests for him while he screened the soil and recorded the shovel test data."

and other inappropriate tasks (i.e., recording shovel test pits) *unsupervised* is contradicted by other competent evidence. First, this assertion was expressly denied by Hines, Tyrer, and Weaver in factually consistent statements. Second, the assertion that Faulconer crew members independently excavated and recorded shovel test pits is inconsistent with the contemporaneous field notes, which appeared to have been recorded exclusively by Circa staff members.⁶² Thus, Mai's statement that Faulconer construction crew members performed unsupervised archeological investigations and improper recording of shovel test pits during the Phase I/II field study does not appear to be credible.

E. Allegations Regarding the Laboratory Methods and Phase I/II Report (Mai Declaration Paragraphs 55–61)

The Mai Declaration asserts that the laboratory methods were improper and that statements in the Phase I/II report were incorrect. Mai provides no foundation for these allegations and they cannot be corroborated.

1. The Phase I/II Report Was Not Complete and Accurate

Mai states that the “Phase I/II report is not a full and accurate assessment of what we found during survey and testing.”⁶³ He cites one specific example, stating that he does “not believe the Circa report accurately characterizes the site’s cultural richness” in the vicinity of the “power line easement near the top of the upper floodplain area.”⁶⁴

Tyrer states that the “Phase I/II reports [sic] details the extensive excavations and rich archaeological resources that were recorded in the project area” and that the “report discusses the presence of cobbles on the ground surface of the upper floodplain and details the artifacts that were recorded.”

Mai's criticism of the Phase I/II report reflects an opinion without any supporting factual basis. Counsel does not have sufficient information available to evaluate that opinion and offer any conclusions on it.

⁶² Note that not every shovel test pit form page was initialed by a Circa staff member. However, in several cases, it appears that a staff member initialed a page then did not initial subsequent pages. In those cases, the forms were recorded in a similar style and handwriting, indicating that they were recorded by the same person.

⁶³ Mai Decl. ¶ 56.

⁶⁴ Mai Decl. ¶ 56.

2. The Laboratory Methods Used to Investigate Artifacts from the Phase I/II Field Study Was Misstated

Mai states that the “methodology used to analyze the artifacts we found is also misstated” because all of the “artifacts sent to the lab were treated the same, regardless of type, importance, or condition.”⁶⁵ Mai further states that the unidentified “lab manager” did not possess the training or educational background to serve in that capacity.

Tyrer states that she was the laboratory director and that the person identified in Mai’s statement as the “lab manager” was her assistant. She states that she segregated any “special artifacts” prior to washing by the laboratory assistant. She also asserts that Mai was not regularly in Circa’s office and had “no working knowledge of the laboratory.”

Counsel identified no available evidence that sheds light on the laboratory methods employed by Circa for the Phase I/II field study. However, it is significant that Mai does not state the foundation for his purported knowledge of the laboratory methods employed on the Project. The declaration does not clarify whether this information came from Mai’s own observations, statements made by the unidentified “lab manager” to Mai, or some other source. Moreover, Tyrer’s statement that Mai had little direct knowledge of the laboratory practices observed at Circa’s office appears to be plausible in light of Mai’s statements about the tasks he performed for Circa. Accordingly, Counsel does not find Mai’s statements about Circa’s laboratory methods to be sufficiently supported or reliable to be deemed credible allegations of misconduct.

VI. Conclusion

The allegations of improper conduct presented in the Mai Declaration are serious and warranted a thorough examination. Counsel has endeavored to evaluate each of the principal allegations in the declaration based on all available information to draw reasonable conclusions about whether those allegations are credible to better inform the Board’s response.

As detailed above, Counsel was not able to confirm any of the most serious allegations of falsifying information about the Phase I/II field study and giving false

⁶⁵ Mai Decl. ¶ 57.

statements to agency officials. To the contrary, the Mai Declaration appears to contain numerous statements that are irreconcilably inconsistent with contemporaneous documents associated with the study or other statements by Mai. Furthermore, many of the allegations appear to deliberately misleading and exaggerated. Others appear to be false.⁶⁶

The direct and circumstantial evidence relating to several of the allegations against Circa and Tyrer is fairly characterized as inconclusive. Furthermore, allegations that Tyrer falsified her professional qualifications are the subject of litigation filed by Tyrer against DHR. Although those allegations are referenced in the Mai Declaration, Mai has no relevant first-hand knowledge relating to those allegations and Counsel expresses no opinion on them in this report. A court is the appropriate forum to resolve that issue.

In summary, Counsel does not find any of the principal allegations in the Mai Declaration to be credible and/or supported by the available evidence. Thus, Counsel does not believe the Mai Declaration provides information that is sufficiently reliable to base a recommendation for any specific further Board action with respect to Circa and Tyrer. Nevertheless, questions remain pending in court and with the relevant agencies (USACE and DHR) relating principally to Tyrer's professional qualifications. Unless and until those issues are resolved conclusively, Counsel recommends that the most reasonable and prudent course of action is to (1) retain Circa as a consultant on a limited on-call basis going forward so that JRWA does not lose the benefit of Circa's knowledge of the site and previous field studies and (2) proceed with the ongoing review of Circa's prior work product that is being conducted by GAI.

* * *
JWC

⁶⁶ Because the Mai Declaration is a sworn statement submitted to a federal agency for the purpose of affecting a pending permit application, any willfully false statements therein constitute perjury under federal (18 U.S.C. §§ 1621, 1622) and state law (Va. Code § 18.2-434).