

May 15, 2020

Mr. Kevin S. Young, P.E.  
Senior Consultant  
J. R. Wauford & Company  
2835 Lebanon Pike  
Nashville, Tennessee 37214

**Subject: Scope of Work and Fee Proposal, Cultural Resources Review for the City of Crossville, Tennessee, Water Supply Project, Wauford Project No. 4637-P3**

Dear Mr. Young,

TRC is pleased to provide J. R. Wauford & Company this proposal to complete a Phase I Cultural Resources Survey for the City of Crossville, Tennessee, Water Supply Project (the Project). The City of Crossville is preparing an application for a US Army Corps of Engineers (USACE) Department of the Army Section 404 Permit to raise the dam impounding the Meadow Park Lake drinking water supply reservoir. Raising the Meadow Park Lake dam will inundate approximately 363 acres to satisfy the projected future water supply needs of the City of Crossville and Cumberland County.

The proposed Phase I survey will be completed in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and the National Environmental Policy Act (NEPA) in support of the USACE Section 404 Permit application. The cultural resources survey will comply with the regulatory process described at 35 CFR Part 800 and will include both a Phase I archaeological survey and a historic architectural survey within the “permit review area,” also called the Area of Potential Effects (APE), as established by the USACE.

The following proposal provides the scope of work for a cultural resources survey and report according to the standards set out by the Tennessee State Historic Preservation Office (SHPO), the Tennessee Division of Archaeology (TDOA), and USACE. This proposal also provides a separate scope and fee for consultation services with the USACE and SHPO to resolve any adverse effects to architectural resources that may result from the proposed Project.

**Background Literature Research**

Prior to fieldwork, TRC will conduct a background literature and records search to locate previously identified archaeological and architectural resources in the project APE and to develop a cultural context for the area. TRC will conduct background research at the TDOA site files, the National Register of Historic Places (NRHP) files and pending records, and county survey records on file at the SHPO in Nashville.

The goal of the background research will be to determine if there are resources listed or determined eligible for listing in the NRHP, or previously surveyed within a 1.0-mile radius of the APE.

Additional sources of historical background data will be gathered from published and unpublished sources, including historic maps, county histories, online sources, and other relevant materials.

## **Phase I Archaeological Survey Methods**

The proposed archaeological survey will be conducted within the permit area also considered the Area of Potential Effects (APE). It is TRC's understanding that the APE consists of up to 363 acres, excluding the existing reservoir. TRC will conduct an intensive archaeological survey of the project area. Survey methods will meet or exceed the standards set by the TN-SHPO and TDOA. All areas with less than 10 percent slope will require systematic shovel testing at no greater than 30-meter (100-foot) intervals. This technique involves the excavation of 30-cm diameter shovel tests to subsoil. For areas where subsoil is not encountered within 1-meter additional hand auger testing will be employed to a maximum depth of 70-cm below surface.

It is understood that there is a high probability of the presence of stone features within each of the proposed tracts. Stone features such as rock cairns can vary in size and shape and can be covered/camouflaged by leaf litter and forest debris. During the visual inspection of the proposed tracts, TRC plans to use a commercial leaf blower to improve the visibility of these possible stone features.

If artifacts are located, additional shovel tests will be excavated at no greater than 10-m intervals in order to determine the spatial extent of the cultural material. This shortened interval will be continued until two negative shovel tests are excavated in each cardinal direction. Each site will be examined enough to sufficiently propose a NRHP eligibility determination.

The soil from each shovel test will be screened through ¼-inch mesh hardware cloth to ensure uniform artifact recovery. Detailed descriptions of the soils encountered in each test unit will be made. All artifacts recovered will be bagged by site and relative provenience within each site. The Field Director will maintain detailed notes on the survey methods, identified sites, and relevant environmental information.

Each site will be documented using Tennessee archaeological site forms, mapped, and recorded on USGS 7.5-minute quadrangles and photographed using a high-resolution digital camera. UTM coordinates for each site will be recorded with a GPS receiver.

Following the fieldwork, all artifacts, notes, maps, photographs, and other project materials will be returned to the TRC laboratory in Nashville for analysis. Laboratory analysis will include a complete catalogue of all recovered material, with special attention paid to materials that are temporally diagnostic or can help determine the function of the site at discrete points in time. The analyses will proceed following established laboratory protocols for archaeological research. Following analysis, the artifact collection will be prepared for permanent curation at a curation facility agreed to by the City, the TN-SHPO, and TDOA.

## **Historic Architectural Survey**

Preliminary research shows the Meadow Park Lake Dam was completed by the City of Crossville in partnership with the Works Progress Administration (WPA) in 1939. A water filtration plant was also built at the time but is no longer standing. The dam is the only architectural resource aged 50 years or older in the APE. For this survey, TRC will conduct background research to obtain copies of any drawings and/or records pertaining to the construction and history of the dam using readily available sources at local and regional libraries and archives, historical societies, and online sources. TRC assumes the ability to conduct thorough background research may be impacted by the ongoing Covid-19 pandemic and will adjust as necessary to obtain available documents and sources.

Using the results of the background research, TRC will conduct a site visit to document the dam with high-resolution digital photography and notes on its construction and current condition. Sufficient data will be gathered to complete an evaluation of the dam's eligibility for listing in the NRHP in accordance with the criteria set forth at 36 CFR Part 60.4. Sufficient data will also be collected to make a recommendation regarding a Section 106 Assessment of Effect pursuant to the regulations set forth by the Advisory Council on Historic Preservation (ACHP) at 36 CFR Part 800.5 (Assessment of Adverse Effects). The assessment of effect will include the information required by the RFP, including a description of the undertaking; identification of affected historic properties; and an assessment of the undertaking's effects on historic properties.

## **Consultation and Mitigation Services**

TRC will provide consultation services to assist in developing mitigation for any findings of adverse effect to the dam as a result of the Project. It is difficult at this point to say if these services will be required, or exactly what type of mitigation strategy will result from the consultation with SHPO and the USACE, because the Phase I survey has not been completed yet. Examples of mitigation strategies recently completed by TRC include the design of interpretive history signs installed at the Project, and documentation of resources for the Historic American Engineering Record (HAER). The HAER program is administered by the National Parks Service (NPS) and includes the compilation of background research gathered during the initial survey and evaluation into a prescribed NPS report format and the completion of large-format, black-and-white archival photography of the resource before project construction or alteration. The resulting documentation is reviewed by the SHPO, USACE, and NPS and is then sent to the U.S. Library of Congress for permanent archival storage. TRC has provided a separate estimated cost for these services below with the assumption that this cost may change depending on the outcome of the Phase I study and agency consultation.

## **Reporting and Deliverables**

Upon completion of fieldwork, TRC will provide the City with an email management summary outlining the initial results of our field surveys. TRC will then submit a pdf copy of the draft report for review. This will be a fully documented and professionally illustrated report meeting SHPO and TDOA standards, and will provide:

- An executive summary of the survey;
- An introduction and description of the survey research goals and methods;
- Maps showing surveyed resource locations;
- A cultural context;
- Survey results;
- NRHP eligibility recommendations and assessment of effects.

After receiving comments from the City, TRC will submit pdf copies of the Draft Final report for review and approval by the City and USACE. After receipt of review comments by the City and USACE, TRC will prepare a final report incorporating any changes requested. TRC will submit bound and electronic copies (number to be determined) of the final report within two weeks of receipt of comments.

### **Schedule**

TRC can mobilize and begin the survey within 10 business days of written Notice to Proceed (NTP). A management summary will be available within one week of the completion of the field survey. Following the management summary, a draft report will be prepared and provided to the City for review. A Final Draft report will be delivered to the City and USACE within 10 business days of receipt of comments.

### **Assumptions**

The proposed Phase I Cultural Resources Review for the Wauford Project No. 4637-P3 is based on the following assumptions:

- TRC assumes that 60 percent of the 363-acre project area, or 217.8 acres, will require systematic shovel testing at 30-meter intervals. The remaining 40 %, or 145.2 acres, contains excessive slope of greater than 10 percent and can be surveyed via a pedestrian survey and visual inspection at a short 10-meter interval.
- Up to 1080 shovel test probes will be excavated.
- In areas that have the potential to contain deeply buried cultural deposits TRC archaeologists will excavated up to 20 judgmental auger tests.
- Weather permitting archaeological fieldwork will be completed within nine (9) days with a crew of 5 TRC archaeologist.
- Based on our understanding of the region, up to 10 archaeological sites will be documented and assessed for NRHP eligibility.
- If a site is found to be potentially eligible, then TRC will consult with the USACE and SHPO on what mitigation measures are appropriate.
- TRC's costing is based on using our Nashville based personnel with a single mobilization and demobilization.
- TRC archaeologists will be housed in local hotel accommodations and receive standard General Services Administration (GSA) per diem rates.

**Cost**

TRC is offering the described above Phase I cultural resources survey services at a lump sum cost of **\$55,360.00**, under our standard terms and conditions with payment terms net 30 days. The proposed mitigation strategy to resolve potential adverse effects to the dam is offered at a lump sum cost of **\$15,360.00**. The combined total for all services described in this proposal is a lump sum cost of **\$70,720.00**.

TRC is pleased to have the opportunity to submit a proposal for this work. If you have any questions about the proposal, cost, or schedule, please contact me for clarification.

Sincerely,



James Greene, MA, RPA  
Project Manager, Archaeology  
615-218-4512  
TRC Nashville Office

Attachments: TRC Standard Terms and Conditions

Authorization:

J. R. Wauford & Company authorizes TRC Environmental Corporation to carry out the above described services. Check all that apply.

- Cultural Resources Review – \$55,360.00**
- Consultation and Mitigation – \$15,360.00**

Signature

Printed Name

Title

Date