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Virgin Islands Water and Power Authority  
9720 Estate Thomas  
St. Thomas, USVI 00802

**Subject: Revised Preliminary Proposal and Cost Estimate for Archaeological Monitoring for the Feeder 7E Underground Project in Cruz Bay, St. John, US Virgin Islands  
WAPA REQ. #41265**

To Whom it May Concern,

On behalf of the University of Tennessee at Chattanooga and the Jeffrey L. Brown Institute of Archaeology (JBIA), we are pleased to provide this revised cost proposal to provide Archaeological Monitoring for the Feeder 7E Underground Project in Cruz Bay, St. John, US Virgin Islands, for the Virgin Islands Water and Power Authority (WAPA). This revised proposal package describes the scope of the proposed archaeological investigations (Section I); offers a cost and payment structure (Section II); and provides a budget for review (Section III).

As a non-profit research institution of the University of Tennessee at Chattanooga, the JBIA would look forward to applying our archaeological expertise to this project. Should you elect to move forward and accept our proposal, please contact the undersigned so that our team can provide a Contract for signature. Please note that this is a preliminary proposal that reflects our best estimate of costs for the requested base rates. We have also included a more comprehensive budget that would account for operational costs that would accompany the proposed 1500 hours/188 days of archaeological monitoring. A more detailed budget or explanation of our cost structure can be provided if it would aid in your proposal review. Costs will need to be adjusted at the time the Contract is issued if the notice to proceed is issued beyond 90 days or if the scope of the project extends beyond the estimated 1500 hours of required fieldwork. Specifically, if the archaeological monitoring yields intact deposits requiring mitigation or if the period of performance extends beyond the requested 1500-hour estimate, additional project costs will be assessed related to fieldwork, the analysis of recovered materials, and the production of a final report. Such costs should be expected, although they are not included in this estimate for 1500 hours of archaeological monitoring. We note that our final contract would include such costs and would be drafted as a not-to-exceed proposal based on time and materials, meaning that costs will be assessed and invoiced up to the proposed amount noted in a final proposal.

Please know that we look forward to working with WAPA on this important project, which will be of great benefit to St. Johnians and significantly contribute to future disaster mitigation. We have successfully executed similarly structured projects in the USVI and would gladly bring our experience to this project. If you have any questions about the proposal or scope of work, please feel free to reach out to us. Know that we welcome the opportunity to work with you on this project, or any other project for which you have need of archaeological services.

Sincerely,

A handwritten signature in blue ink that reads "A. Brooke Persons".

Dr. A. Brooke Persons RPA  
Director, Jeffrey L. Brown Institute of Archaeology  
Research Assistant Professor  
Department of Social, Cultural, and Justice Studies  
University of Tennessee at Chattanooga

# SECTION I

## STATEMENT OF WORK

**Title:** Revised Preliminary Proposal for Archaeological Monitoring for the Feeder 7E Underground Project in Cruz Bay, St. John, US Virgin Islands  
**Client:** Virgin Islands Water and Power Authority (WAPA)  
**Contacts:** WAPA (Representative not identified) and Dr. A. Brooke Persons (JBIA)  
**Principal Investigator:** Dr. A. Brooke Persons RPA, Director (JBIA)

### Project Description

On behalf of the University of Tennessee at Chattanooga and the Jeffrey L. Brown Institute of Archaeology (JBIA), this revised cost proposal offers to conduct archaeological monitoring for the Feeder 7E Underground Project in Cruz Bay, St. John, US Virgin Islands (Figure 1). Archaeological monitoring is being required by the Virgin Islands State Historic Preservation Office (VISHPO), as the proposed project will rehouse the existing aboveground electric grid into a buried underground duct bank. The project extends through Cruz Bay, the primary town of St. John, but extends south and west to Frank Bay on Tobacco Road and north just beyond Mongoose Junction. This project takes place within portions of the historic Cruz Bay town and the newly designated Cruz Bay Historic and Architectural Control District as defined by the VISHPO's Historic Preservation Committee. The Area of Potential Effect (APE) consists of approximately 2,388 linear meters of trenching, underground duct bank installation of primary and secondary conduit, associated access points, and related infrastructure.

This proposal is designed to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended 2006 (16UDC 470) and associated regulation (36 CFR 800), as well as the guidelines established by the VISHPO. This proposed scope of work is adherent to the Antiquities and Cultural Properties Act of 1998 (Title 29, Chapter 17 of the VI Code), VISHPO standards for archaeological monitoring and testing, is in accordance with professional standards for the discipline, and reflects our staff's over 30 years of cumulative archaeological experience as Caribbean archaeologists with a specific research focus in the Virgin Islands.

Archaeological monitoring involves a literature and records search throughout the APE and archaeological fieldwork conducted during active earth change activities for the duration of the project as required by the VISHPO. On-site archaeological monitoring for the Feeder 7E Underground project would effectively identify and document subsurface features, prehistoric archaeological sites and deposits, and historic archaeological sites and deposits within the APE. The research design and associated budget for this proposal were prepared in accordance with information provided by your organization regarding the scope of work and the APE. Analysis of recovered materials will be concurrent with the fieldwork, but the full analysis and production of a final report may extend beyond the construction dates.

Archaeological monitoring within the boundaries of Cruz Bay will provide a unique opportunity to identify whether intact archaeological deposits or features remain preserved that are associated with critical events in the development of St. John, including the indigenous settlement of the island, early colonization, the 1733 Slave Insurrection, colonial administration of the island, the 1867 tsunami, and more. Additionally, there remains a possibility for as yet undiscovered subsurface deposits, historic foundations, and archaeological features associated with the town itself, including homes, storefronts, cemeteries, infrastructure, and other buildings. Based on the historic significance of the town of Cruz Bay, there is a high likelihood that intact historic and/or prehistoric deposits and features will be uncovered during the earth change activities associated with the Feeder 7E underground project.

In accordance with the VISHPO's guidelines for archaeological survey and testing, the enclosed scope of work seeks to identify and document archaeological sites, features, and foundations that are within the areas impacted by the proposed conduit rehousing. As this is a proposal for archaeological monitoring, the identification and documentation of archaeological data will be concurrent with on-site excavations during earth change activities. Onsite monitoring will prioritize the salvage and/or mitigation of discovered features, concurrent with the active utility crews or WAPA's contractors.

# SECTION I STATEMENT OF WORK



Figure 1. Proposed extent of archaeological monitoring for the Cruz Bay 7E Feeder Project on St. John, US Virgin Islands.



## SECTION I STATEMENT OF WORK

### Scope of Work

The enclosed proposal for archaeological monitoring provides for the following:

*VISHPO Notification:* Following execution of a contract, JBIA will reach out to the VISHPO and provide a research design for their review, along with a notification of the proposed schedule of monitoring activities associated with the Feeder 7E project. JBIA will work with the VISHPO to establish a protocol for the discovery, documentation, and assessment of cultural resources discovered during fieldwork to mitigate any potential impacts to archaeological sites, subsurface deposits, and/or archaeological features. JBIA will also work with the VISHPO to establish a mechanism of timely reporting, including weekly summaries of monitoring and associated archaeological finds.

JBIA identifies Dr. A. Brooke Persons RPA as the Principal Investigator and Kate Crossan RPA, MA, as the Field Director and primary on-site monitor. Both archaeologists meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology and are members of the Register of Professional Archaeologists (RPA). Additional qualified staff may be tasked to work on the project as needed.

*Literature and Records Search:* A records search was requested from the VISHPO prior to this proposal, although the results are pending. However, there are documented historic and prehistoric archaeological resources in the vicinity of the project area. If awarded this contract, a records search will include a search of known sites, including sites represented in the Virgin Islands State Historic Preservation Office's Sitefile and report library and sites listed in the National Register of Historic Places (NRHP). The JBIA will also reach out to the Virgin Islands National Park (VINP) for relevant data on recent projects. A background search will include a summary of nearby archaeological investigations and a general narrative of the development of St. Cruz Bay and St. John relative to the cultural resources identified during the project. Background research will include prehistoric and historic sites and information on historic buildings and sites, as available and as warranted.

*Archaeological Monitoring and Fieldwork:* Field investigations for the project will include archaeological monitoring, which involves the presence of an archaeologist for all earth change activities associated with the underground duct banks and associated infrastructure. Field investigations for the project will involve visual inspection of excavations, screening of excavated soils (as needed), and documentation of subsurface deposits through digital photography, recorded soil profiles, hand excavations, and other methods as necessary. All diagnostic observed materials will be recovered, bagged, and then labelled with relevant provenience information. The location of cultural material recovery, recorded features, and any associated deposits, will be mapped, recorded via handheld global positioning systems (GPS) or geographic information systems (GIS) software, and documented through digital photography and scaled drawings. Field records will record daily monitoring activities, onsite conditions, observed soil profiles, subsurface archaeological contexts, recovered materials, and relevant characteristics of the APE.

In the event that a site, feature, or deposit is encountered during the earth change activities, the archaeological monitor will document the find in the field. The monitor may request that earth change activities be temporarily halted to permit full documentation of the find. The monitor will provide an in-field assessment and determination of significance, but please note that the length of time required to make an appropriate assessment may vary based on the nature of the find. Most finds can be recorded within an hour or less, but others require additional work and investigation. JBIA will coordinate with WAPA, its contractor, and the VISHPO to determine an appropriate course of action if additional mitigation measures are warranted.

If a potentially significant find is uncovered that cannot be dealt with within the scheduled work day, JBIA will notify WAPA immediately and seek immediate consultation with the VISHPO staff. If the mitigation measures as required by the VISHPO require additional assistance in the field, JBIA may bring additional staff in to participate in fieldwork, including documentation, test unit excavations, or specialized analyses. If warranted and necessary, JBIA will provide a change order for approval by the client.

## SECTION I

### STATEMENT OF WORK

Although not anticipated, should human remains be encountered during any point during the survey and fieldwork, JBI A will immediately halt excavations in that locale, notify the client, and request VISHPO consultation.

*Laboratory Analysis:* Any artifacts recovered during the archaeological monitoring will be analyzed using classificatory schema appropriate for the Caribbean and relevant to current practices in the Virgin Islands. Artifacts will be washed, air-dried, and safely stored during analysis. When dry, all artifacts will be analyzed and sorted relative to major artifact classes (e.g., metal, ceramics, lithics, etc.), counted, weighed, labelled, and rebagged by provenience in 4-mil plastic bags. Recovered materials will be compared to contemporaneous sites, if warranted, and analyzed using standard classification systems consistent with industry standards. Artifacts will be stored in archival-quality bags and prepared for curation. The results of the analysis will be tabulated and summarized in a final report.

*Should the project result in mitigation of intact archaeological resources and extensive cultural material recovery, note that additional costs will be assessed related to the processing and analysis of recovered materials. Such costs are not included in this proposal, as the bid requested a base rate for 1500 hours. We can provide a better estimate of reporting costs with a better idea of project timelines, schedules, and more. Such costs will be factored into a final contract.*

*Report Preparation:* To provide an ongoing report of the project and associated discoveries, JBI A will prepare a weekly report. The weekly report will be distributed to the VISHPO, WAPA, the contractor, or other key project personnel, providing information regarding monitoring activities, recent finds, challenges, relevant project information, and recommendations. The production of a weekly report is included in the enclosed budget.

Following the completion of the fieldwork and laboratory analysis, a complete report of investigations will be prepared outlining the background search, the results of JBI A fieldwork and analysis, and a brief summary of environmental and geographic data. A cultural history will be provided of relevant cultural periods related to recovered materials. Upon completion of the report, JBI A will provide a copy of the report to the client, including four hard copies and a digital PDF version. Two of the hard copies should be submitted to the VISHPO for permanent filing upon acceptance and following VISHPO review.

If the client or the regulatory agency requests revisions, JBI A will provide an updated version of the report for permanent filing. The report will include project maps, relevant historic maps (if available), and a map of relevant project data as it pertains to the monitoring. Digital photographs and GIS shapefiles can be provided to the client or their representatives upon request. JBI A will notify the client and the VISHPO upon the completion of the fieldwork and demobilization.

*As dictated by VISHPO guidelines and industry standards, a project of this scale will require the production of a final report. The cost of producing a final report is not included in this proposal, as the bid requested a base rate for 1500 hours. We can provide a better estimate of reporting costs with a better idea of project timelines, schedules, and more. Such costs will be factored into a final contract.*

*Curation of Artifacts and Records:* Following the conclusion of the project, JBI A will permanently curate any all records and recovered materials with the VISHPO at the time in which the VISHPO is prepared to receive new collections. If the VISHPO is not accepting collections at the time of curation, the materials will be curated at facility that meets Federal curation standards under 36 CFR Part 79 until the VISHPO is prepared to receive new collections. The facility will be identified in the report. It is estimated that five (5) boxes of materials will be recovered during the monitoring activities. Should actual curation costs be greater than this estimate, JBI A will submit an invoice for payment by the client.

## **SECTION I**

### **STATEMENT OF WORK**

*Coordination and Consultation:* We anticipate being a part of scheduled meetings for this project. If the presence of requested, JBIA will bill the client for actual time spent during on site meetings and consultation with the client or the client's representatives. Should additional time or travel be requested by the client following the demobilization from fieldwork, JBIA will submit a change order and/or invoice for associated costs.

## SECTION II COST PROPOSAL AND STRUCTURE

### Schedule of Work and Deliverables

The JBIA will immediately begin work following execution of a contract between UTC and WAPA. JBIA requests that authorization for the project be provided at least 3 weeks in advance to the start of the field monitoring activities. The length of archaeological monitoring will be determined by the nature of the work being performed, the duration of earth change activities, and the schedule of work as determined by WAPA and its contractor. A daily protocol and schedule for fieldwork will be arranged with the client and the contractor following notification to proceed.

The enclosed proposal was drafted based on the RFP provided by WAPA, which requested the following basic price points: 1350 hours for onsite monitoring, 50 hours of advice on mitigation, 50 hours of administrative reports, and 50 hours for on-site-meetings and reporting of urgent issues. The basic hourly rates are noted below:

Item	Description	Qty	Rate	Amount
1	The Archaeologist will be responsible for monitoring ground-disturbing and the installation of the associated distribution equipment activities that will be conducted during the 7E Underground Project.	1350 hrs	Basic Hourly Rate for Principal Investigator (PI): \$46.21  Hourly Rate for Field Director (FD): \$ 35.24	Depending on staffing, between \$62,383.50 (PI) and \$47,574 (FD).
2	Advice on general mitigation measures to be used throughout the entire project.	50 hrs	Basic Hourly Rate for PI: \$46.21  Hourly Rate for FD: \$35.24	Depending on staffing, between \$2,310.50 (PI) and \$1,762 (FD).
3	Provide recurring administrative reports and provide them to the Authority's Project Managers.	50 hrs	Basic Hourly Rate for PI: \$46.21  Hourly Rate for FD: \$35.24	Depending on staffing, between \$2,310.50 (PI) and \$1,762 (FD).
4	Conduct on-site meetings and report urgent issues regarding archaeologist findings	50 hrs	Basic Hourly Rate for PI: \$46.21  Hourly Rate for FD: \$35.24	Depending on staffing, between \$2,310.50 (PI) and \$1,762 (FD).
1500 HOUR BASE SALARY ESTIMATES				Depending on staffing. If all work performed by PI: \$ 69,315  If all work performed by FD: \$ 52,860

While the above costs reflect basic salary estimates, we anticipate that the project will incur additional operational and indirect costs to ensure that an archaeologist is on site for the duration of the project. Based on information provided by your institution, the project duration is approximately 12 months, beginning in March of 2021 and ending in March of 2022. We assume a work schedule that runs Monday through Friday (five days a week) and includes 8-hour workdays during daytime hours.

## SECTION II

### COST PROPOSAL AND STRUCTURE

While the requested RFP requested basic hourly rates, the 1500 hours would translate to approximately 188 actual work days interspersed across at least 37.5 weeks. Accordingly, a comprehensive budget covering 188 days of archaeological monitoring is accounted for in the attached proposal.

We understand that proposed 1500 hours of monitoring requested in the RFP may not suffice for the entire one-year period of performance and that additional man-hours, travel, and project costs would be factored into a final contract. Specifically, such work would include additional man-hours and fieldwork to meet monitoring obligations over the 12-month period, the production of a final report, curation of additional excavated materials, and additional tasks as assigned, which will require more than the projected 1500 hours. Please note that the official Period of Performance will be established in the executed Contract agreed upon by both parties, and that all project activities must fall within the Period of Performance as delineated in the Contract.

Should monitoring services be required beyond the proposed period of performance, JBIA can provide a change order or an amended contract for execution to cover additional services and charges.

#### Cost Structure

The JBIA estimates the proposed cost for 188 days of on-site, on-call archaeological monitoring services as outlined above would be valued at approximately \$171,409.16 (One Hundred and Seventy One Thousand Four Hundred and Nine Dollars and Sixteen Cents). This proposal estimates 90 days of fieldwork during high-season travel and 98 days of fieldwork during low-season travel using rates according to the GSA per diem schedule.

Overall, though, for on-call archaeological monitoring, analysis, and report production, the following rates would apply (including benefits):

Principal Investigator:	\$ 369.69/day or \$46.21/hour
Field Director	\$ 281.88/day or \$35.24/hour
Archaeological Field Assistant	\$ 130.8/day or \$ 16.35/hour

*Overtime Rates Over 40 Hours/Week are assessed at 1.5X for each employee.*

Associated travel costs for the on-site archaeologist(s) will include travel time, airfare, vehicle rental, and per diem assessed at GSA rates during mobilization. GSA rates for St. John are currently at \$293/day during the low seasons and \$353/day during the high season, including lodging, meals, and incidentals. We note that all reasonable efforts will be made to reduce travel costs whenever possible and that all efforts will be made to implement cost-saving measures. In addition, in accordance with UTC's own internal policies, our negotiated overhead rate of 15.5 percent will be applied, rather than our standard rate of 36 percent.

If awarded the contract, JBIA agrees to provide an archaeological monitor on an on-call basis during the proposed period of performance, including a five-day work week and 8-hour work days. For each day during the week for which work is scheduled by WAPA, whether a five day or six day work week, JBIA will bill a minimum of four (4) hours of work for providing an on-call monitor, or actual hours worked if over four hours.

If over 40 hours of monitoring are required within a given work week, JBIA monitors will be paid at a rate equivalent to a multiplier of 1.5 for labor expenses per hour for hours worked over 40 hours in a given week.

In event that the project experiences delays or extended shut downs (e.g., Carnival, holidays, weather, etc.), JBIA may demobilize to implement cost-saving measures or continue to work on other elements of the project invoicing actual hours worked. JBIA requests notification in advance of extended breaks when no work is scheduled.



## **SECTION II**

### **COST PROPOSAL AND STRUCTURE**

If archaeological testing and/or data recovery are required and additional staff are warranted to complete the excavations in a timely manner, JBI A will provide WAPA with a cost proposal and change order for authorization prior to conducting such work. Deployment of additional staff may require up to seven (7) days to initiate following authorization, which may require an adjustment of the associated work schedule for WAPA or its contractors.

Expendable field supplies required for the monitoring project, including field equipment, safety equipment, specimen bags, and hand tools, may be purchased as needed and billed to the project.

Importantly, this proposal accounts for approximately 1500 hours or 188 days of archaeological monitoring. We assume that the actual hours to complete the archaeological monitoring for the Feeder 7E project will require more than the projected 1500-hour total. If awarded the contract, JBI A can provide the services above on a Time and Materials basis at the basic rates outlined above. JBI A will maintain appropriate documentation to account for and substantiate costs incurred. Supporting documentation can be provided to WAPA upon request.

#### **Payment Schedule**

Following execution of a contract and prior to mobilization, JBI A will invoice WAPA for a mobilization fee totaling 25 percent of the total estimated project costs as defined by the final contract and period of performance. Although background research and initial project work may be performed prior to the fieldwork, JBI A fieldwork and on-site monitoring will not begin until the 25 percent mobilization fee has been received by UTC.

Once those funds have been exhausted and for the remainder of the project, JBI A will provide monthly invoices to WAPA through the period of performance. Payment is due upon receipt and within 30 days.

#### **Statement of Qualifications**

The Jeffrey L. Brown Institute of Archaeology, a non-profit research institution of the University of Tennessee at Chattanooga, is listed on the List of VISHPO Authorized Archaeological Consulting Firms. Founded in 1975, the JBI A's mission is to conduct archaeological investigations that help private industry, non-profits, and federal/state/local/territorial governments to conduct archaeological research and document archaeological heritage. Under its director, Dr. A. Brooke Persons, JBI A conducts academic research and sponsored investigations throughout the American southeast and the Caribbean, with a special focus in the US Virgin Islands. At the JBI A, we seek creative, research-driven solutions to heritage management that enrich our community partners and contribute to the documentation of archaeological resource across regions.

Dr. A. Brooke Persons, is listed on the Register of Professional Archaeologists, meets all of the Secretary of the Interior's professional qualification standards for archaeology, and serves as the Principal Investigator for all JBI A projects. She has been dedicated to prehistoric and historic Caribbean archaeology since 2004 and has been working, and at times living, in the US Virgin Islands since 2007. She has directed numerous projects focusing on prehistoric and historic sites through the USVI, Cuba, and the American Southeast, including all phases of investigation and archaeological monitoring. She previously served as an archaeologist for the Department of Planning and Natural Resource's Virgin Island State Historic Preservation Office, and she received a MA (2006) and PhD (2013) in Anthropology from the University of Alabama.

Kate Crossan, the Field Director for this project, is listed on the Register of Professional Archaeologists and meets all of the Secretary of the Interior's professional qualification standards for archaeology. A former resident of St. Croix, Ms. Crossan has been working in Virgin Islands archaeology since 2007. Her experience spans Mesoamerica, the Caribbean, the Southeast, and Ireland. She has participated in and directed numerous projects on prehistoric and historic sites throughout the USVI. She has served as the primary onsite monitor for long-term archaeological monitoring projects in the USVI, and has extensive experience with historic background research, analysis of prehistoric and historic materials, and archaeological investigations of all phases. She received a MA (2015) in Archaeology from the University of Ireland in Galway.

## **SECTION II**

### **COST PROPOSAL AND STRUCTURE**

While the JBIA does not maintain a USVI business license, we are listed on the VISHPO's list of approved archaeological consulting firms. UTC is a registered Vendor with the Government of the Virgin Islands and can provide documentation upon request. Additionally, as UTC and the JBIA represent an educational institution whose primary responsibility is education, we are exempt from being required to have a business license to conduct research (cultural resources management) in the USVI.

### SECTION III COMPREHENSIVE BUDGET

This budget provides an estimate to cover approximately 1500 hours or 188 days of on-site archaeological monitoring for the Feeder 7E Underground Project in Cruz Bay, St. John, US Virgin Islands. Additional information can be provided upon request.

<b>Preliminary Proposed Archaeological Monitoring Estimate for WAPA Feeder 7E Underground Project, Cruz Bay, St. John, US Virgin Islands</b>		
Preproject Background Research, Fieldwork, Lab, Analysis, and Weekly Reports	Salaries	\$ 58,262.20
Travel (reflects GSA rates during mobilization, mileage, operations)	Travel	\$ 85,269.00
Materials/Supplies, Curation, Field Incidentals, Water Screening	Direct and Indirect Expenses	\$ 27,877.96
TOTAL ESTIMATED COSTS		\$ 171,409.16
TOTAL PROPOSED COST		\$ 171,409.16

As noted throughout the proposal, additional fieldwork and associated activities may be required beyond the 1500 hours to complete the project, including the analysis and processing of recovered materials, mitigation if intact resources are discovered, and, most importantly, the production of a final report as required by the VISHPO guidelines (See Section II). While we could contribute to some of those tasks within the estimate 1500 hours of archaeological monitoring, we anticipate that additional costs may be required to meet VISHPO guidelines of reporting.