

RESOLUTION NO 2024 – 090
CITY OF LAKE CITY, FLORIDA

A RESOLUTION OF THE CITY OF LAKE CITY, FLORIDA, AUTHORIZING TASK ASSIGNMENT NUMBER TWO PURSUANT TO THE CONTINUING CONTRACT WITH FOUR WATERS ENGINEERING, INC, A FLORIDA CORPORATION; PROVIDING FOR ENGINEERING SERVICES PERTAINING TO THE DESIGN, PERMITTING AND BIDDING ASSISTANCE OF GWEN LAKE AT A PROPOSED PRICE NOT TO EXCEED \$305,225.00; MAKING CERTAIN FINDINGS OF FACT IN SUPPORT OF THE CITY APPROVING SAID TASK ASSIGNMENT; RECOGNIZING THE AUTHORITY OF THE MAYOR TO EXECUTE AND BIND THE CITY TO SAID TASK ASSIGNMENT; AUTHORIZING THE CITY MANAGER WITH THE CONSENT OF THE CITY ATTORNEY TO MAKE MINOR CHANGES TO THE SCOPE OF WORK OF THE TASK ASSIGNMENT PROVIDED SUCH CHANGES DO NOT INCREASE THE QUOTED PRICE IN THE TASK ASSIGNMENT; REPEALING ALL PRIOR RESOLUTIONS IN CONFLICT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Lake City, Florida (“the “City”) and Four Waters Engineering, Inc. (the “Vendor”) entered into that certain continuing contract as authorized by City Council Resolution No. 2024-066 (the “Continuing Contract”); and

WHEREAS, the Vendor shall provide engineering services (the “Services”) including design, permitting and bidding assistance in furtherance of the remediation of Gwen Lake; and

WHEREAS, the Continuing Contract provides the Vendor shall provide services to the City only when requested and authorized in writing by the City; and

WHEREAS, each request from the City to the Vendor for services shall be for a specific project with the scope of the work defined by and embodied in a separate task assignment; and

WHEREAS, the City Council desires to enter into that certain task assignment pursuant to the Continuing Contract with the Vendor for the Services in furtherance of the Project, in accordance with the terms and conditions of Task Assignment Number Two (the “Agreement”), a copy of which is attached as an Exhibit hereto; and

WHEREAS, the City Council desires that the City Manager, with the consent of the City Attorney, be authorized to consent to minor changes to the scope of work of the Agreement provided such changes do not increase the quoted price of the Agreement; and

WHEREAS, approving the Agreement pursuant to the Continuing Contract with the Vendor for the Services in furtherance of the Project is in the public interest and in the interests of the City; now therefore

BE IT RESOLVED by the City of Lake City, Florida:

1. Approving the Agreement pursuant to the Continuing Contract with the Vendor for the Services in furtherance of the Project is in the public or community interest and for public welfare; and

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2. In furtherance thereof, the Agreement in the form of the Exhibit attached hereto should be and is approved by the City Council of the City of Lake City; and
 3. The Mayor of the City of Lake City is the officer of the City duly designated by the City's Code of Ordinances to enforce such rules and regulations as are adopted by the City Council of the City of Lake City; and
 4. The Mayor of the City of Lake City is authorized and directed to execute on behalf of and bind the City to the terms of the Agreement; and
 5. The City Manager, with the consent of the City Attorney, is authorized to agree to minor changes to the scope of work of the Agreement provided such changes do not increase the quoted price of the Agreement; and
 6. All prior resolutions of the City Council of the City of Lake City in conflict with this resolution are hereby repealed to the extent of such conflict; and
 7. This resolution shall become effective and enforceable upon final adoption by the City Council of the City of Lake City.

APPROVED AND ADOPTED, by an affirmative vote of a majority of a quorum present of the City Council of the City of Lake City, Florida, at a regular meeting, this ____ day of October, 2024.

BY THE MAYOR OF THE CITY OF LAKE CITY,
FLORIDA

Stephen M. Witt, Mayor

ATTEST, BY THE CLERK OF THE CITY COUNCIL
OF THE CITY OF LAKE CITY, FLORIDA:

Audrey Sikes, City Clerk

APPROVED AS TO FORM AND LEGALITY:

Clay Martin, City Attorney

**TASK ASSIGNMENT NUMBER TWO
TO THE
CONTINUING CONTRACT
BETWEEN THE CITY OF LAKE CITY, FLORIDA, AND FOUR WATERS ENGINEERING, INC, A
FLORIDA CORPORATION,
FOR DESIGN, PERMITTING AND BIDDING ASSISTANCE IN
FURTHERANCE OF THE REMEDIATION OF GWEN LAKE**

THIS TASK ASSIGNMENT NUMBER TWO made and entered into this ____ day of October 2024, by and between the CITY OF LAKE CITY, FLORIDA, a municipal corporation, located at 205 North Marion Avenue, Lake City, Florida 32055 (hereinafter the "City"), and Four Waters Engineering, Inc., a Florida corporation (hereinafter the "Consultant").

RECITALS

A. City and Consultant have heretofore entered into a Continuing Contract for engineering assessments, project development, design, permitting, construction monitoring, and other related services as authorized by City Council Resolution No. 2024-066.

B. The Continuing Contract provides that Consultant shall perform services to the City only when requested to and authorized in writing by City and that each request for services shall be for a specific project, with the scope of the work to be performed by and compensation to be paid to Consultant for each separate project and be defined by and embodied in a separate Task Assignment.

C. The City is in need of engineering services including design, permitting and bidding assistance in furtherance of the remediation of Gwen Lake.

D. The City desires to enter into this Task Assignment Number Two with the Consultant for the aforementioned services pursuant to the terms and conditions contained herein and the attachment hereto.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained, the parties hereto agree as follows:

1. **RECITALS**: The above recitals are all true and accurate and are incorporated herein and made a part of this Task Assignment Number Two.

2. **PROJECT**: The City hereby engages Consultant and Consultant agrees to furnish to City the services and work as set forth in the correspondence dated September 11, 2024, received by the City from the Consultant consisting of a total of one (1) page and attached hereto as "Exhibit A" and made a part of this Task Assignment.

3. **COMPENSATION TO CONSULTANT**: City shall pay Consultant a fee for the tasks identified in Exhibit A as each task is completed for a total projected cost not to exceed three hundred five thousand two hundred twenty-five dollars (\$305,225.00).

4. **PROVISIONS OF CONTINUING CONTRACT**: The terms, provisions, conditions, and requirements of the Continuing Contract are incorporated herein and made a part of this agreement and shall be complied with by Consultant. Should any conflict arise between the terms and conditions set forth herein and the Continuing Contract, the terms and conditions of the

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Continuing Contract shall be controlling. Should any conflict arise between the terms and conditions set forth in the attached exhibit with either the Continuing Contract or this Task Assignment, the conflicts shall be construed in favor of the Continuing Contract first and then, if applicable, this Task Assignment.

5. **ATTORNEYS' FEES AND COSTS.** In the event of breach by either party of the Continuing Contract or any Task Assignment, the breaching party shall be liable for, and agrees to pay, all costs and expenses incurred in the enforcement of this Continuing Contract or any Task Assignment, including reasonable attorneys' fees and legal costs and fees incurred in seeking reasonable attorneys' fees.

6. **ENTIRE AGREEMENT.** This Task Assignment, and the Continuing Contract, constitute the entire agreement between City and Consultant and supersedes all prior written or oral understandings with respect to the project. This Task Assignment may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

7. **PARTIES BOUND.** This Task Assignment Number Two shall be binding upon and shall inure to the benefit of City and Consultant, their successors and assigns.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Assignment Number Two as of the day and year first above written.

CITY OF LAKE CITY, FLORIDA

By: _____
Stephen M. Witt, Mayor

ATTEST:

By: _____
Audrey E. Sikes, City Clerk

APPROVED AS TO FORM AND LEGALITY:

By: _____
Clay Martin
City Attorney

FOUR WATERS ENGINEERING, INC

By: _____
Its : _____



FOUR WATERS ENGINEERING, INC.
324 6th Avenue North
Jacksonville Beach, FL 32250
(904) 414-2400 Office

July 12, 2024
Revised July 27, 2024
Revised September 11, 2024
Sent Electronically

Don Rosenthal
City Manager
City of Lake City
205 N Marion Avenue
Lake City, FL 32055
rosenthald@lcfla.com

Re: Proposal for Professional Engineering Services
Gwen Lake Restoration Project

Dear Mr. Rosenthal:

Four Waters Engineering, Inc. (4Waters) is pleased to provide this proposal to the City of Lake City (City) for services that include design, permitting and bidding of the restoration of Gwen Lake located between NW Willow Drive and NW Shelby Terrace in Lake City, Florida. The City owns the parcel (31-3S-17-06000-999) consisting of approximately 7 acres that encompasses the lake, surrounding lake edge, and outflow channel from the lake that discharges to the southwest.

Based on coordination with the City, Suwannee River Water Management District (SRWMD), and review and research of available data, we understand that Gwen Lake was an open water lake prior to failure of upstream and downstream structures resulting in the lake being compromised with sediment and the lake water level lowered, allowing vegetation growth to occur in the majority of the lake. Improvements and repairs have been made to the upstream structure to reduce the inflow of sediment; however, engineering, hydrologic and hydraulic (H&H) analysis, and permitting have not been prepared for rehabilitation of the downstream outlet control structure, removal of deposited sediment, and restoration of the lake to an open water condition.

The project site has several permitting challenges that include location in a FEMA Floodway, wetland mitigation and/or analysis to self-mitigate, Environmental Resource Permitting (ERP), and U.S. Army Corps. of Engineer Permitting (USACE) permitting. In addition, the outlet structure is categorized by SRWMD as a dam, requiring additional H&H modeling to understand implication of a dam failure and identification of potential risk.

We have met with the City and SRWMD and understand the City's objective and the permitting requirements for this project. The project will include preparation of construction drawings, technical specifications, an opinion of probable construction costs, SRWMD ERP, USACE permitting, H&H modeling to confirm FEMA involvement is not required and receive approval from SRWMD, and dam analysis based on Form 62-330.301 (25).

Two (2) hard copies, as requested, and an electronic copy of the design and supporting documents will be provided at each milestone. 4Waters will submit three (3) hard copies (signed and sealed by a

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Florida Registered Professional Engineer) and an electronic copy (PDF) of the final construction documents to the City.

4Waters proposes to complete this project with the following Tasks:

Task Work Assignment #1.0 – Project Initiation, Management, Data Collection, & Grant Assistance:

The project will be initiated with a meeting between key City and 4Waters personnel to review project goals, milestones, and schedule. 4Waters will prepare meeting minutes to summarize the meeting results. 4Waters will then proceed with gathering the necessary data for the project design.

This task includes project management of the anticipated project schedule and permitting of 12 to 15 months. The 4Waters design and permitting team includes the following subconsultants and their specialized professional services.

- DRMP – Survey, utility locates, bathymetry survey, and permanent/temporary easements (2)
- CSI Geo – Soil exploration and evaluation, geotechnical engineering
- Kiestler Webb (K|W) – Structural engineering
- Wetland Solutions, Inc. (WSI) – Wetland mitigation analysis and wetland permitting
- Gateway Grant Writing & Administration, Inc. (Gateway) – Grant submittal support
- Gemini Engineering & Sciences, Inc. (Gemini) – H&H modeling support

All subconsultant detailed proposals are attached to this proposal for the City to view.

Grant support is included for up to three (3) grant submittals with the aid of the City to pursue grants for either reimbursement of engineering costs and/or funding for estimated construction costs. Some grants allow the engineering fees to act as part of the grant percentage match, which would allow those type of grants to use majority of the funds for construction and construction administration services.

The proposed data collection sub-tasks are described below and also attached to this proposal.

Topographic Survey: The topographic survey scope can be seen below in **Figure 1** and will be completed by DRMP under this contract. The survey will consist of a full topographic survey of Gwen Lake and other areas of interest for the H&H modeling and include the following:

- Establish Vertical Datum in NAVD 88 and set and post a benchmark.
- Reference to NAD83, Florida State Plane Coordinate System, be expressed in United States Survey Feet horizontally, and set a horizontal control pair at the site.
- Locate any visible above ground improvements, sanitary and drainage structures with inverts and sizes if obtainable, overhead utility lines and poles, trees and vertical data.
- Include topographic data picked up within the survey area taken at 50-foot intervals and at High/Low points.
- Collect finished floor elevations (FFE) of buildings located in the survey limits.
- Lake bathymetry of 50-foot grid.
- Gather data on wetland delineation flags, geotechnical borings, and soil samplings.
- Downstream channel cross sections.
- Utility locates at the outlet structure or confirm no utilities in area.
- Parcel data along with addresses.

- Provide survey file to 4Waters in AutoCAD format.

Figure 1: Survey Area Scope of Work



4Waters will conduct a site visit to the project area and verify the data and information provided in the DRMP survey.

Geotechnical Engineering. Geotechnical engineering services will be provided by CSI Geo, Inc. for the project including two borings to determine soil conditions for the proposed outlet structure. The scope includes:

- Two (2) – 65 ft SPT;
- Muck probes of lake;
- Corrosion tests;
- Geotechnical analysis and recommendations for outlet structure installations.

The geotechnical analysis will include a written discussion of the subsurface conditions encountered, evaluation of the subsurface soils, and recommendations concerning the soil properties for design of the outlet structure. The geotechnical analysis will be included with the bid documents for contractors to review. The geotechnical evaluation will begin upon City approval of the proposal.

Wetland Delineation: WSI previously delineated the lake/wetland boundaries, and it is anticipated that some reflagging will be necessary prior to the commencement of the survey.

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Sediment Sampling: The City may be required to demonstrate that the sediment to be removed from Gwen Lake is not hazardous and may be disposed of at a Class III landfill or used as general fill for other projects. WSI will collect two (2) five-foot cores of the sediment plume in Gwen Lake. Each core will be subdivided into 1-foot sections and delivered to an analytical laboratory for grain size analysis. For samples with >10% fines, WSI will deliver additional subsamples to an analytical laboratory for chemical analyses. For cost-estimating purposes, it was assumed that 2 discrete samples will require further chemical analyses with triplicate subsamples.

Task Work Assignment #2.0 – Conceptual and Detailed Design, Permitting, & Bidding Assistance:

Conceptual Design (30%):

The data gathered in the previous task will provide information on the proposed design of the project. 4Waters will utilize the data gathered to determine feasible construction methods and options for the outlet control structure, dredging depths, vegetation removal, easements required (temporary or permanent), access for construction, and conceptual H&H modeling.

An H&H model will be developed during the conceptual design to understand the existing conditions and the proposed design. The H&H modeling is a significant part of this project due to the project location in a floodway. The effective FEMA model will be used as a starting point; however, due to the significant changes to the existing conditions from the FEMA model the existing conditions will be modeled. The existing conditions model will include the upstream control structure and current condition of Gwen Lake. If the floodway elevations change by a foot or greater, then this would be a FEMA violation. If a violation occurs the proposed design will need to be corrected to match the current floodway elevations. It is likely that the upstream control structure requires alterations in order for the entire Gwen Lake floodway system to match current FEMA floodway elevations. This proposal includes minor alterations of the upstream control structure for additional design, modeling, and permitting. ***This proposal does not include FEMA floodway modeling, coordination with FEMA, nor FEMA LOMR or other FEMA floodway revisions submittals.*** If permitting with FEMA is required, the design team will provide necessary services fees to the City at that time. If possible, the goal of the design team is to restore Gwen Lake back to FEMA floodway elevations, in order to not involve FEMA.

The proposed H&H model will include the proposed restoration design of Gwen Lake including the downstream outlet control structure and as mentioned above, if necessary, the upstream outlet control structure. The Gwen Lake restoration will require a Environmental Resource Permit (ERP) from SRWMD. 4Waters and The City had a meeting with SRWMD on July 2, 2024 and SRWMD categorized the downstream outlet control structure as a dam and not an outfall structure. This proposal includes services for the dam requirements of a Low Hazard Potential (LHP) dam classification which is defined as “Failure or mis-operation is not expected to result in loss of human life and may result in low economic and/or environmental losses, that are largely limited to the owner’s property.” This classification has not been determined for the dam of Gwen Lake nor does SRWMD have any information regarding this dam classification. Therefore, when the design team completes the proposed model, a dam analysis will be conducted for a LHP dam classification to either confirm the LHP classification or determine if the dam is another classification of High Hazard Potential (HHP) or Significant Hazard Potential (SHP). ***This proposal does not include services for the SRWMD requirements if the dam is classified as either HHP or SHP, these classifications require an Emergency Action Plan and Condition Assessment and 4Waters will coordinate with the City on additional services fees if this classification occurs.***

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The conceptual design document will consist of conceptual design drawings along with a technical memorandum that includes discussion of data collection findings, H&H modeling results, proposed design options, pre-application meeting minutes, wetland impacts and mitigation, and opinion of probable construction costs. 4Waters will meet with City staff to present the findings and receive feedback and approval of conceptual design prior to proceeding with detailed design efforts.

Detailed Design – 90%, 100% and Bid Design Documents

The project design will continue with development to 90%, 100%, and Bid construction contract documents. The design will include plan and section view drawing sheets, cover page, general notes, survey conditions, erosion and sediment control plans, detailed temporary traffic control (TTC) plans, easements required (permanent or temporary) and construction details, Engineers Opinion of Construction Cost Estimate, itemized Bid Form, and technical specifications not included in City of Lake City standard specifications.

The H&H modeling will continue to be updated to a final report to support the proposed design and required permitting submittal to SRWMD and USACE.

Front end documents will be prepared by the City. 4Waters will meet with City staff to review each submittal and will revise design documents based on City feedback.

Permitting

SRWMD & USACE: SRWMD & USACE Permitting will be led by WSI, which has previously been involved with the Gwen Lake wetland analysis for the restoration of Gwen Lake. WSI believes that Gwen Lake can be self-mitigated and does not require wetland mitigation. If SRWMD decides wetland mitigation is required, this proposal includes services to be used for development of the wetland mitigation plan. An ERP will be required from SRWMD that will include impacts to the wetland, wetland analysis for self-mitigation or mitigation required, H&H modeling and drainage report supporting flood elevations remaining the same, and dam analysis requirements currently scoped for a LHP dam classification. Coordination with USACE will also be done in tandem with the wetland permitting with SRWMD. The proposed design will include the wetland areas, wetland impacted areas, and dredge/fill volumes to be used for permitting.

Requests for Additional Information (RFIs): 4Waters and WSI will provide responses for up to two (2) requests for additional information.

Permit fees are not included in this proposal and are to be paid by the City.

Bid Services

4Waters will provide any necessary support during the bid period to include attendance at pre-bid conference, preparation of responses to contractor RAIs, and preparation of addenda to construction documents as necessary. 4Waters will conform drawings and specifications for preparation of construction.

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Limitations/Clarifications:

- Permit fees are not included in this proposal and are to be paid by the City.
- Floodway analysis, floodplain compensation calculations, and a FEMA submittal or permitting is not included in this proposal.
- The dam tasks in the proposal are assumed to be Low Hazard Potential (LHP) classification. If the state (SRWMD) reclassifies the dam as Significant Hazard Potential (SHP) or High Hazard Potential (HHP), additional tasks, including developing an Emergency Action Plan (EAP) and a Condition Assessment Report (CAR), are not included. If this classification occurs, we will discuss the necessary options and adjustments with the City.
- Construction administration services are not included but 4Waters can provide a proposal for these services at the time of construction.
- Construction Engineering Inspector (CEI) services are not included but 4Waters can provide a proposal for these services at the time of construction.
- One City Council presentation is included with the proposal as necessary.
- Up to two (2) RFIs are included with the permitting agency.
- It is estimated that the design and permitting will take 12 to 15 months upon an executed contract.
- We will try to justify the lake is self-mitigating; however, mitigation may be required and to be paid by the City if construction is to occur.
- The property is owned by the City. The City authorizes 4Waters and subconsultants staff to access the property as needed to complete the work.
- The City will provide written authorization that 4Waters and subconsultants can represent the City for environmental permitting purposes.
- The City will notify residents of the project and data collection required surrounding the lake.
- The City will notify residents near the downstream outlet structure to allow access to the outlet structure from NW Palm Drive or NW Shelby Terrace.
- The conceptual design model will determine if the existing structures upstream and downstream are a FEMA violation. At this time we do not know if the improvements upstream changed the floodway elevations. Thus, it is possible that this structure will need to be redesigned and constructed to achieve a no rise or limited rise in floodway elevations for the Gwen Lake system. The proposal includes design of minor alterations of the upstream structure along with the downstream structure improvements if necessary to achieve permit approval.

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Schedule and Task Work Assignment (TWA) Fees

We anticipate the above tasks can be completed within 12 to 15 months upon execution of a professional services agreement. We are available to begin work immediately upon receipt of a Work Authorization and will request the survey and soil exploration upon Notice to Proceed from the City. Below is the task work assignments and fees.

TWA #1:

Project Initiation, Management, Data Collection, & Grant Assistance:

Kickoff Meeting, Data Review, Site Visit: \$4,290.00

Project Management: \$10,750.00

Grant Assistance: \$9,650.00

Survey & Survey Verification: \$32,895.00

Geotechnical Engineering & Review: \$17,578.20

Wetland Boundary: \$4,885.00

Sediment Sampling: \$12,955.00

Total Cost of TA #1: \$93,003.20

TWA #2:

Conceptual and Detailed Design, Permitting, & Bidding Assistance:

Conceptual and Detailed Design:

Conceptual Design (30%): \$42,925.00

90% Detailed Design: \$59,685.00

100% Detailed Design: \$37,400.00

Minor Design Alterations to Upstream Structure: \$18,320.00

Permitting:

Pre-App Meetings: \$3,985.00

SRWMD/USACE Permitting – Wetlands: \$17,920.00

Permitting – Wetland Supporting Data & Documents: \$27,115.00

SRWMD (H&H) Drainage Calcs, Modeling, Report: \$52,160.00

SRWMD Permitting – Dam (LHP): \$32,550.00

Bidding Assistance:

Bidding Assistance: \$7,715.00

Conformed Drawings and Specs: \$5,450.00

Total Cost of TA #2: \$305,225.00

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July 12, 2024
Revised July 27, 2024
Revised September 11, 2024
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We appreciate this opportunity to work with the City and have attached a detailed fee summary sheet for the project. The proposed lump sum fee to complete Task Work Assignments #1 and #2 outlined above is \$398,228.20 including \$149,453.20 in subconsultant fees, see proposals attached. If you have any questions, please contact me at mklink@4weng.com or (904) 414-2400 Ext. 54.

Regards,
Four Waters Engineering, Inc.



Michael Klink, PE
Principal Engineer

Enclosures: As stated

CC: Demetrius Johnson, Interim City Manager
Stephen Brown, City Executive Director of Utilities
Brenda Karr, City Director of Procurement

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**Gwen Lake Restoration
 Proposal for Professional Engineering Services**

Task Work Assignment (TWA) Description	Principal Engineer	PM/Senior Engineer	Project Engineer	Associate Engineer	CAD Draft	Administrative	Sub-Consultants	Direct Costs	Total Professional Service Fees
	\$190.00 Hours \$	\$170.00 Hours \$	\$145.00 Hours \$	\$125.00 Hours \$	\$110.00 Hours \$	\$75.00 Hours \$			
TWA #1: Project Initiation, Management, Data Collection, & Grant Assistance									
Task 1.1 Kickoff Meeting, Data Review, Site Visit, Document Review	4 \$760.00	4 \$680.00	8 \$1,160.00	8 \$1,000.00	4 \$440.00	2 \$150.00	\$0.00	\$100.00	\$ 4,290.00
Task 1.2 Project Management	30 \$5,700.00	15 \$2,550.00	0 \$0.00	0 \$0.00	0 \$0.00	30 \$2,250.00	\$0.00	\$250.00	\$ 10,750.00
Task 1.3 Grant Assistance	2 \$380.00	4 \$680.00	4 \$580.00	16 \$2,000.00	16 \$1,760.00	6 \$450.00	\$3,600.00	\$200.00	\$ 9,650.00
Task 1.4 Survey & Survey Verification	1 \$190.00	2 \$340.00	0 \$0.00	6 \$750.00	4 \$440.00	1 \$75.00	\$31,000.00	\$100.00	\$ 32,895.00
Task 1.5 Geotechnical Engineering & Review	1 \$190.00	2 \$340.00	0 \$0.00	2 \$250.00	2 \$220.00	1 \$75.00	\$16,403.20	\$100.00	\$ 17,118.20
Task 1.6 Wetland Boundary	0 \$0.00	2 \$340.00	0 \$0.00	2 \$250.00	2 \$220.00	1 \$75.00	\$3,900.00	\$100.00	\$ 4,295.00
Task 1.7 Sediment Sampling	1 \$190.00	2 \$340.00	0 \$0.00	2 \$250.00	0 \$0.00	1 \$75.00	\$12,000.00	\$100.00	\$ 12,565.00
TWA #2: Conceptual and Detailed Design, Permitting, & Bidding									
Conceptual									
Task 2.1A Conceptual Design (30%)	4 \$760.00	24 \$4,080.00	40 \$5,800.00	40 \$5,000.00	60 \$6,600.00	4 \$300.00	\$3,555.00	\$150.00	\$ 26,835.00
Task 2.1B Interdisciplinary Meetings & Coordination	1 \$190.00	6 \$1,020.00	3 \$435.00	0 \$0.00	0 \$0.00	2 \$150.00	\$0.00	\$50.00	\$ 1,795.00
Task 2.1C Conceptual Design Technical Memo	2 \$380.00	6 \$1,020.00	24 \$3,480.00	24 \$3,000.00	8 \$880.00	2 \$150.00	\$0.00	\$100.00	\$ 9,810.00
Task 2.1D Cost Estimate	1 \$190.00	2 \$340.00	4 \$580.00	0 \$0.00	2 \$220.00	1 \$75.00	\$0.00	\$50.00	\$ 1,385.00
Task 2.1E QAQC & Updates	1 \$190.00	3 \$510.00	6 \$870.00	2 \$250.00	6 \$660.00	1 \$75.00	\$0.00	\$50.00	\$ 2,305.00
Task 2.1F Lake City 30% Conceptual Design Meeting	3 \$570.00	6 \$1,020.00	0 \$0.00	0 \$0.00	0 \$0.00	1 \$75.00	\$0.00	\$100.00	\$ 1,765.00
90% Design									
Task 2.2A 90% Detailed Design	8 \$1,520.00	40 \$6,800.00	64 \$9,280.00	64 \$8,000.00	88 \$9,680.00	6 \$450.00	\$6,795.00	\$200.00	\$ 42,455.00
Task 2.2B Interdisciplinary Meetings & Coordination	2 \$380.00	12 \$2,040.00	6 \$870.00	0 \$0.00	0 \$0.00	2 \$150.00	\$0.00	\$50.00	\$ 3,440.00
Task 2.2C Specifications	2 \$380.00	8 \$1,360.00	8 \$1,160.00	24 \$3,000.00	0 \$0.00	4 \$300.00	\$0.00	\$75.00	\$ 6,175.00
Task 2.2D QAQC & Updates	1 \$190.00	4 \$680.00	8 \$1,160.00	4 \$500.00	12 \$1,320.00	1 \$75.00	\$0.00	\$50.00	\$ 3,375.00
Task 2.2E Cost Estimate	1 \$190.00	2 \$340.00	4 \$580.00	0 \$0.00	2 \$220.00	1 \$75.00	\$0.00	\$50.00	\$ 1,385.00
Task 2.2F Lake City 90% Design Meeting	3 \$570.00	6 \$1,020.00	0 \$0.00	0 \$0.00	0 \$0.00	1 \$75.00	\$0.00	\$100.00	\$ 1,765.00
100% Design									
Task 2.3A 100% Detailed Design	4 \$760.00	24 \$4,080.00	32 \$4,640.00	32 \$4,000.00	48 \$5,280.00	4 \$300.00	\$1,500.00	\$200.00	\$ 20,880.00
Task 2.3B Interdisciplinary Meetings & Coordination	1 \$190.00	4 \$680.00	2 \$290.00	0 \$0.00	0 \$0.00	2 \$150.00	\$0.00	\$50.00	\$ 1,260.00
Task 2.3C Specifications	1 \$190.00	4 \$680.00	4 \$580.00	12 \$1,500.00	0 \$0.00	4 \$300.00	\$0.00	\$75.00	\$ 3,125.00
Task 2.3D Lake City 100% Design Meeting	3 \$570.00	6 \$1,020.00	0 \$0.00	0 \$0.00	0 \$0.00	1 \$75.00	\$0.00	\$100.00	\$ 1,765.00
Task 2.3E QAQC & Updates	1 \$190.00	2 \$340.00	4 \$580.00	4 \$500.00	6 \$660.00	1 \$75.00	\$0.00	\$50.00	\$ 2,315.00
Task 2.3F Cost Estimate	1 \$190.00	1 \$170.00	2 \$290.00	0 \$0.00	2 \$220.00	1 \$75.00	\$0.00	\$50.00	\$ 1,445.00
Task 2.3G Bid Documents (IFB)	4 \$760.00	8 \$1,360.00	16 \$2,320.00	0 \$0.00	16 \$1,760.00	4 \$300.00	\$0.00	\$300.00	\$ 6,500.00
Task 2.4A Minor Design Alterations to Upstream Structure	4 \$760.00	24 \$4,080.00	24 \$3,480.00	40 \$5,000.00	40 \$4,400.00	4 \$300.00	\$0.00	\$300.00	\$ 18,960.00
Permitting									
Task 2.5A Pre-App Meetings (up to 3)	3 \$570.00	6 \$1,020.00	6 \$870.00	0 \$0.00	0 \$0.00	3 \$225.00	\$1,200.00	\$100.00	\$ 3,965.00
Task 2.5B SRWMD/USACE Permitting - Wetlands	2 \$380.00	8 \$1,360.00	12 \$1,740.00	12 \$1,500.00	4 \$440.00	2 \$150.00	\$12,200.00	\$150.00	\$ 17,510.00
Task 2.5C SRWMD Permitting - Wetland Supporting Data & Documents	3 \$570.00	6 \$1,020.00	10 \$1,450.00	18 \$2,250.00	30 \$3,300.00	3 \$225.00	\$18,100.00	\$200.00	\$ 27,845.00
Task 2.5D SRWMD (H&H) Drainage Calcs, Modeling, & Report for ERP Permitting	4 \$760.00	16 \$2,720.00	36 \$5,220.00	40 \$5,000.00	16 \$1,760.00	6 \$450.00	\$36,100.00	\$150.00	\$ 52,350.00
Task 2.5E SRWMD Permitting - Dam (LHP)	4 \$760.00	8 \$1,360.00	16 \$2,320.00	24 \$3,000.00	16 \$1,760.00	6 \$450.00	\$22,800.00	\$100.00	\$ 32,890.00
Bidding Services									
Task 2.6A PreBid Conference	0 \$0.00	4 \$680.00	4 \$580.00	0 \$0.00	0 \$0.00	1 \$75.00	\$0.00	\$100.00	\$ 1,435.00
Task 2.6B Addenda Issue	2 \$380.00	4 \$680.00	8 \$1,160.00	8 \$1,000.00	16 \$1,760.00	2 \$150.00	\$1,100.00	\$50.00	\$ 6,030.00
Task 2.6C Conformed Dwgs and Specs	2 \$380.00	6 \$1,020.00	12 \$1,740.00	0 \$0.00	16 \$1,760.00	2 \$150.00	\$0.00	\$400.00	\$ 5,350.00
Totals TWA #1 and #2	107 \$20,330.00	281 \$47,770.00	367 \$53,215.00	384 \$48,000.00	416 \$45,760.00	114 \$8,550.00	\$170,253.20	\$4,350.00	\$398,228.20

**EXHIBIT TO
 RESOLUTION
 NOT FOR
 EXECUTION**