Addendum 1 – May 31, 2024
Contract 224 –ARP Lagoon Rehabilitation
City of Tiptonville, TN (Owner)
130 S. Court St., Tiptonville, TN 38079

1) CHANGE BID DATE AND TIME TO THURSDAY JUNE 13, 2024, 1:30 PM CST, TIPTONVILLE CITY HALL

Separate sealed BIDS for Contract 224 – ARP Lagoon Rehabilitation including lagoon dredging, replacement of ten (10) floating aerators, replacement of a floating baffle curtain, instrumentation assessment and calibration, and other work, will be received by the City of Tiptonville at City Hall at 130 S. Court St., Tiptonville, TN 38079 until 1:30 PM CST, Thursday, June 13, 2024, and then at said office publicly opened and read aloud. Treasury American Rescue Plan financial assistance will be used to fund all or a portion of the contract under ARP Grant 2022-8383 Project ID WW-PDC-01, WW-PDC-02, and WW-PDC-03. The Contractor must comply will all applicable Federal law, regulations, executive orders, Treasury policies, procedures, and directives.

2) Bid Proposal – Replace Bid Proposal, Pages 110 through 112, with attached revised Bid Proposal Form.

The Bid Proposal Form has been revised to reflect the Items Shown below. In addition, the revision clarifies that the Base Bid shall be based on providing EEE Aerators (with bids for alternate manufacturer's equipment provided for under Alternate Bid 4) , providing a baffle curtain constructed with stitched seams, re-using the existing aerator wiring, and providing new aerator mooring cables.

3) General Clarification, "Lagoon Sludge Removal & Disposal", Part 1, Section 1.6 "Submittals", Item b. 2.:

Regarding "vector attraction reduction": "Vectors" are regarded as birds, rodents, etc., that get exposed to the wasted sludge and transport it offsite. The best way to minimize vector attraction is to make sure that the sludge being discharged into the dry cell is not allowed to excessively pond. The Contractor will act to insure that the volume of sludge to be wasted naturally spreads in a very thin layer across a very small part of the large 15-acre dry cell, barely wetting a fraction of the cell floor. Accordingly, the sludge dries quickly and vector attraction is not an issue. The Contractor shall monitor how the sludge is accumulating in the dry cell, relocating the dredge discharge hose as may be necessary during the course of the operation to spread the wasted sludge over the large available area along the berm, to avoid ponding.

4) General Clarification, "Lagoon Sludge Removal & Disposal", Part 3, Section 3.4, and Part 4:

The Dredging Contractor is directed to allow six inches to twelve inches of biosolids (sludge) to remain on the lagoon floor, as is necessary to avoid damage to the bentonite clay liner which seals the lagoon floor.

5) General Clarification, Alternate Bids

Alternate Bids 1 through 4 are not listed in any order of priority. The Owner reserves the right to award the contract on the basis of selecting none, any, or all of the alternates, in any combination, as serves their best interest and at their discretion. The Lump Sum Price for Pay Item 2 will be adjusted to reflect the adjustments corresponding to any Alternates as may be selected.

6) Alternate Bid 1 – Re-installing the Existing Baffle Curtain

Alternate Bid 1 is an Adjustment to Pay Item 2 for re-installing the existing baffle curtain in lieu of providing a new baffle curtain.

7) Alternate Bid 2 – Provide New Power Cables Feeding Aerators

Alternate Bid 2 is an adjustment to Pay Item 2 for providing new power cable in lieu of re-using existing aerator power cables. New cable to be provided under this alternate shall be SEOOW type, 3-#8 with 1-#8 ground.

8) Alternate Bid 3 – Alternate Floating Baffle Specifications

Alternate Bid 3 is an adjustment to Pay Item 2 for providing a Floating Baffle Curtain constructed using hot air welded seams in lieu of stitched seams. The Specification for the floating baffle curtain to be provided under Alternate 3 is attached to this Addendum 1.

9) Alternate Bid 4 – Alternate Floating Aerators

An alternate bid is being invited for floating aerators not manufactured by EEE, Inc.

Attachments:

1) Revised Bid Proposal Form – replace original Bid Proposal Pages 110 through 112 as found in the Specifications and Contract Documents with the attached pages.

2) Typical specification for Alternate Bid 3, Floating Baffle Curtain constructed using heat welded seams in lieu of stitched seams.

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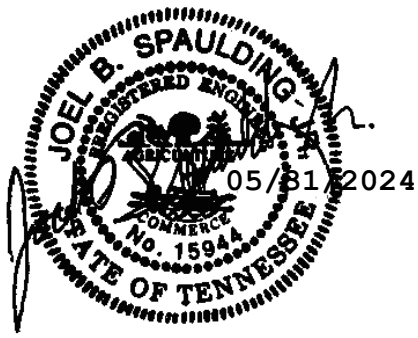

BIDDER'S PROPOSAL AS REVISED BY ADDENDUM 1

Contract 224 - ARP Lagoon Rehabilitation

City of Tiptonville, Tennessee

Item	Approx. Quantity		Description	Lump Sum Price
1	1	L.S.	Schedule WW-PDC-01: Dredging of solids from across the entire lagoon, disposing of the effluent into the adjacent abandoned lagoon cell for drying and temporary storage, as shown on the Drawings and detailed in the Specifications.	
SUB-TOTAL: WW-PDC-01				
NAME OF DREDGING SUB-CONTRACTOR				
Item	**Approx. Quantity**		**Description**	**Lump Sum Price**
2	1	L.S.	Schedule WW-PDC-02: Coordination and facilitation of all work in the project scope. Remove ten existing aerators from the lagoon. Remove existing mooring cables. Remove existing baffle curtain and store onsite for potential reuse. Coordinate dredging activities described above. Furnish and install ten (10) new 15 HP floating aerators, reusing wiring. Install new mooring cables. Base Bid shall be based upon furnishing and installing aerators as manufactured by Environmental Equipment, Inc. (Alternate 4 is provided below for other manufacturer's equipment). Furnish and install new baffle curtain (stitched seam) as specified. Coordinate and assist qualified technician with investigative activites detailed below. Clean out chlorine contact chamber. Provide all other work shown on the Drawings and detailed in the Specifications that is not included in other pay items for a complete, "lock and key" job.	
SUB-TOTAL: WW-PDC-02				
NAME OF BAFFLE CURTAIN INSTALLER				

Item	Approx. Quantity		Description	Unit Price	Total Price
3	140	Hours	Schedule WW-PDC-03: Hourly rate for a qualified technician, per hour actually on-site and working, performing investigation and trouble shooting of existing strap-on ultrasonic meter installations, assessment, repair, and calibration of: two each Ultrasonic Flow Meters at Flumes, one each insertion type mag meter on lagoon effluent, and one each on existing rain gauge.		
4	18	Days	Per Diem for qualified technician, for each consecutive day on-site.		
SUB-TOTAL: WW-PDC-03					
NAME OF TECHNICIAN					
TOTAL BASE BID (PAY ITEMS 1 THRU 4)					

NOTE: ALTERNATES ARE NOT LISTED BY PRIORITY, & MAY BE SELECTED BY OWNER IN ANY COMBINATION OR ORDER

ALTERNATE BID 1

Item	Approx. Quantity		Description	Lump Sum Adjustment
5	1	L.S.	Adjustment to Pay Item 2 For re-installing the existing baffle curtain in lieu of providing a new baffle curtain.	
TOTAL BASE BID NET OF ALTERNATE BID 1				

ALTERNATE BID 2

Item	Approx. Quantity		Description	Unit Price	Total Price
6	3,575	L.F.	Adjustment to Pay Item 2: Provide new power cable in lieu of re-using existing aerator power cables. New cable to be SEOOW type, 3-#8 with 1-#8 ground.		
TOTAL BASE BID NET OF ALTERNATE BID 2					

ALTERNATE BID 3				
Item	**Approx. Quantity**		**Description**	**Lump Sum Adjustment**
7	1	L.S.	Adjustment to Pay Item 2: Provide new 590' long (more or less) 6730 XR-5 floating baffle curtain constructed using hot-air welded seams in lieu of stitched seams.	

TOTAL BASE BID NET OF ALTERNATE 3	

ALTERNATE BID 4				
Item	**Approx. Quantity**		**Description**	**Lump Sum Adjustment**
8	1	L.S.	Furnish and install ten (10) new 15 HP floating aerators by other manufacturers in lieu of aerators as manufactured by Environmental Equipment, Inc.	

TOTAL BASE BID NET OF ALTERNATE 4	

NAME OF MANUFACTURER OF AERATORS BEING BID	

MIN. DIAMETER OF COMPLETE MIX AT 6' DEPTH	

MIN. DIAMETER OF 02 DISPERSION T 6' DEPTH	
PUMPING RATE	
WEIGHT OF EACH UNIT	
ATTACH DELIVERY SCHEDULE FOR ABOVE MATERIALS	
ATTACH DESCRIPTIVE LITERATURE FOR ABOVE	
ATTACH WARRANTY FOR ABOVE MATERIALS	

TIPTONVILLE C-224 LAGOON REHABILITATION ADDENDUM 1
ALTERNATE BID 3 FLOATING BAFFLE CURTAIN SPECIFICATION

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. SUPPLIER shall furnish all baffle curtain materials anchor forms, all hardware, and incidentals required for installing, completing, and readying for operation, the floating baffle curtains indicated on the drawings and as generally specified herein, except for concrete anchors and anchor posts. CONTRACTOR shall coordinate for the construction and installation of the baffle curtains.

1.2 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

1. The manufacturer of the floating baffle curtain shall have at least ten years of experience in the construction of floating baffle curtains utilizing dielectric and / or hot wedge sealing fabrication methods. No sewn seams shall be permitted.
2. The manufacturer of the floating baffle curtains shall have manufactured a of no less than five-thousand linear feet of baffle curtains for tanks, ponds, and open water applications.

1.3 SUBMITTALS

A. In evaluating ALTERNATE BID 3, submittals shall be provided to the ENGINEER for review and shall include the following:

1. Shop Drawings with construction details of each of the floating baffle curtains.
2. Floating baffle curtain manufacturer including contact name, address and telephone number.
3. Product data and physical properties of the floating baffle curtain material along with fabric manufacturer name, contact, address, and telephone number.
4. Product data with specifications covering all components used in the fabrication of the floating baffle curtain.

1.4 DELIVERY, STORAGE AND HANDLING

A. Packing, shipping, Handling and Unloading:

1. Deliver materials to the Site to ensure uninterrupted progress of the Work. Packaging of the floating baffle curtain shall be the responsibility of the floating baffle curtain manufacturer and so that the floating baffle curtains shall not be damaged during shipment.

B. STORAGE AND PROTECTION:

1. Store materials to permit easy access for inspection and identification. Keep all material off the ground, using pallets, platforms, or other supports. Protect steel members and packaged materials from corrosion and deterioration.

1.5 WARRANTY

1. The baffle manufacturer shall warrant the floating baffle curtain against defects in workmanship and materials for a period of two years from the date of installation.

PART 2 – PRODUCTS

2.1 EQUIPMENT PREFORMANCE

A. Description:

1. The baffle curtains shall consist of a fabric wall that is anchored at the bottom by a galvanized chain in a sealed pocket and is floated at the top by buoyant logs that are also in a sealed pocket. The floating baffle curtains shall be constructed in multiple sections resulting in the specified dimension of each curtain. Weight and ease of handling at the job site shall be taken into account when determining the lengths of the prefabricated floating baffle sections. The floating baffle curtains shall be delivered to the jobsite ready to install and the only fabrication required at the jobsite shall be the connection of the floating baffle sections. The floating baffle curtains shall be floated into position for installation.

B. Design Criteria:

1. A total of 1 floating baffle curtain is required, generally dimensioned as shown on the DRAWINGS. :

2.2 DETAILS OF CONSTRUCTION

A. Flotation:

1. The flotation shall consist of 6-inch diameter (minimum) flotation logs made of closed cell polyfoam logs, having a buoyancy of at least 60 pounds per cubic foot.

2. The flotation shall be completely enclosed inside the floating baffle curtain by means of a thermal seal. Each flotation log shall be sealed in its own chamber along the top of the floating baffle curtain.

B. Anchoring:

1. Bottom Ballast:

a. The floating baffle curtain shall be anchored in position by a galvanized chain thermally sealed into a pocket along the bottom of the curtain.

b. The chain shall be continuous from berm through each floating baffle curtain section, connected to each other with a stainless steel rapid link. The ballast shall be 5/8" galvanized proof coil chain.

2. Concrete Anchors:

Concrete anchors shall be placed along the upstream side of the ballast chain at 18' intervals beginning at the toe of the levee. The concrete anchors shall be attached to the ballast chain using a stainless steel rapid link or marine grade rope. The connection shall be secured to the ballast chain through cutouts in the ballast chain pocket forming an opening exposing the ballast chain for attachment of the concrete anchors. The concrete anchors shall be made using a five-gallon bucket, filled with concrete with a 3/8" x 9-inch-long or greater galvanized eyebolt, flat washer and two nuts, inserted into the concrete at least 6" to 7" to form an attachment. The eyebolt shall be of a size to accept a 3/8" stainless steel rapid link thru the eye of the eyebolt.

3. Retrieval Rope:

The concrete anchors shall be made retrievable by securing one end of a 3/8" diameter marine grade rope through the ballast chain and the other end of the rope secured to a stainless-steel grommet paced in the flotation collar located at the top of the floating baffle curtain.

4. Shore Anchor Post:

Existing shore anchors shall be re-used.

C. Cable

1. Tension Cable:

The cable shall be stainless steel sealed in a pocket on the lower side of the flotation collar and shall be continuous from berm through each floating baffle curtain section, connected to each other with

3/8" stainless steel rapid links. The cable shall have the breaking strength of at least 12,000 lb.

D. Connections:

1. End Connection:

The end connections shall consist of ¼" x 4" x 12" stainless steel predrilled plates that shall by attached to the floating baffle curtain with 3/8" diameter by 1-1/2" long stainless-steel bolts to "sandwich" the end of the floating baffle curtain between the end plates. The tension cable or connection chain shall connect the anchor posts to the stainless steel predrilled plates at both top and bottom of the curtain. No grommets shall be used for the connections to the shore anchor posts.

2. Baffle Connection:

The floating baffle curtain sections shall be joined with the use of 3/16" x 1-1/2" x 10" long stainless steel predrilled plates and 3/8" diameter by 1-1/2" long stainless-steel bolts. The plates shall be applied to the outside of each floating baffle curtain section, then bolted together to "sandwich" the joining sections together.

2. Miscellaneous Hardware:
All hardware provided for the floating baffle curtains shall be type 304 stainless steel. The galvanized ballast chain shall be the only exception.

E. Baffle Curtain Material

1. The baffle material shall be a reinforced synthetic material. The material supplied under these specifications shall be a first quality product specifically designed and manufactured for this application and demonstrated to be suitable and durable for the construction of floating baffle curtains.

2. Physical Specifications:

a.	Color:	Black
b.	Base Type:	Polyester
c.	Fabric weight:	7 oz/yd 2
d.	Finished Coated Weight:	30.0 +/- 2.0 oz/yd2
e.	Grab Tensile:	550/525 lbs/in
f.	Minimum Adhesion:	10 lbs/in
g.	Minimum Hydrostatic Resistance:	500 psi

3. The material shall be 6730 XR-5 as manufactured by the Seaman Corporation of Wooster, Ohio.

2.3 MANUFACTURERS

A. Provide equipment from:

1. Engineered Textile Products, Inc.

2. Elastec/American Marine, Inc.

Part 3 – EXECUTION

3.1 INSTALLATION:

A. OWNER to verify dimensions of the lagoon and to determine exact location of the shore anchor posts prior to ordering floating baffle curtains.

B. The floating baffle curtains shall be installed into position as shown on the project plans. The floating baffle curtains shall be installed in accordance to manufacturer's shop drawings, instructions and recommendations.

3.2 MANUFACTURER'S SERVICES

A. Provide to ENGINEER Certification that the floating baffle curtains were installed in accordance with the Contract Documents.