Addendum No. 6

Bid 039 – 19 – Side Stream Storage Vessels

For

The City of Fairhope Public Utilities Wastewater Department

October 16, 2019

To All Bidder and Other Concerned:

Thank you for the interest in the referenced bid. The City of Fairhope is looking forward to working with the successful bidder. As stated in Addendum 3, the coating system for the interior surfaces of this project is critical to the overall operation, maintenance and useful life of the vessel(s). Please acknowledge your receipt of this, and all previous addendums, on your bid submittal.

TECHNICAL SPECIFICATIONS:

SPECIFICATIONS FOR FACTORY POWDER COATED BOLTED STEEL TANKS

- 1. PART 3 EXECUTION; PARAGRAPH 3.01 PROTECTIVE COATING, Delete in its entirety and add the Specification provided herein.
- 2 Add: A. Sealant Specification provided herein.
 - B. Fastener Specification provided herein.

CAST-IN-PLACE CONCRETE:

Note to Bidders: The concrete specification provided in the bid documents provide general guidance for the designer. The owner recognizes there may be different design requirements for different tank design options. Any variances to the specification provided herein shall be approved by the owner prior to construction.

All Tanks:

- The overflow pipe shall be external with an internal weir box designed to discharge 1,500 GPM with no more than 6" of head required above the weir box. The overflow pipe shall be 12" diameter, with a flanged connection at the tank and terminate 12" above the floor of the tank
- 2. The interior ladder is not required.

3. The inlet and outlet piping shall be ductile iron, or approved equal, and terminate ten feet beyond the foundation of the tank.

General:

Site access to the Twin Beech Site shall be provided by the owner. Clearing for the tank construction, including any required space for construction related equipment shall be the responsibility of the contractor.

A revised Bid Form is attached. Please note the "ADDITIONAL INFORMATION REQUIRED FOR EACH BID" Paragraph, which details additional submittal information with each bid.

Thank you for your interest in this project. On behalf of the City of Fairhope, we look forward to working with you on this project.

Respectfully Submitted,

Richard Peterson, PE, Director of Operation The City of Fairhope Public Utilities

ITEM III BID FORM

Date _____

Bid No.: 039-19 Bid Name: Side Stream Storage Vessels Project No.: PW010-19 Project Name: Side Stream Storage Vessels

Base bid will include all labor, materials, equipment, shipping, overhead, profit, bonds, insurance and all other costs necessary to provide the complete services out lined within this contract and scope of work.

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished, in accordance with the contract. The scheduled quantities or work to be done and materials to be furnished may each be increased, decreased, or omitted as provided herein.

The Owner agrees to provide the following materials: NONE

The Contractor agrees to complete all the work within 150 calendar days from date given in the Notice to Proceed (NTP) unless other arrangements are approved by the Project Manager.

BASE BID

BID ITEM NUMBER 1 (Twin Beech Site)

A. This bid is to provide one fifty (50) foot diameter by twelve (12) feet tall side stream storage vessel with a 12" diameter inlet main and a 16" diameter outlet main, 1 - 24" diameter manway opening located 30" above the floor of the vessel, two 24" by 24" access hatches on the roof, 8 - 6" diameter flanged piping connections and one 24" by 24" roof ventilation outlet as shown in the schematic drawings and specified herein. The bid price shall include all cost, including mobilization, site clearing, vessel and foundation design, vessel foundation, vessel fabrication and delivery, vessel erection, all equipment, materials, supervision and overhead costs required to provide complete side stream storage vessel ready for use by the owner.

Item A. Lump Sum Bid \$______

B. This bid is for the unit price of the excavation of the soil under the tank and extending 5 feet beyond the perimeter of the tank, the installation of structural fill and the crushed gravel base material, based on estimated quantities. Payment shall be determined based on actual field measurements.

| Item | Description | Unit Price | | Total Price |
|-------------|---------------------------|------------|------------------|-------------|
| ltem 1. 450 |) Cu. Yd. Cut Material | \$ | /YD ³ | \$ |
| Item 2. 350 |) Cu. Yd. Structural Fill | \$ | /YD ³ | \$ |

| Item 3. 60 Cu. Yd. Gravel Base | \$/YI | D ³ \$ |
|--------------------------------|-------|-------------------|
| TOTAL – BID ITEM NUMBER 1 | \$ | |

BID ITEM NUMBER 2 (Woodlands Site)

A. This bid is to provide one fifty (50) foot diameter by twelve (12) feet tall side stream storage vessel with a 12" diameter inlet main and a 16" diameter outlet main, 1 - 24" diameter manway opening located 30" above the floor of the vessel, two 24" by 24" access hatches on the roof, 8 - 6" diameter flanged piping connections and one 24" by 24" roof ventilation outlet as shown in the schematic drawings and specified herein. The bid price shall include all cost, including mobilization, site clearing, vessel and foundation design, vessel foundation, vessel fabrication and delivery, vessel erection, all equipment, materials, supervision and overhead costs required to provide complete side stream storage vessel ready for use by the owner.

Item A. Lump Sum Bid

\$_____

B. This bid is for the unit price of the excavation of the soil under the tank and extending 5 feet beyond the perimeter of the tank, the installation of structural fill and the crushed gravel base material, based on estimated quantities. Payment shall be determined based on actual field measurements.

| Item Description | Unit Price | Total Price | |
|-------------------------------------|------------|--------------------|--|
| Item 1. 275 Cu. Yd. Cut Material | \$ /Y | ′D³ \$ | |
| Item 2. 200 Cu. Yd. Structural Fill | \$/Y | 'D ³ \$ | |
| Item 3. 60 Cu. Yd. Gravel Base | \$/YI | D ³ \$ | |
| TOTAL – BID ITEM NUMBER 2 | \$ | | |

BID ITEM NUMBER 3 (Quail Creek)

A. This bid is to provide one fifty (60) foot diameter by twelve (12) feet tall side stream storage vessel with a 12" diameter inlet main and a 16" diameter outlet main, 1 - 24" diameter manway opening located 30" above the floor of the vessel, two 24" by 24" access hatches on the roof, 8 - 6" diameter flanged piping connections and one 24" by 24" roof ventilation outlet as shown in the schematic drawings and specified herein. The bid price shall include all cost, including mobilization, site clearing, vessel and foundation design, vessel foundation, vessel fabrication and delivery, vessel erection, all equipment, materials, supervision and overhead costs required to provide complete side stream storage vessel ready for use by the owner.

Item A. Lump Sum Bid

\$ _____

B. This bid is for the unit price of the excavation of the soil under the tank and extending 5 feet beyond the perimeter of the tank, the installation of structural fill and the crushed gravel base material, based on estimated quantities. Payment shall be determined based on actual field measurements.

| Item | Description | Unit Price | | Total Price | |
|---------|---|-----------------------|--------------------|-----------------|-----------------------|
| ltem 1. | 300 Cu. Yd. Cut Materia | I \$ | _ /YD ³ | \$ | |
| ltem 2. | 325 Cu. Yd. Structural Fi | II \$ | _/YD ³ | \$ | |
| ltem 3. | 80 Cu. Yd. Gravel Base | \$ | _/YD ³ | \$ | |
| TOTAL - | – BID ITEM NUMBER 3 | \$ | | | |
| CONTIN | IGENCY ALLOWANCE | \$ | | 75,000.00 | |
| TOTAL | BASE BID (sum of Bid Iter | ns 1, 2, 3 and contin | gency al | lowance) | |
| | | \$ | | | |
| Writter | 1: | | | | |
| | | | | | |
| • | of the following Addend to complete below). | a to these documen | ts is her | eby acknowledge | ed by the undersigned |
| | ADDENDUM NO | DATE ISSUED | AD[| DENDUM NO | DATE ISSUED |
| | | | | | |

Each bid must give the full business address of the bidder and must be signed by him with his usual signature. Bids by partnerships must furnish the full names of all partners and must be signed with the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and designation of the person signing. Bids by corporations must be signed with the legal name of the corporation followed by the name of the State of Incorporation and by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The name of each person shall also be typed or printed below the signature. A bid by a person who affixes to this signature the word "president", "secretary", "agent", or other designation without disclosing his principal may be held to be the bid of the individual signing. When requested by the City of Fairhope, Baldwin County, Alabama, satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished.

The undersigned agrees to furnish the goods/services as requested by you for the City of Fairhope, Baldwin County, Alabama in your invitation to bid, and certifies that they will meet or exceed the specifications called for. The undersigned has read all information pertaining to this bid and has resolved all questions. It is also understood and agreed that all prices quoted are F.O.B. described in the bid documents and specifications. The undersigned also affirms he/she has not been in any agreement or collusion among bidders or prospective bidders in restraint of freedom of competition, by agreement to bid at a fixed price or to refrain from bidding or otherwise.

ADDITIONAL INFORMATION REQUIRED FOR EACH BID

IF CORPORATION OR LLC

The bidder shall provide a list of not less than four (4) tank projects that have been successfully completed for the express purpose of storing municipal wastewater liquids with similar properties anticipated for this project. The information shall provide the name of the owner responsible for the operation and maintenance of such facility with contact information for the person, or persons, in direct charge of the facility.

The information shall include a brief description of the tanks relating to the interior coating, exterior coating, sealants used (if required), the completion date of the project and the results of all anniversary inspections and/or owner requested inspections after the tank has been placed in service. The tank manufacturer shall state the recommended useful life of the tank including all recommended periodic maintenance requirements.

The award of the bid for this project is subject to the owner's full and complete satisfaction that the product submitted for this project will provide the intended service for the best value as determined by the owner. Failure to provide adequate proof of experience with tanks meeting the conditions required for this project shall be adequate cause for the rejection of the bid.

| Company | State of Incorporation |
|-------------|---|
| Company Re | presentative |
| . , | (SIGNATURE of Representative authorized to sign Bids and Contracts for the company) |
| Company Re | presentative |
| | (PRINT name of Representative authorized to sign Bids and Contracts for the company) |
| | |
| (Address) | |
| | ind Zip Code) |
| Phone | Fax No |
| Primary e-m | ail |
| Alabama Coi | ntractor's License Foreign Corp. Entity ID Number (required of out-of-state Vendors) |

THIS MUST BE NOTARIZED!

NOTARIZATION OF THE BID

STATE of _____}

COUNTY of _____}

I, the undersigned authority in and for said State and County, hereby certify that

,

| | | Name |
|------------|--|--|
| as | , respectively of | |
| whose | | |
| (tit | le) | Company |
| day, that, | | nt and who is known to me, acknowledged before me on this sof the document they executed the same voluntarily on the |
| Given und | er my hand and Notary Seal on | thisday of2014. |
| | | Notary |
| | | My Commission expires |
| | | |
| | | |
| | ING OF SALES TAX nt to Bid Response XII) | |
| То: | City of Fairhope | Date: |
| Project: | | |
| | | |

Sales Tax Accounting

Pursuant to Code of Alabama (1975) Section 40-9-14.1, the Contractor accounts for the sales tax NOT included in the bid proposal form as follows:

ESTIMATED SALES TAX AMOUNT

| BASE BID: | \$ |
|--|------------------|
| | |
| Alternate No. 1 () Insert keyword for alternate | (add)(deduct) \$ |
| Alternate No. 2 () | (add)(deduct) \$ |
| Alternate No. 3 () | (add)(deduct) \$ |
| Alternate No. 4 () Alternate No. 5 () | |
| Alternate No. 6 () | (add)(deduct) \$ |

Failure to provide an accounting of Sales Tax shall render the bid non-responsive. Other than determining responsiveness, sales tax accounting shall not affect the bid pricing nor be considered in the determination of the lowest responsible and responsive bidder.

| Legal Name of Bidder | |
|-----------------------|----------|
| Mailing Address | |
| *By (Legal Signature) | |
| *Name (type or Print) | _ (Seal) |
| *Title | - |
| *Telephone | - |

- 3.4 Bolt Fasteners
- 3.4.1 Bolts used in tank lap joints shall be¹/₂ 13 UNC-2A rolled thread, and shall meet the minimum requirements of AWWA D103, Section 2.2.
- 3.4.2 Bolt Material
- 3.4.2.1 SAE Grade 5 (1" thru 11/2")
- 3.4.2.1.1 Tensile strength -105,000 psiMin.
- 3.4.2.1.2 Proof Load 74,000 psiMin.
- 3.4.2.2 SAE Grade 8 (1" thru 11/2")
- 3.4.2.2.1 Tensile Strength -150,000 psi Min.
- 3.4.2.2.2 Proof Load -120,000 psi Min.
- 3.4.3 Bolt Finish JS500 electro -plated.
- 3.4.4 Bolt Head Encapsulation

3.4.4.1 High impact polypropylene copolymer encapsulation of entire bolt head up to the splines on the shank

3.4.4.2 Resin shall be stabilized with an ultraviolet light resistant material such that the color shall appear black. The bolt head encapsulation shall be certified to meet the ANSI/NSF Standard 61 for indirect additives.

- 3.4.5 All bolts on the vertical tank wall shall be installed such that the head portion is located inside the tank, and the washer and nut are on the exterior.
- 3.4.6 Bolt lengths shall be sized to achieve a neat and uniform appearance. Excessive threads extending beyond the nut after torquing will not be permitted.

3.5 Sealants

3.5 General

The sealant used for bolted tank construction shall be recommended by the manufacturer for the use intended for this project. Sealants, such as SIKAFLEX - TS Plus, or equal, shall be considered for this project. The manufacturer shall submit confirming documentation that the product is specifically designed for this application.

- 3.5.1 The lap joint sealant shall be a one component, moisture cured, polyurethane compound. The sealant shall be suitable for contact with potable water and shall be certified to meet ANSI/NSF Additives Standard 61 for indirect additives.
- 3.5.2 The sealant shall be used to seal lap joints and bolt connections and edge fillets for sheet notches and starter sheets. The sealant shall cure to a rubber -like consistency, have excellent adhesion to the Fusion Bond coating, low shrinkage, and be suitable for interior and exterior use.
- 3.5.3 Sealant curing rate at 73°F and 50% RH
- 3.5.4 Tack-free time: 6 to 8 hours
- 3.5.5 Final cure time: 10 to 12 hours
- 3.5.6 Neoprene gaskets and tape type sealer shall not be used in liquid contacting surfaces.

4. FACTORY POWDER COAT PROCESS

4.0 General – The tank manufacturer shall be responsible to provide confirmation data that the coating system, herein defined or as an approved equal, has been specifically developed to provide protection to all components of the tank subject to the physical and chemical environment relating to the storage of raw, untreated wastewater with potentially high levels of hydrogen sulfide gases in a moisture prone environment. The coating manufacturer shall be required to submit testing data that supports the use of the product for this application.

4.1 Cleaning

4.1.1 Following the fabrication process, sheets and tank components shall be thoroughly washed and rinsed.

4.1.1.1 Washing shall be with a 3-4% solution of DuBois MC-726 and 140°F water.

4.1.1.2 The PH level shall be monitored and maintained at 10 to 12.

4.1.1.3 Rinsing shall be in a two-stage booth and ambient temperature fresh water in the second stage.

4.1.1.4 All water shall be removed from sheets and tank components with forced air at ambient temperature.

4.2 Surface Preparation

4.2.1 Sheets and tank components shall be blasted using steel shot S-230.

4.2.2 Sheets and tank components shall be blasted on both sides providing a surface profile of SSPC-SP10. Anchor

profile shall be 1.0 mil minimum.

4.3 Powder Coating System

4.3.1 After cleaning and blasting, the sheets and tank components shall receive a Fusion Bond powder coating on both

sides of steel. The powder coating shall be applied with an electrostatic process. The thermoset powder coat system shall be as specified:

| LIQUID STORAGE | FUSION SYSTEM | M DFT* | | Range (| min/max) |
|----------------|---------------|----------------------|-------|---------|----------|
| Inter | rior Lining | LIQ Fusion 8000 FBE™ | 7mils | | 6-9 mils |
| Exte | rior Primer | EXT Fusion 8000 FBE™ | 3mils | | 3-5 mils |
| Exte | rior Topcoat | EXT Fusion SDP™ | | 3 mils | 3-5 mils |

*DFT – Nominal dry film thickness

4.3.2 Interior lining, LIQ Fusion 8000 FBE[™] will be applied at 7 mils nominal DFT, with a min/max range from 6-9 mils.

4.3.3 Exterior prime coat, EXT Fusion 8000 FBE[™] will be applied at 3 mils nominal DFT, with a min/max range from 3-5 mils.

4.3.4 Coating thickness shall be maintained by the use of PLC controlled automatic spray guns preset for the application

application.

4.3.5 Visual inspection for coverage shall be made after powder application and before the first oven cure. Areas with

light coverage shall be re-sprayed with a manual spray gun.

4.4 Powder Curing

4.4.1 Sheets and tank components shall then be heated in an oven to achieve a metal temperature of375° and held for15 minutes.

4.4.2 After oven curing, the sheets and tank components shall cool down to a metal temperature of 125° or less.

4.4.3 Both visual inspection and dry film test shall be randomly performed before the application of the top coat.

4.5 EXT Fusion SDP[™] Top Coat (super durable polyester)

4.5.1 SDP top coat shall be applied at 3 mils nominal on all exterior surfaces.

4.5.2 The SDP top coat shall provide excellent gloss retention and UV resistance. Color to be selected from 5

standard colors (chart) with special formulated and premium colors as available options.

4.5.3 Visual and wet mil thickness testing shall be randomly performed before the second oven curing.

4.6 Final Curing

4.6.1 Sheets and tank components shall then pass through the final cure oven where the oven temperature ranges

from 300° to 475° based upon the metal thickness.

4.7 Inspection

4.7.1 During final cool down, sheets shall be randomly inspected for cure, adhesion, coating thickness and holidays.

4.7.2 Cure shall be confirmed using MEK rub.

- 4.7.3 Adhesion shall be confirmed using 100 squares test.
- 4.7.4 Coating thickness shall be confirmed using dry film thickness gage.
- 4.7.5 Holiday testing shall be performed with tinker & razor wet sponge.

END OF SECTION