

ADDENDUM NO. 2

**CITICO CSOTF AND PUMP STATION IMPROVEMENTS
City Project W-12-016-202**

CITY OF CHATTANOOGA, TENNESSEE

****BIDS ARE DUE SEPTEMBER 8, 2016 BY 2:00 P.M.****

- 1) A site visit is scheduled for the Citico CSOTF and Pump Station site on Monday, August 29, 2016 from 10:00 a.m. to 12:00 a.m. local time. Interested parties will be allowed supervised access to the site at that time.

The following modifications are hereby introduced as part of the Project Manual:

- 1) Add the attached Specification 01 51 43 – Temporary Bypass Pumping to the Project Manual.
- 2) In Specification 01 35 00 – Unique Requirements, Article 1.03.B., remove the language “Bypass pumping may be required to connect to existing facilities” and replace with the following language:

“Bypass pumping may be required when replacing, sliplining, and rehabilitating facility outfall piping. Bypass pumping is not anticipated to be required during installation of submersible pumps and modifications to the effluent chamber. Refer to Specification Section 01 51 43 for temporary bypass pumping requirements.”

- 3) In Specification 01 35 00 – Unique Requirements, Article 1.03.E., remove the language of the paragraph and replace with the following language:

“E. When rehabilitating and sliplining the existing CSOTF outfall, Contractor shall install cofferdams, bolted end plates, and other protections as necessary to prevent the intrusion of river and ground water into work zones and shall provide temporary waste collection devices to prevent construction materials, waste, grouting, and debris from being discharged to the Tennessee River. The CSOTF shall be utilized intermittently during heavy rain events to provide flow relief to the Citico Pump Station.

1. The Contractor shall plan for the CSOTF operating during heavy rain events and shall have contingency plans in place to remove equipment temporarily from the effluent chamber to allow the facility to operate. Contractor shall restart construction operations and clean installations after the facility flows subside as necessary to continue installations.

2. The Contractor shall provide temporary bypass pumping equipment and piping to transfer facility flows when replacing, rehabilitating, and sliplining facility outfall piping. Contractor shall maintain temporary bypassing pumping equipment and piping until outfall rehabilitation and replacement is complete and facility discharge piping is reconnected and restored.

ADDITIONAL INFORMATION DOCUMENTS

The following document(s) are being provided with this addendum for information purposes only. The documents listed below are not considered part of the Project Manual:

- 2) Pre-Bid Conference Meeting Notes.
- 3) Pre-Bid Conference Sign-in Sheet.



August 23, 2016

/s/ Justin C. Holland, Administrator
City of Chattanooga
Department of Public Works

Please acknowledge receipt of all addenda in your submitted Bid Form.

Only questions answered in writing by Addenda will be binding.

Addendum Prepared By
BURNS & MCDONNELL
August 23, 2016

Part 1 General

1.01 Scope

- A. This Section covers furnishing, maintaining, and operating a temporary bypass pumping system during construction. The Contractor shall furnish all materials, labor, equipment, power, maintenance, etc., to implement a temporary pumping and control system for the purpose of diverting the existing flow around the work area.
- B. Design and installation of these systems shall be the Contractor's responsibility subject to Engineer's approval as specified.

1.02 General

The design, installation and operation of the temporary pumping system shall be the Contractor's responsibility. The Contractor shall employ the services of a Specialty Contractor (Firm) who can demonstrate to the Engineer that it specializes in the design and operation of temporary bypass pumping systems. The Firm shall provide at least five references of projects of a similar size and complexity as this Project performed by his company within the past three years. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.

1.03 Submittals

- A. The Contractor shall prepare with the Firm a specific, detailed description of the proposed pumping system(s) required for each location and submit it along with the Firm's references within one month following Notice to Proceed.
- B. The Contractor shall submit detailed plans and descriptions outlining all provisions and precautions to be taken by the Contractor regarding the handling of existing wastewater flows in accordance with the submittal section. This plan must be specific and complete, including such items as schedules, locations, elevations, capacities of equipment, pump and drive control selection and design, materials and all other incidental items necessary and/or required to insure proper protection of the facilities. The plan shall include but not be limited to details of the following:
 - 1. Staging areas for pumps.
 - 2. Sewer or structure plugging method and types of plugs.
 - 3. Number, size, material, location and method of installation of suction piping.
 - 4. Number, size, material, method of installation and location of installation of discharge piping.
 - 5. Bypass pump sizes, capacity, and number of each size to be on site and power requirements.

Temporary Bypass Pumping

6. Motor control package design, including wiring diagrams, voltage and amperage requirements, control logic description.
7. Calculations of static lift, friction losses, and flow velocity (pump curves showing pump operating range shall be submitted).
8. Standby power provisions.
9. Thrust and restraint block sizes and locations if applicable.
10. Sections showing suction and discharge pipe depth, embedment, select fill and special backfill.
11. Any temporary pipe supports and anchoring required.
12. Design plans and access provisions to bypass pumping and generator fueling locations indicated on the Drawings.
13. Calculations for selection of bypass pumping pipe size.
14. Schedule for installation and maintenance of bypass pumping lines.
15. Continuous monitoring, operating and emergency response plan.

Part 2 Products

2.01 Design and Performance Requirements

- A. Bypass pumping systems shall have sufficient capacity to pump from negligible flows to 66 MGD. The Contractor shall provide all pumps of adequate size to handle the flow events and temporary piping to ensure that the total flow can be safely diverted around the work area.
- B. Contractor shall have adequate standby equipment available onsite and ready for immediate operation and use in the event of an emergency or breakdown.
- C. The design, installation and operation of the temporary pumping system shall be the Contractor's responsibility. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.
- D. The Contractor shall provide all necessary means to safely convey the sewage past the work area. The Contractor will not be permitted to stop or impede the main flows under any circumstances.
- E. The Contractor shall maintain sewer flow around the work area in a manner that will not cause surcharging of sewers, damage to sewers and that will protect public and private property from damage and flooding.

- F. The Contractor shall protect water resources wetlands and other natural resources.
- G. The Contractor shall provide standby power to all electric pumping units in the event of power loss.

2.02 Equipment

- A. All pumps used shall be fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in the priming system. The pumps may be electric or diesel powered. All pumps used must be constructed to handle low flow events for long periods of time to accommodate the cyclical nature of the wastewater plant flows.
- B. The Contractor shall provide the necessary stop/start and variable speed controls for each pump. The motor controls shall use a PLC based level control system with a submersible level transducer to initiate start and stop signals to the motor controls.
- C. Discharge piping systems shall be constructed of restrained joint type piping. Joints shall allow no leakage. Standard aluminum irrigation piping is not acceptable.

Part 3 Execution

3.01 Field Quality Control and Maintenance

- A. The Contractor shall perform leakage and pressure tests of the bypass pumping discharge piping prior to actual operation.
- B. The Contractor shall inspect the bypass pumping system every two hours to ensure that the system is working correctly.
- C. The Contractor shall ensure that the temporary pumping system is properly maintained and that a responsible operator shall be on hand at all times when pumps are operating.
- D. The Contractor shall submit a plan for the replacement of malfunctioning equipment.
- E. Spare parts for pumps and piping shall be kept on site as required.
- F. Adequate hoisting equipment for each pump and accessories shall be maintained on the site.

3.02 Installation and Operation

- A. The Contractor shall install the bypass pipelines to minimize any disturbance to existing utilities and shall obtain approval of the pipeline locations from the Owner and the Engineer. Routing of bypass pipelines shall not impede pump station traffic flow.
- B. The Contractor shall protect the temporary pumping station and piping from damage during construction.

Temporary Bypass Pumping

- C. Contractor shall provide all fuel and power for the temporary pumping facility. Contractor shall make arrangements for a power meter and pay all associated fees.

END OF SECTION

CITY OF CHATTANOOGA, TENNESSEE
CITICO CSOTF AND PUMP STATION IMPROVEMENTS
PRE-BID CONFERENCE SIGN IN SHEET

8/18/16
(Please Print)

Name	Title	Representing	Telephone #	Email
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ERIC BROOKS	ENGINEERING MANAGER	CITY	423-757-0963	ebrooks@chattanooga.gov
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JASON AARIS	Estimator	Admas Elec.	423-622-5103	jaaris@admas-electric.com
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DENNIS MALONE	ASSISTANT CITY ENGINEER	CITY OF CHATT	643-6188	dmalone@chattanooga.gov

Meeting Notes



Meeting Subject: Pre-Bid Conference
Meeting Date: August 18, 2016
Start Time: 10:00 AM
End Time: 10:45 AM
Location: Moccasin Bend WWTP – Training Facility

Project Name: Citico CSOTF and Pump Station Improvements
Project No.: 82841

<u>Attendees</u>	<u>Organization</u>	<u>Title</u>
Dennis Malone	Chattanooga	Assist. City Engineer
Bonnie Mumpower Dodson	Chattanooga	Contracts Coordinator
Debbie Talley	Chattanooga	Dept. Purchasing Director
Ronald Simmons	Chattanooga	Project Manager
Eric Brooks	Chattanooga	Engineering Manager
Jimmy Spence	Chattanooga	Maintenance
Chad Freund	Xylem/Godwin Pumps	Sales Representative
Jason Hargis	Adman Electric	Estimator
Paul Lacey	RTD	Project Engineer
Gabrielle Sobel	Jacobs	Program Manager
Matt Bracewell*	BMcD	Engineer

* Indicates meeting organizer

Notes Prepared By: Ric Ward
Date Notes Issued: August 23, 2016

Meeting Notes:

Below are notes, questions, and answers from the Pre-Bid Conference for the Citico CSTOF and Pump Station Improvements project.

1. Matt Bracewell led the meeting and followed and described each item listed in the Pre-Bid Agenda, attached to these meeting notes.
2. At the conclusion of the meeting, the floor was opened up for questions and open discussions. The following comments and questions were received:
 - a. An attendee asked how the flow will get through the facility while it is down. This has been addressed through additional items in Addendum No. 2.
 - b. An attendee asked how temporary power will be handled during changeover. Temporary power and utilities, staging, sequencing, and other coordination required to complete the work is the responsibility of the Contractor, per Specification Section 01 35 00, 01 50 10, and other specification sections.
 - c. An attendee asked if a site visit could be scheduled. This has been addressed through additional items in Addendum No. 2.

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- d. An attendee asked if the project had any MBE/WBE requirements. The project does not have any MBE/WBE requirements.
- e. An attendee asked if sales tax is waived for the bid. Refer to General Conditions Article 6.10.

Attachment

AGENDA
Pre-Bid Conference
Citico CSOTF and Pump Station Improvements
Contract W-12-016-202
Thursday, August 18, 2016 at 10:00 AM

Owner: City of Chattanooga (Waste Resources Division)
455 Moccasin Bend Road
Chattanooga, Tennessee 37405

Engineer: Burns & McDonnell Engineering Company
3650 Mansell Road, Suite 300
Alpharetta, GA 30022

Program Manager: Jacobs Engineering
4510 Turntable Road, Suite 110
Chattanooga, Tennessee 37421

Meeting Site: Training Facility
Moccasin Bend Wastewater Treatment Plant
455 Moccasin Bend Road
Chattanooga, Tennessee 37405

Opening and Introductions

- Sign-in Sheet

Overview and Scope of Work

- Project Description
- Project Location

Bid Documents

- Bid Opening Date and Location
- Bidding Requirements
- Bidder Questions and Addenda
- Qualifications
- City Discussion of Requirements

Contract Documents

- Specifications and Drawings
- Contract Completion Times
- Project Meetings
- Insurance Requirements
- Testing
- Allowances

Project Specific Requirements

- Environmental Permit, Disturbance, and Protection Requirements
- Sliplining
- Site Safety
- Staging and Work Limitations
- Waste Management

Open Discussion and Questions

Conclusion