



DATA SHEET
Agenda No. 15.

Meeting Date: October 5, 2017

Agenda Item:

Consider approval of Task Order No. 6 to existing contract with Carollo Engineers, Inc. related to design, bidding and construction phase services for filter repairs and rehabilitation at the Taylor Regional Water Treatment Plant.

Placement: <input type="checkbox"/> Consent <input checked="" type="checkbox"/> Individual Consideration <input type="checkbox"/> Executive Session
Vote: <input type="checkbox"/> Non-Weighted <input checked="" type="checkbox"/> Weighted Capital
Recommending Department: Engineering

Background:

In late 2012, the Taylor Regional Water Treatment Plant began experiencing failures of the underdrain systems of the filters. Three filters (Filter Numbers 3, 4, and 5) were temporarily taken out of service and the underdrains were rebuilt. This reconstruction included replacing air lines, replacing valves, repairing grout and adding filter media. Recently District experienced similar failures in Filter Numbers 1, 2, and 6.

Carollo Engineers was retained to provide engineering services related to design and construction for repairs and replacement of the 2012 filter failures. The current filter issues appear to be similar to the previous failures.

Under the proposed task order, Carollo Engineers will provide final design, bidding assistance and construction services to rebuild underdrains and replace media in three filters, paint piping in filter gallery and replace four (4) existing hypochlorite storage tanks.

The task order includes budget amounts of \$99,348 for Basic Services (design, bidding and construction services), \$5,948 for Special Services (additional meeting assistance and project documentation), and \$20,000 Additional Services (contingency for project related unknowns). The total amount of the proposed Task Order is \$125,296.

Financial:

Funding is included in the approved FY 18 Capital Budget.

Recommendation:

Staff recommends approval of proposed Task Order No. 6.

Enclosures:

Draft Task Order No. 6.

Submitted By: 
Kurt Staller, Acting Director of Engineering & Construction

Date: September 29, 2017

ATTACHMENT A

Task Order No. 6

This Task Order is part of the AGREEMENT between Carollo Engineers, Inc., (the "ENGINEER"), and Upper Trinity Regional Water District (UTRWD), (the "OWNER"), for a project generally described as:

Improvements to the Regional Water System

The purpose of this Task Order is as follows:

Filter Rehabilitation Project No. 2 at the Thomas E. Taylor Regional WTP

ARTICLE I SCOPE OF SERVICES

The ENGINEER agrees to furnish the OWNER the following specific services:

BASIC ENGINEERING SERVICES

The following scope of work describes the work tasks and activities to be completed by the ENGINEER as part of engineering services related to the Final Design and Engineering Services During Construction for the Filter Rehabilitation Project No. 2 at the District's Thomas E. Taylor Regional WTP (TRWTP).

Scope of Work:

Task 100 Final Design

Task 101 - Meetings / Management: Prepare internal project instructions, work plan, quality control procedures, and meeting procedures. Conduct internal staff coordination; budget and schedule control; coordination of various task activities being conducted simultaneously and prepare handouts for meetings and workshops. A duration of 3 months is assumed for the final design phase of the project. ENGINEER will attend the following meetings:

- a. Kickoff Meeting: ENGINEER will participate in one (1) meeting with OWNER via teleconference to kick off the project. ENGINEER will prepare handouts, meeting agendas and meeting minutes.
- b. Draft Design Document Review Meeting: ENGINEER will participate in one (1) meeting with OWNER to discuss the OWNER's review comments on the draft design document submittal. ENGINEER will prepare handouts, meeting agendas and meeting minutes.
- c. Design Progress Meetings: ENGINEER will participate in one (1) meeting with OWNER via teleconference to keep the OWNER apprised of the job, to review detailed design documents prepared to date, and to receive the OWNER's input, comments and approval on proposed designs. ENGINEER will prepare handouts, meeting agendas and meeting minutes.
- d. Pre- Bid Meeting: ENGINEER will attend and assist OWNER in Pre-Bid meeting for the project. ENGINEER will prepare handouts, meeting agendas and meeting minutes.

Task 102 – Final Design: The ENGINEER shall complete the final design and prepare biddable Plans and Specifications.

- a. Draft Design Document Submittal: Draft plans and specifications will be completed under this task. Five (5) copies of the plans and specifications (11x17 format), along with pdf files will be submitted to the OWNER for review and comment.
- b. Final Design Documents Submittal: The plans and specifications will be finalized based on the comments received from the OWNER and ENGINEER's QA/QC efforts. Five (5) copies of the sealed and signed final plans (11x17 format) and specifications, along with pdf files will be submitted to the OWNER. ENGINEER shall submit final Bid Documents to TCEQ as required.
- c. Specifications: The ENGINEER shall prepare General Conditions, Special Conditions, and final Technical Specifications for bidding package from ENGINEER's Standard technical specifications. Specifications, Bid Forms and Contract Documents shall be reviewed by the OWNER. Specifications will include pre-negotiated price agreement letter and scope of supply from Leopold for the filter underdrain block and media retention cap.

- d. **Cost Estimate:** An opinion of probable construction costs will be developed by the ENGINEER and updated at the draft design submittal and final submittal design stages.
- e. **Quality Management:** The draft plans and specifications will be submitted to the ENGINEER's quality management team for review. This review will include constructability, coordination between disciplines, and coordination between plans and specifications. The constructability review shall examine adequacy of the detail for construction.
- f. **Agency Coordination:** ENGINEER shall communicate filter repair work with TCEQ. Engineer shall prepare and submit letter summarizing work to TCEQ.

Task 103 - Bidding Assistance: The ENGINEER shall provide the following assistance to the OWNER during the period of time between advertisement and receipt of bids:

- a. Maintain and update a Planholder's list
- b. Printing and mailing of plans, specifications, and addenda. The Bid Document set format will be specifications and 11x17 drawings. Both the Bid Documents and full-sized drawing sets will be made available to the Contractor's and Suppliers.
- c. Interpretation of intent of plans and specifications, and providing clarifications to bidders
- d. Preparation of addenda to plans and specifications, and mailing of the same during bid period
- e. Assistance to the OWNER during pre-bid meeting (per Task 101), opening of bids, and recommendation of award

The ENGINEER shall determine the sale price of the Bid Documents and full-sized drawings to recover cost of printing and mailing and shall use the revenue from their sale as reimbursement for printing, mailing, and handling costs. The sale price will be reviewed with the OWNER prior to final determination.

Task 200 Construction Services

Task 201 – Meetings / Management: Prepare project instructions, work plan, quality control procedures, and meeting procedures. Conduct internal staff coordination; budget and schedule control; and coordination of various task activities being conducted simultaneously. A duration of 8 months is assumed for the construction phase of the project. ENGINEER will attend the following meetings:

- a. **Pre-Construction Meeting:** ENGINEER will attend a preconstruction meeting with the OWNER and CONTRACTOR. ENGINEER will prepare meeting agenda for the meeting and assist the OWNER in presenting materials and/or responding to questions. ENGINEER will prepare meeting minutes.
- b. **Construction Meetings:** ENGINEER will attend up to six (6) construction meetings and/or non-periodic site visits to meet with the CONTRACTOR and OWNER. ENGINEER will not be responsible for preparation of meeting agenda or meeting minutes.

Task 202 – Engineering Services During Construction

- a. **Submittals:** This task includes the following:
 - ENGINEER will review contractor submittals for conformance with the contract documents, drawings, specifications and design intent. The ENGINEER will document all comments for a submittal and submit draft comments to the OWNER for review. ENGINEER will submit final comments to CONTRACTOR in electronic format by email.
 - The ENGINEER will track and log all submittals.
 - This task is based on a total of up to 62 hours of submittal services. Effort in excess of 62 hours may require additional budget.
 - Submittals will generally be reviewed and returned by the ENGINEER within 10 working days. Certain complex submittals may require longer periods.
- b. **RFI's / Change Order Support:** ENGINEER will provide RFI / Change Order Support services.
 - RFI's: ENGINEER will submit draft comments to the OWNER for review. The ENGINEER will submit responses to RFI's electronically via email. ENGINEER will track and log RFI's. ENGINEER will generally review and return RFIs within 7 working days, but may request a longer review time for complex RFI's. If requested by the CONTRACTOR or OWNER for a specific RFI, the ENGINEER will attempt to complete the review and transmit a response in shorter durations.

- Change Order Support: As directed by the OWNER, this work may include reviewing or preparing change orders, reviewing or preparing opinion of probable cost for change orders, and reviewing or preparing sketches or CAD drawings for change orders. ENGINEER will track and log all change orders.

This task is based on a total of up to 16 hours of RFI/Change Order Support services. Effort in excess of 16 hours may require additional budget.

- c. Progress Payments & Schedule Review: ENGINEER shall review schedules submitted by CONTRACTOR, monitor the progress of the work, and review and recommend OWNER action of Contractor progress payments.
- d. Final Inspection: Conduct jointly with the OWNER and the Contractor one (1) inspection for Substantial Completion and one (1) inspection for Final Completion. Develop jointly with the OWNER's field representatives and issue to the Contractor a punchlist of incomplete work.

SPECIAL SERVICES

Special Services are those services known to be required for completion of the project that the OWNER agrees are to be furnished by the ENGINEER or by a subconsultant that cannot be defined sufficiently at this time to establish the maximum compensation. The services are not included in the scope of work of Basic Services or the amount of compensation for Basic Services. The Special Services for this assignment are described as follows:

Task 301 – UTRWD Board Meeting Assistance: ENGINEER will attend one (1) UTRWD Board meeting associated with this project. At the request of the OWNER, ENGINEER will assist in preparing materials for the Board meeting and assist in responding to questions.

Task 302 – Record Drawings: Based on redlines provided by the Contractor and OWNER, the ENGINEER will prepare record drawings for review by the OWNER. ENGINEER will submit one (1) set of halfsize draft record drawings to the OWNER for review. Two (2) sets of final half size signed record drawings on bond paper will be submitted to OWNER. Electronic PDF files will also be submitted on CD.

ADDITIONAL SERVICES

Additional services to be performed by the ENGINEER, if authorized by the OWNER, which are not included in the above-described Basic Engineering Services, are described as follows:

- A. Task 401 - Additional Investigation/Design/ESDC Services related to the filter underdrain failure and repair ; and other tasks that may be needed to complete the project.

ASSUMPTIONS:

The following assumptions have been made in the preparation of the scope and fee for this project :

1. Project Schedule: ENGINEER's scope and fee are based on the following preliminary schedule for this project:
 - a. OWNER will provide ENGINEER with notice to proceed for Final Design following the District's October 5, 2017 Board Meeting.
 - b. Design and Bidding phase will be completed within 3 months from NTP
 - c. Construction phase will be completed within 8 months from NTP.
2. The project will include the following elements:
 - a. The replacement of the underdrain and media in three (3) filters (Filters 1, 2 and 6). No work is included on any other filters. The scope of work does not include investigation into the failure or replacement of items other than the underdrain system.
 - b. Repainting of piping within the filter gallery.
 - c. Replacement of four (4) existing 15,000 gallon FRP sodium hypochlorite storage tanks. Tanks will be replaced in kind with new tanks. The scope of work does not include replacement of anything other than the storage tanks and does not include any electrical or I&C drawings or specifications. Reuse and reconnection of existing electrical and I&C components will be covered by notes on the mechanical drawings.

3. The final design documents will utilize the November 2012 "Filter Rehabilitation Project" design documents as the starting point for development of design documents for this project. Modifications to these documents will be limited to changes to reflect the scope of this project and technical updates to equipment specifications. No additional drawings or specifications will be required. Drawings and specifications will be bound together in a single document.
4. Existing drawings are assumed to be accurate and represent 'as-built' locations and dimensions. No surveying will be required
5. OWNER will provide construction manager and field inspection for the project. ENGINEER will provide office related construction services.
6. Preparation of conformed documents will not be required.
7. This proposal does not include prequalification, preselection or prenegotiation of Contractors.
8. This proposal does not include legal assistance or fees associated with resolving construction disputes and formal claims.
9. All material testing will be performed by others.
10. Any other services and costs not specifically stated in our scope of work are not included in our proposed estimated fee.
11. There will be no formal partnering arrangement between the OWNER, ENGINEER, and General Contractor. Informal partnering will be encouraged.
12. Labor rates are subject to an annual increase of up to 4 percent starting in January, 2018

Article II Compensation

Basic Services

Compensation by the OWNER to the ENGINEER for all Basic Services enumerated in Task Order No. 6 will be based on actual hours and costs (time and materials) in accordance with Exhibit A, with the total not to exceed amount of \$ 99,348

Special Services

For all Special Services enumerated in Task Order No.5, compensation shall be based on the actual cost times a multiplier in accordance with Exhibit A. The total amount will not exceed \$ 5,948 without prior written authorization from the OWNER. Special Services are broken down into the following major items of work:

A.	Special Services	<u>\$ 5,948</u>
	• Task 301 – Board Meeting Assistance	<u>\$ 3,399</u>
	• Task 302 - Record Drawings	<u>\$ 2,549</u>

Additional Services

Additional Services which may be required by the OWNER shall be based on the actual hours and costs in accordance with Exhibit A. A budget allowance of \$20,000 has been established for this item and will not be exceeded without specific written authorization of the OWNER. No work will be undertaken without specific prior written authorization from the OWNER. Additional Services are broken down into the following major items of work:

A.	Additional Services	<u>\$ 20,000</u>
	• Task 401 – Additional Investigation /Design /ESDC Services	<u>\$ 20,000</u>

Total Compensation Summary

Basic Services:	<u>\$ 99,348</u>
Special Services	<u>\$ 5,948</u>
Additional Services:	<u>\$ 20,000</u>

Estimated Total Task Order No. 6: \$ 125,296

Other Provisions

The following provisions shall apply to this Task Order:

The ENGINEER's compensation is based on immediate authorization to proceed and timely completion of the PROJECT. If the PROJECT timing deviates from the assumed schedule for causes beyond the ENGINEER's control, the ENGINEER reserves the right to request renegotiation of those portions of the compensation affected by the time change.

This Task Order No. 6 will become part of the referenced AGREEMENT when executed by both parties.

IN WITNESS WHEREOF, the parties execute below:

For the OWNER, Upper Trinity Regional Water District dated this _____ day of _____, 2017.

By: _____

By: _____
Name Title

For the ENGINEER, Carollo Engineers, Inc. dated this _____ day of _____, 2017.

By: _____

By: _____
Name Title

