

CITY OF HIGH POINT

AGENDA ITEM



Title: Engineering and Construction Services for Elevated Water Storage Tank at Potts Ave.

From: Terry Houk – Public Services Director
Tyler Berrier – Civil Engineer

Meeting Date: November 21, 2016

Public Hearing: N/A

Advertising Date: N/A

Advertised By: N/A

Attachments: Engineering Proposal

PURPOSE:

This proposal is for the Engineering and Construction Services of a new elevated storage tank for the City, located at Potts Avenue. The project includes a 1.0 MG elevated storage tank with associated valves, electrical, instrumentation and other appurtenances. This scope of services is to provide contract administration and construction inspection during construction. This new tank replaces the existing Ward Street tank constructed in 1928.

BACKGROUND:

Public Services selected CDM Smith from the 2013 Master On-Call Services Agreement to provide design and bid phase services for a new elevated storage tank for the City, located at Potts Avenue.

BUDGET IMPACT:

Funds are available in the FY 2016-2017 annual budget.

RECOMMENDATION / ACTION REQUESTED:

The Public Services Department recommends approval of the contract and that the appropriate City official and/or employee be authorized to execute all necessary documents to award the project to CDM Smith in the amount of \$157,975.00.

**SCOPE OF SERVICES SUPPLEMENTAL AGREEMENT
BETWEEN
CITY AND ENGINEER
FOR
PROFESSIONAL ENGINEERING SERVICES**

FURTHER DESCRIPTION OF ENGINEERING SERVICES AND RELATED MATTERS

This is an exhibit attached to and made a part of the Contract dated _____, 2015, between the City of High Point (City) and CDM Smith Inc. (Engineer/Consultant) for Professional Engineering Services.

The Basic Services of the Consultant as described in Section 2 of said Contract are supplemented as follows for the Potts Avenue Elevated Water Storage Tank (project) as follows:

PROJECT DESCRIPTION

CDM Smith has provided design and bid phase services for a new elevated storage tank for the City, located at Potts Avenue. The project includes approximately 50 feet of 16-inch water transmission main piping and a 1.0 MG elevated storage tank with associated valves, electrical, instrumentation and other appurtenances. This scope of services is to provide contract administration during construction.

BASIC SERVICES

Basic Services to be provided by the Engineer under this Agreement shall be limited to the following:

- Task 600 – Construction Contract Administration
- Task 700 – Construction Observation

Note, Task 100 through 500 were for design and bid phase services. The detailed scope of services for the basic services included under this Contract (Tasks 600 and 700) follows:

TASK 600 CONSTRUCTION CONTRACT ADMINISTRATION

The Engineer shall provide Contract Construction Administration services, including part time onsite observation, for the construction project over an assumed 16-month construction period. It is assumed that active onsite construction will not occur in the first 4 months of the project. This Agreement would need to be amended to provide additional compensation should an increase in the 16-month construction period duration occur.

601 Definitions

“Work” means the entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such

construction, all as required by the Contract Documents.

602 General Administration of Construction Contract

Engineer shall consult with and advise Owner and act as Owner's representative as set forth herein. Owner's instructions to the Contractor(s) shall be issued through Engineer who shall have the authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement. This task includes the Engineer leading monthly construction progress meetings (during the active phase of construction) including the preparation and distribution of meeting minutes. It is assumed that 12 monthly progress meetings will be necessary during the construction of the project (no meetings the first three months and no meeting the last month).

603 Defective Work

Engineer shall have authority to disapprove or reject Contractors' Work while it is in progress if Engineer believes that such Work does not conform to the Contract Documents or that it will prejudice the integrity of the design concept of the project as reflected in the Contract Documents. Engineer shall have access to the Work at all times wherever it is in preparation or progress.

604 Shop Drawings

Engineer shall review and approve or take other appropriate action with respect to Shop Drawings, samples, and other data which Contractor is required to submit, but only for conformance with the design concept of the completed project as a functioning whole as indicated in the Contract Documents and in compliance with the information given in the Contract Documents. Such reviews or other action shall not include means, methods, techniques, sequences, or procedures of construction or safety programs and precautions incident thereto.

605 Clarifications and Interpretations: Field Orders

Engineer shall issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the Work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Engineer may issue Field Orders authorizing minor variations from the requirements of the Contract Documents. Field Orders shall not involve change in Contract Price or Time.

606 Change Orders and Work Change Directives

Engineer shall recommend Change Orders and Work Change Directives to Owner as appropriate, and shall assist Owner with preparation of Change Orders and Work Change Directives as required. Change Orders and Work Change Directives will not be issued until Owner has approved and accepted Contractor's cost and schedule change to implement such Directives.

607 Substitutes

Engineer shall evaluate and determine the acceptability of substitute materials and equipment proposed by Contractor.

608 Inspections and Tests

Engineer shall make recommendations to Owner regarding the advisability of requiring special inspections or testing of the Work and have authority to receive and review all certificates of inspections, testing, and approvals required by laws, rules, regulations, ordinances, codes, orders, or the Contract Documents to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents. The Engineer has not included the special inspections testing in this scope of work. It is assumed that the Owner will contract with a third party special inspections firm during construction.

609 Disagreements Between Owner and Contractor

Engineer shall act as initial interpreter of the requirements of the Contract Documents, judge the acceptability of the Work, and make decisions on all claims of Owner and Contractor relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the Work.

610 Applications for Payment

Engineer shall determine the amount owing to Contractor based on Engineer's observations (if included under Engineer's scope of services under Task 700) and inspections at the site and the data comprising the Application for Payment, and the accompanying data and schedules, and recommend in writing payments to Contractor in such amounts. Such recommendations of payment will constitute a representation to Owner that the Work has progressed to the point indicated and that, to the best of Engineer's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The issuance of a recommendation will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a recommendation for payment will not be a representation that the Engineer is responsible for construction means, methods, techniques, sequences, or procedures or has ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Price. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents).

611 Contractor's Completion Documents

Engineer shall receive, review, and transmit to Owner with written comments maintenance and operating instructions, schedules, guarantees, certificates of insurance, marked-up record drawings (including shop drawings, samples and other pertinent data), bonds, certificates of inspection, and tests and approvals of equipment which are to be provided by Contractor in accordance with the Contract Documents. Engineer shall determine that their content complies with the requirements of the Contract Documents.

612 Substantial Completion

Following notice from Contractor that Contractor considers the entire work ready for its intended use, Engineer and Owner, accompanied by Contractor, shall conduct an inspection to determine if the work is substantially complete. If after considering any objections by the Owner, Engineer considers the Work substantially complete, Engineer shall deliver a notice of substantial completion to Owner and Contractor.

613 Final Notice of Acceptability of Work

Prior to final payment to the Contractor, and in company with the Owner, Engineer shall visit the project to observe any apparent defects in the completed work, assist Owner in consultations and discussions with Contractor concerning correction of such defects, and make recommendations as to replacement or correction of defective work.

Engineer shall conduct a final inspection to determine if the completed Work is acceptable to Engineer and Owner so that Engineer may recommend, in writing, final payment to Contractor and may give written notice to Owner and Contractor that the Work is acceptable, subject to any conditions therein expressed. Accompanying the recommendation for final payment, Engineer shall indicate that the work is acceptable to the best of Engineer's knowledge, information, and belief and based on the extent of the services performed and furnished by Engineer under this Agreement.

Engineer shall provide Engineer's certification that the work has been completed in accordance with Owner's approved plans and specifications.

614 Record Drawings

Engineer shall prepare a set of reproducible record prints of Record Drawings showing those changes made during the construction process based on the marked-up prints, shop drawings, drawings, and other data furnished by the Contractor to Engineer. The record prints shall also incorporate the Engineer's observation of changes made during construction. These record drawings shall be prepared on reproducible hard copies and on disk (in the latest version of AutoCAD or such version as the parties agree) for delivery to the Owner.

TASK 700 VISITS TO SITE AND OBSERVATION OF CONSTRUCTION

Engineer shall make visits to the site at intervals appropriate to the stage of construction, or otherwise agreed to by Engineer in writing, to observe as an experienced and qualified design professional the progress and quality of the Work and to determine if the Work is proceeding in accordance with the Contract Documents. Engineer's observation of the Work shall not be intended to involve work beyond the responsibility specifically assigned to Engineer in this Agreement and the Contract Documents. On the basis of site observations, Engineer shall keep the Owner informed of the progress and quality of the Work and shall alert the Owner to defects and deficiencies in the Work of the Contractor. Engineer shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures of construction selected by Contractor or for safety and environmental programs and precautions incidental to the Work. Engineer shall not be responsible for the failure of the Contractor, his Subcontractors, or any other persons performing any of the Work to comply with laws, rules, regulations, ordinances, code, or orders, or for failure of any of them to carry out the Work in accordance with the Contract Documents except as otherwise expressly provided herein.

The purpose of Engineer's visits to the site will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed work of Contractor will conform to the Contract Documents, and that the integrity of the design concept of the completed project as a functioning whole as indicated in the Contract Documents has been implemented and

preserved by Contractor. This scope of work assumes the following:

- 12 hours per week of onsite inspection for 12 months of active onsite construction (it is assumed that some weeks may require 2 visits per week and other weeks may only require 1 visit per week).

This Agreement would need to be amended to provide additional compensation should an increase in these assumptions be necessary.

2. The responsibilities of the City are as follows:

- Pay for necessary permit application fees.
- Provide materials testing services during construction for soils compaction, concrete sampling and other special inspections required by Building Code.
- Provide specialty inspection services for inspection of the coating/painting on the project.

3. The time periods for the performance of the Engineer's services are as follows.

The Engineer will work with the City to complete the Project in accordance with construction schedule which is anticipated to be 16 months. This Agreement would need to be amended to provide additional compensation should an increase in these assumptions be necessary.

4. The method of payment for services rendered by the Engineer shall be as set forth below.

The total cost of all Basic Services shall be the lump sum or not to exceed basis as described below. Total payments to the Engineer shall not exceed \$157,975.00. In addition to this compensation, the City reserves the right to amend this Contract so that the Engineer may furnish additional services as may be needed. The Engineer shall submit its invoices applicable under the terms of this Contract on a monthly basis. The Engineer's invoices shall be paid within 30 days of receipt by the City. The Engineer shall submit its final invoice applicable under the terms of this Contract within 30 days of the Contract termination date.

<u>Task Description</u>	<u>Fee</u>	<u>Lump Sum or Not-to-Exceed Cost Ceiling</u>
Task 600 – Construction Administration	\$82,800.00	Lump Sum
Task 700 – Construction Observation	\$75,175.00	Not-to-Exceed

5. The City has established the following special provisions and/or other considerations or requirements in respect of the Assignment:

None.

This Task Order is executed this _____ day of _____ 2016.

CDM SMITH, INC.

WITNESS

By: _____

David L. Collins, P.E.
Vice President

Jonathan S. Lapsley, P.E.
Principal

CITY OF HIGH POINT

WITNESS

By: _____

Terry Houk

Tyler Berrier, P.E.