



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Materials Management

ACM: Mario Canizares

DATE: August 1, 2017

SUBJECT

Consider adoption of an ordinance accepting competitive proposals and awarding a public works contract for the construction of the Hickory Substation Underground Transmission Line Duct Bank Project for the City of Denton which consists of the installation of a grouping of conduits for underground electrical conductors from inside the Hickory Substation boundary to appropriate points outside of the substation; providing for the expenditure of funds therefor; and providing an effective date (RFP 6416C-awarded to Larrett, Inc. in the amount of \$892,455). The Public Utilities Board recommends approval (6-0).

RFP INFORMATION

The City of Denton is currently updating utilities within Hickory Street from Bonnie Brae Street to Carroll Boulevard in preparation for repaving that section of Hickory Street. The Street Department has worked to coordinate utility replacements, upgrades, and new installations ahead of repaving. Repaving is scheduled later this year. Denton Municipal Electric (DME) developed RFP #6416 to support this City effort.

As can be seen from the drawing in Exhibit 2, much of the conduit will be located under the pavements of Hickory Street and Avenue H. The duct bank sections to be constructed under RFP #6416 will extend from inside the new substation boundary to appropriate points outside the station. One duct bank will be for distribution conductors, and one will be for 138kV transmission conductors. Future phases of construction will extend the duct banks to their ultimate connection points. Additional transmission and distribution duct bank construction will be required in other areas around the substation as the substation project progresses.

The Hickory Substation is an approved Capital Improvement Plan (CIP) project, and City Council has directed that the substation be constructed as a Gas Insulated Substation (GIS). In order to maintain the aesthetic benefit of the GIS, underground transmission lines will be installed into the station. This will be DME's first experience with transmission underground technology. Construction of these duct banks are the first steps in beginning the project for the new Hickory Substation.

RFP #6416 was advertised in accordance with standard City of Denton Materials Management procedures. Request for Proposals were sent to 569 prospective suppliers. In addition, specifications were placed on the Purchasing website for prospective suppliers to download. Six companies were represented at the pre-submission conference that was held to answer questions for contractors and provide basic information. One proposal was received from Larrett, Inc., of Kaufman, Texas. The proposal was evaluated based upon published criteria, including price, delivery and probable performance by the supplier. Larrett, Inc.'s proposal met all of the required criteria and was determined to be the best value for the City (Exhibit 3).

Installation of transmission voltage duct banks is specialized work that is not yet being performed by a large numbers of contractors. Part of the reason is that projects of this type normally require long radius field bending of conduits with radii in the range of 50 feet to 400 feet. DME's project will require bends with radii of 50 feet and 100 feet. By contrast, normal radii used for distribution underground circuits are in the range of six feet or less and are factory made. Further, the inside diameter of the six inch conduit that will be used as transmission conduit is a fraction over six inches. The 138kV cables will have a diameter of about 4.8 inches. Joints between conduit sections must be precise to allow these large diameter transmission cables to be pulled into the conduits. The pulling equipment and the cable will not transit a conduit joint with as little as five degrees of angle at a coupling because of both the diameter and the stiffness of such large cable.

Larrett, Inc. is a contractor that specializes in the installation of underground utilities including underground duct banks. DME's transmission underground design engineering firm (Power Engineers) has worked with Larrett, Inc. on projects and has experienced good results regarding performance and staff capabilities. Larrett's proposed price is in line with the project estimate, and the length of time they estimated to complete the work is acceptable for coordinating with the schedule for Hickory Street paving project.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On July 24, 2017, the Public Utilities Board recommended approval to forward this item to the City Council for consideration.

RECOMMENDATION

Award a public works contract for the construction of the Hickory Substation Underground Transmission Line Duct Bank Project to Larrett, Inc. in the amount of \$892,455.

PRINCIPAL PLACE OF BUSINESS

Larrett, Inc.
Kaufman, TX

ESTIMATED SCHEDULE OF PROJECT

This project is estimated to be completed within 113 working days.

FISCAL INFORMATION

This approved DME CIP project will be funded with bond funds from account #604189500.1360.3560 for the transmission portion of the contract and from account #604189500.1360.3660 for the distribution portion of the contract. The project costs that are in the transmission category will ultimately be recovered through the Public Utility Commission transmission cost of service program (TCOS). \$485,466 of the project amount will be in the transmission category.

STRATEGIC PLAN RELATIONSHIP

The City of Denton's Strategic Plan is an action-oriented road map that will help the City achieve its vision. The foundation for the plan is the five long-term Key Focus Areas (KFA): Organizational Excellence; Public Infrastructure; Economic Development; Safe, Livable, and Family-Friendly Community; and Sustainability and Environmental Stewardship. While individual items may support multiple KFAs, this specific City Council agenda item contributes most directly to the following KFA and goal:

Related Key Focus Area: Organizational Excellence

Related Goal: 2.3 Promote superior utility services and facilities

EXHIBITS

Exhibit 1: Agenda Information Sheet

Exhibit 2: Site Drawing

Exhibit 3: Evaluation and Pricing Sheet

Exhibit 4: Public Utilities Board Minutes

Exhibit 5: Ordinance

Exhibit 6: Contract

Respectfully submitted:
Galen Gillum, 349-7656
Director of Capital Projects

For information concerning this acquisition, contact: Chuck Sears at 349-7111.