



## Legislation Details (With Text)

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**Title:** Consider recommending approval of a contract with Larrett, Inc., Kaufman, Texas, for construction of the initial phase of the Hickory Substation underground transmission and distribution line duct banks in an amount not to exceed \$892,455.00. (RFP #6416)  
**Sponsors:**  
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**Attachments:** 1. Exhibit 1 - Project Drawing, 2. Exhibit 2 - RFP Cost and Evaluation

Date	Ver.	Action By	Action	Result
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## Agenda Information Sheet

**DEPARTMENT:** Denton Municipal Electric

**CM/ ACM:** Todd Hileman

**Date:** July 24, 2017

### SUBJECT

Consider recommending approval of a contract with Larrett, Inc., Kaufman, Texas, for construction of the initial phase of the Hickory Substation underground transmission and distribution line duct banks in an amount not to exceed \$892,455.00. (RFP #6416)

### BACKGROUND

RFP #6416 was advertised to seek proposals for construction of certain sections of electrical duct banks that will be needed to support the new Hickory Substation. Exhibit 1 is a drawing that shows the locations for the planned duct banks. A duct bank is a grouping of conduits (pipes) for underground electrical conductors that provide a path for, and physical protection for, insulated electrical conductors.

The City of Denton is currently updating utilities within Hickory Street from Bonnie Brae in 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. DME developed RFP #6416 to support this city effort.

As can be seen from the drawing in Exhibit 1, 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 CIP project, and the City Council has directed that the substation be constructed as a Gas Insulated Substation (GIS) and, in order to maintain the aesthetic benefit of the GIS, to use underground for transmission lines 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.

Installation of transmission voltage duct banks is specialized work that is not yet performed by 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.

RFP #6416 was advertised in accordance with standard City of Denton Materials Management procedures. The solicitation was provided to 569 prospective suppliers. Six companies were represented at the pre-submission conference that was held to answer questions for contractors and provide basic information. One response was received for the RFP, that being from Larrett, Inc., of Kaufman, Texas.

Larrett is a contractor that specializes in installation of underground utilities including underground duct banks. We understand that they are the exclusive contractor for Oncor for such work. They specialize in underground utility construction for utilities and municipalities. DME's transmission underground design engineer (Dennis Johnson with Power Engineers) has worked with Larrett on projects and has specific knowledge of their capabilities and past performance. According to him, Larrett's performance has been very good. 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. Exhibit 2 is a summary of the cost from Larrett and evaluation of their proposal.

The ratings factors that were intended to be used to evaluate proposals were defined in the RFP as the following:

a) Project Schedule (FACTOR: 10%).

Ability to timely start and complete project. This includes the schedule to complete project and may include ability to meet required milestones of completion.

b) Compliance with specifications, quality, reliability, characteristics to meet stated or implied needs (FACTOR 20%)

Compliance with the stated specification(s) coupled with the quality and reliability of the goods and services such as fitness for use that meets or exceeds Owner's expectations and the characteristics of the product or service that bear on its ability to meet the stated/implied needs.

c) Indicators of Probable Performance under contract (FACTOR: 10%).

Indicators of probable performance under the contract to include: past vendor performance, financial resources and ability to perform, experience or demonstrated capability and responsibility, references, and the vendor's ability to provide reliable maintenance agreements and support.

d) Price, Total Cost of Ownership (FACTOR: 60%).

The price of the items, to include total cost of ownership, such as installation costs, life cycle costs,

and warranty provisions.

Larrett, Inc., was awarded the maximum number of points for their proposal.

### **RECOMMENDATION**

DME recommends awarding the construction contract to Larrett, Inc., in the total estimated expenditure amount of \$892,455. Of this amount, \$485,466 will be in the transmission category, and \$406,989 will be in the distribution category.

### **PRIOR ACTION/REVIEW (Council, Boards, Commissions)**

None specifically on this item. The City Council directed construction of the Hickory Substation as GIS and with transmission underground on June 21, 2016. The proposed purchase is consistent with project information detailed in the CIP and Budget documents and presentations

### **FISCAL INFORMATION**

This approved DME CIP project will be funded with bond funds from Project #604189500.1360.3560 for the transmission portion of the contract and from Project #604189500.1360.3660 for the distribution portion of the contract.

### **BID INFORMATION**

The RFP evaluation information is summarized in Exhibit 1.

### **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:**     **Public Infrastructure**

**Related Goal:**                **2.3 Promote superior utility services and facilities**

### **EXHIBITS**

1.     Project Drawing
2.     RFP Cost and Evaluation

Respectfully submitted:  
Bryan Langley  
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