



MEMORANDUM

To: Mayor and City Council

From: Ken Griffin, P.E., Director of Engineering and Public Works

Date: September 26, 2017

Reference: Award of SCADA/Fiber project to NEMA 3 Electric, Inc.

2030: Special Place to Live – Ensure Well-Maintained Neighborhoods, Public Infrastructure, Including Streets, Alleys, Utilities and Fences

General Information:

- City of Coppell maintains over 23.6 miles of fiber optic cable. This project adds 2.2 miles.
- Original PO amount of \$22,866.00
- Change Order # 1 \$70,947.10
- The City of Coppell has an annual contract with NEMA 3 Electric to perform electrical & data/communication services.

Introduction:

SCADA (Supervisory Control and Data Acquisition) is a system for remote monitoring and control of facilities such as water treatment plants, wastewater treatment plants, elevated tanks, pump stations.

FY16/17 included a project for the Utilities Division to remove their SCADA system from a radio system and place it on the City fiber optic network.

Analysis:

The City of Coppell budgeted \$125,000.00 in FY 16/17 for SCADA upgrades/conversion to Fiber Optic cable. NEMA 3 Electric was issued a purchase order in the amount of \$22,866.00 for installation of 2" conduit at the Deforest Lift Station, the Village Parkway Pump Station and the Sandy Lake Lift Station. To complete the removal from radio and the conversion to fiber, it is necessary to install communication panels and electrical work as well as pull fiber optic cable through various facilities. This portion of the project will also bring 3 traffic signals onto the fiber optic network. The proposal includes \$28,349.20 for this work.

Additional work, to also be performed by NEMA 3 Electric, for this project includes the installation of 2" conduit for future fiber from the Deforest Lift Station to the east approximately 2300 LF

(through Lake Park Addition – Deforest Road and Glen Lakes Drive) towards the entrance to the Moore Road Park. This coincides with the Traffic Divisions future project of connecting the Deforest Road Lift Station to the CORE. This future connection will create a looped fiber optic system which will provide redundancy should the fiber optic be damaged. Currently the CORE is served by a single point on the network. The proposal includes \$42,597.90 for this work.

Other aspects of the project, which have been encumbered by other vendors, include purchasing network switchgear, cabinet and battery backup for the Sandy Lake Lift Station, and work to be performed by the SCADA vendor totals \$31,186.90.

This brings the total cost of this project to the budgeted amount of \$125,000.00.

Legal Review:

This item did not require legal review.

Fiscal Impact:

The fiscal impact of this agenda item is \$70,947.10 as budgeted in the Utility Division capital funds.

Recommendation:

The Engineering Department recommends approval of Change Order #1 in the amount of \$70,947.10.