

EXECUTIVE BRIEF ELECTRIC UTILITY MEETING

AGENDA DATE: March 30, 2021

TITLE:

Task Order No. 8 with E.C. Fennell, PA, to complete engineering design for the 6th Ave South Circuit 0603 Storm Hardening

SUMMARY:

Task Order No. 8 authorizes E.C. Fennell, PA, to complete engineering design for the 6th Ave South Circuit 0603 Storm Hardening in the amount not to exceed \$217,920.

BACKGROUND AND JUSTIFICATION:

City previously issued a Request for Qualifications (RFQ 18-303) to provide letters of interest and Professional Qualifications from consulting companies/firms for civil engineering, geotechnical engineering, surveying, architecture, hydrogeological services, energy management and engineering services. E.C. Fennell, PA, was one of three firms selected under the Energy Management category for the Continuing Contracts for Professional Services.

Based on the results of multiple engineering studies carried out by consulting companies in the past as well as results of an in-house engineering evaluation, a comprehensive electric system upgrade plan has been created and was presented by the Electric Utility Department Staff in 2018 and 2019. Staff's plan has been independently affirmed by an independent engineer (Stantec) in February of 2020. The plan was subsequently presented to bond rating agencies and potential investors in support of the City's recent bond sale specific to utility infrastructure improvements.

System Hardening and Reliability Improvement Program (SHRIP), focuses on system wide Electric Utility upgrades and re-configuration that affords maximum reliability, improved efficiency, standardized voltage class across the distribution network and a system that can withstand the effects of high-velocity windstorms.

The System Hardening and Reliability Improvement Program (SHRIP), focuses on system wide Electric Utility upgrades and re-configuration that affords maximum reliability, improved efficiency, standardized voltage class across the distribution network, and yields a system that can support growth and withstand the effects of high-velocity windstorms.

Utilizing circuit performance and outage data, the Electric Utility force ranked each of the City's circuits based on the following; number of customers affected, number of tip/close operations, feeder outage minutes and total customer outages minutes. The results of this exercise provided the information needed to begin to address the poorest performing circuits in an orderly fashion.

The 0603 circuit emanates from the 6th Ave South substation, has already been converted to 26.4kV but requires storm hardening and integration with adjoining circuits for increased system reliability. EC Fennell is proposed to be tasked to provide engineering design for storm hardening for the 0603 circuit. ECF will also complete system modeling of the surrounding four circuits to aid in construction sequencing during their voltage conversion process, in addition to

converting the current radial system into a grid or mesh electrical distribution network for increased system reliability and customer outage reduction. The design team will prepare all drawings, pole bores, framing standards, materials list and construction sequencing as part of this Task Order and is estimated to be completed in 12 months. A boundary map attached to this staff report outlines the service area for the 0603 circuit.

MOTION:

Move to approve/disapprove Task Order No. 8 to EC Fennell PA., to complete engineering design for the 6th Ave South Circuit 0603 Storm Hardening at a cost not to exceed \$217,920.

ATTACHMENT(S):

Fiscal Impact Analysis
 Task Order 8
 Boundaries 26R0603

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2021	2022	2023	2024	2025
Capital Expenditures	\$217,920	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	\$217,920	0	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact: Funds have been identified in account No. 421-6034-531-63.15

Account Number	Account Description	Project Number	FY21 Budget	Current Balance	Agenda Expenditure	Balance
421-6034-531-63.15	Improve Other that Build/Infrastructure	SH2124	\$600,000	\$600,000	-\$217,920	\$382,080