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CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: August 7, 2018

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Contract For Preliminary Design Of El Estero Wastewater Treatment Plant Electrical Distribution Upgrades

RECOMMENDATION:

That Council authorize the Public Works Director to execute a City Professional Services contract with (*firm*) in the amount of \$(*amount*) for preliminary design services of the El Estero Wastewater Treatment Plant Electrical Distribution Upgrades Project, and authorize the Public Works Director to approve expenditures of up to (*amount*) for extra services of (*firm*) that may result from necessary changes in the scope of work.

DISCUSSION:

Background

The El Estero Wastewater Treatment Plant (El Estero) provides wastewater treatment for the City of Santa Barbara and serves a population of approximately 95,000. It was initially constructed in 1952; however, a majority of El Estero's current infrastructure was constructed in 1978.

Over the past several years, capital improvements have been made consistently, including recent, significant system improvements to the headworks, influent pumps, tertiary treatment, and the secondary process (currently under construction). In addition, a conceptual plan was developed to improve the biosolids process (Biosolids Project). On December 9, 2014, Council authorized staff to apply for a \$22 million State Revolving Fund (SRF) loan for the Biosolids Project.

Despite the recent and significant improvements, there is still a substantial amount of work that needs to be done to replace El Estero's aging equipment and upgrade processes. Therefore, on September 20, 2016, Council authorized a contract with Brown and Caldwell (BC) to develop the El Estero Facility Plan (FP), which provides a "road map" for capital improvements needed over the next 25 years. BC also performed a peer review of the Biosolids Project.

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The FP is now complete and identifies over \$95 million in capital improvements over the next 25 years. Although the solids processing structures and equipment identified in the Biosolids Project are aging, and like many of the structures and equipment at El Estero, are past their useful life, the replacement of the electrical power and distribution system was identified as the top priority based on overall risk. Therefore, staff is moving forward with the Electrical Distribution Upgrades Project (Electrical Project) as its top priority.

The City submitted requests for proposals to qualified firms and received three proposals from engineering firms interested in performing preliminary design work for the Electrical Project. Staff interviewed two firms, and XX was recommended to perform this work.

XX will analyze current power requirements and future demands to size the new electrical distribution system properly to improve overall reliability of El Estero's electrical distribution system and provide for future electrical needs. Additionally, XX will:

- Provide design services for a new waste gas flare. The existing flare is undersized and limits the amount of Fats, Oils, and Grease (FOG) the City can currently accept.
- Evaluate improvements to upgrade the cogeneration system and associated electrical components. XX will develop a technical memorandum outlining 1) the necessary improvements to produce enough energy to meet the future demands of El Estero and the desalination plant, and 2) the improvements needed to meet El Estero's future demands and additional energy for peak shaving of electricity at the desalination plant.
- Design improvements to address storm water management at El Estero.
- Develop a preliminary plan to address staffing, storage, and public outreach needs. This work will be performed by XX's subconsultant architectural firm, Kruger Bensen Ziemer Architects, Inc. (KBZ), and will include consolidation of administrative and collection system staff, consolidation and relocation of temporary storage units, and design improvements to El Estero's conference room and breezeway to facilitate outreach to the community in the form of public tours and providing information focused on the "One Water" concept.

BUDGET/FINANCIAL INFORMATION:

A planning-level budget for the Electrical Project is approximately \$20 million. Staff will work with the State Water Resources Control Board on the necessary steps to either modify the existing Biosolids Project application, or withdraw the existing Biosolids Project application and reapply for SRF loan financing for the Electrical Project.

The SRF loan program provides 20-year loans at an interest rate lower than the State General Obligation Bond rate. This low interest rate offers significant savings for wastewater rate payers. If SRF funding is not able to be secured, staff will need to pursue issuance of bonded indebtedness, such as Certificates of Participation.

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SUSTAINABILITY IMPACT:

El Estero has limited capacity for FOG, and construction of these improvements will allow the City to increase its ability to receive FOG. The increase in FOG will allow additional biogas production in El Estero's digesters that can be used as renewable energy for the on-site cogeneration system. On average, the cogeneration system currently provides approximately 70 percent of El Estero's electricity.

At its meeting on July 19, 2018, the Water Commission voted X-X in support of staff's recommendations.

A copy of the contract/agreement is available for public review at the City Clerk's Office.

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SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office