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CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: March 27, 2018

TO: Mayor and Councilmembers

FROM: Engineering Division, Public Works Department

SUBJECT: Contract For Design Of The Tunnel Pump Station Rehabilitation Project

RECOMMENDATION:

That Council authorize the Public Works Director to execute a City Professional Services contract with Kennedy/Jenks Consultants in the amount of \$244,770 for design services of the Tunnel Pump Station Rehabilitation Project, and authorize the Public Works Director to approve expenditures of up to \$24,477 for extra services of Kennedy/Jenks Consultants that may result from necessary changes in the scope of work.

DISCUSSION:

Background

The Tunnel Pump Station and Reservoir are co-located outside City limits on a parcel at the end of Tunnel Road. Both facilities were constructed in 1975. The reservoir provides water service to the Mission Canyon area and conveys water to the City's El Cielito Reservoir. The reservoir also provides water to the pump station, which boosts water pressure for domestic water service and fire protection to the City's water customers living above the reservoir at the top of Mission Canyon, which is known as the Upper Tunnel Pressure Zone (upper zone). The pump station is the only source of domestic water supplies to the upper zone, which is located at the top of the City's water service area.

The Tunnel Pump Station is nearing the end of its useful life. The electrical controls for the pump station are antiquated, and are becoming increasingly difficult to service due to a lack of available replacement parts. Additionally, the pump configuration is inefficient, with a large fire pump which has had minimal operation over the past 20 years, and two smaller pumps that are regularly operated to provide domestic water service to the area.

Project Description

The Tunnel Pump Station Rehabilitation Project (Project) consists of performing an engineering condition assessment of the pump station, including the building, type and size of the pumps, control system, operating strategy, and piping configuration. The reservoir's water circulation will be modeled to evaluate its effect on water age.

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The final design will include updated Supervisory Control and Data Acquisition equipment, any necessary building upgrades, new pumps to provide fire flows that meet current requirements, and an improved piping configuration for both the pump station and reservoir. The design will also provide a control strategy that will best serve the needs of the upper zone, while also maximizing electrical efficiencies.

The Consultant will provide a detailed set of design plans and specifications. These documents will be used to advertise the Project for competitive bidding for the procurement and installation of the needed equipment. While design is expected to be completed by the end of this calendar year, construction will take place in Fiscal Year 2019, when funding for this project has been programmed.

Consultant Selection

Kennedy/Jenks Consultants (KJ) was selected by staff from four firms that responded to a competitive Request for Proposal for the Project. Staff found that KJ's approach to the Project best met the City's needs, and that KJ is also well qualified to perform this type of work.

Staff recommends that Council authorize the Public Works Director to execute a contract with KJ in the amount of \$244,770 for design, and \$24,477 for potential extra services, for a total amount of \$269,247.

Community Outreach

The design phase of the Project will define the work to be performed and develop a Project description. Once the Project is ready for environmental review, bidding and construction, the details for public outreach will be developed. As currently contemplated, the proposed equipment replacement will all be inside the building and will not require significant modifications to the structure itself. Since the building is located outside City limits, the Project may require review and permitting by the County of Santa Barbara.

Funding

The source of funding for this Project is the Water Capital Fund using the funds earmarked for Pump Station Rehabilitation.

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The following summarizes all estimated total Project costs:

ESTIMATED TOTAL PROJECT COST

Design (by Contract)	\$244,770
Contract Change Order Authority	24,477
Other Design Costs - City Engineering staff	54,000
Subtotal	\$323,247
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Estimated Construction Contract w/Change Order Allowance	\$1,100,000
Estimated Construction Management/Inspection (by Contract or City)	70,000
Estimated Other Construction Costs (testing, etc.)	15,000
Subtotal	\$1,185,000
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TOTAL PROJECT COST	\$1,508,247

There are sufficient funds in the Water Capital Fund to cover these costs.

SUSTAINABILITY IMPACT:

As part of the design, better efficiencies related to the consumption of electricity provided by Southern California Edison will be examined.

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

PREPARED BY: Linda Sumansky, Principal Engineer/TE/tb

SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office