



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** July 12, 2016

**TO:** Mayor and Councilmembers

**FROM:** Water Resources Division, Public Works Department

**SUBJECT:** Purchase Order For Modifications To The Gibraltar Reservoir Water Conveyance System

### **RECOMMENDATION:**

That Council authorize the General Services Manager to issue a purchase order in the amount of \$62,553 to Tierra Contracting, Inc., for repairs to the Gibraltar Reservoir water conveyance system, and approve expenditures up to \$9,383 for extra services that may result from necessary changes in the scope of work.

### **DISCUSSION:**

#### Background

The City's water conveyance system from Gibraltar Reservoir to Lauro Reservoir consists of water flowing from Gibraltar Reservoir through the 3.7-mile long Mission Tunnel and into an 80-foot flume over Mission Creek. Water then flows into a 36-inch concrete pipe, and on through a structure referred to as the "Small Tunnel". From the Small Tunnel, water is conveyed via gravity into a pipeline near Tunnel Trail, and on through the City's Hydroelectric Plant (Hydro Plant) at Lauro Reservoir.

The Small Tunnel was constructed around the same time as Mission Tunnel (1906-1911). When the Hydro Plant was originally completed in 1985, the Small Tunnel was sealed at the southern end and allowed to fill with water (a pressurized condition) for the operation of the Hydro Plant. The Hydro Plant was idled in 1998, when the costs associated with the Hydro Plant's operation, maintenance, and regulatory compliance exceeded the revenues from power sales.

On January 28, 2013, Council authorized a professional services contract with SOAR Technologies, Inc., to re-commission the Hydro Plant and operate and maintain it for one year. The Hydro Plant was re-commissioned, and operations resumed in 2015. However, the Small Tunnel was found to be compromised because of root intrusion.

This, plus a lack of water in Gibraltar Reservoir because of the drought, have precluded the continued operation of the Hydro Plant to the present time.

### Project Description

The proposed project will make the needed repairs to the Small Tunnel, which will enable the Hydro Plant to be placed back into service. The Small Tunnel is approximately 300 feet long, 6 feet wide, and 8 feet high at the crown. The needed maintenance includes changing operations at the Hydro Plant to allow the Small Tunnel to be operated under gravity flows, rather than under a pressurized condition, which will prolong the Small Tunnel's useful life.

To accomplish the necessary work, the water level control system at Mission Tunnel will need to be relocated to the Small Tunnel. This will require making physical modifications to the Small Tunnel's southern end, installing water level controls, upgrading communication equipment, constructing an emergency overflow system with erosion control, and controlling nuisance vegetation. Once this work is complete, the Hydro Plant can be returned to partial service until Gibraltar Reservoir fills, at which time the Hydro Plant will be operated to its full capacity.

### Contractor Selection

City staff solicited bids from three local contractors under the maintenance and repair purchase process for contracts anticipated to be less than \$75,000. On April 29, 2016, one bid was received from Tierra Contracting, Inc., (Tierra) in the amount of \$84,600. Staff met with Tierra to perform value engineering for the project. Certain modifications to the project work were made, without compromising the purpose of the project. As a result, staff revised the project design, and Tierra revised their bid amount to \$62,553.

Staff recommends that Council authorize the General Services Manager to issue a purchase order in the amount of \$62,553 to Tierra for the Small Tunnel Modifications; and approve expenditures up to \$9,383 for extra services that may result from necessary changes in the scope of work. Contract inspection and management will be performed by Water Resources Division staff during the 20 working-day contract period.

### Funding

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

### Sustainability Impacts

Repairing the Small Tunnel will enable the Hydro Plant to be returned into service producing clean electric energy.

**PREPARED BY:** Catherine Taylor, Water System Manager/RLR/mh

**SUBMITTED BY:** Rebecca J. Bjork, Public Works Director

**APPROVED BY:** City Administrator's Office