



Agenda Item No. \_\_\_\_\_

File Code No. \_\_\_\_\_

# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

## ATTACHMENT 7

**DRAFT**

**AGENDA DATE:** April 22, 2014

**TO:** Mayor and Councilmembers

**FROM:** Engineering Division, Public Works Department

**SUBJECT:** Contract For Construction For Tertiary Filtration Plant Replacement Project

**RECOMMENDATION:** That Council:

- A. Appropriate \$2,738,201 from Water Fund reserves to the Water Capital Fund to construct the Tertiary Filtration Plant Replacement Project;
- B. Award a contract with GSE Construction Co., Inc, in their low bid amount of \$8,010,600 for construction of the Tertiary Filtration Plant Replacement Project, Bid No. 3688A;
- C. Authorize the Public Works Director to execute the contract and approve expenditures up to \$831,060 to cover any cost increases that may result from contract change orders for extra work and differences between estimated bid quantities and actual quantities measured for payment;
- D. Authorize the Public Works Director to execute a contract with MNS Engineers Inc., in the amount of \$706,154 for construction management services, and approve expenditures of up to \$70,615.40 for extra services of MNS Engineers Inc., that may result from necessary changes in the scope of work;
- E. Authorize the Public Works Director to execute a contract with CDM Smith in the amount of \$491,019 for construction support services, and approve expenditures of up to \$49,101 for extra services of CDM Smith that may result from necessary changes in the scope of work; and
- F. Authorize the Public Works Director to execute a contract with Dudek in the amount of \$60,304.40 for environmental monitoring and support services, and approve expenditures of up to \$6,031 for extra services of Dudek that may result from necessary changes in the scope of work.

### EXECUTIVE SUMMARY:

Four bids were received for the Tertiary Filtration Plant Replacement Project (Project); the lowest bidder was GSE Constructors (GSE). Staff recommends that Council award a contract with GSE for construction of the Project. Staff recommends that Council authorize the Public Works Director to enter into contacts with CDM Smith (CDM), MNS Engineers (MNS) and Dudek for professional services during construction; and

appropriate \$2,738,201 from the Water Fund reserves to the Water Capital Fund to construct the Project.

## **DISCUSSION:**

### **BACKGROUND**

The City's Tertiary Filtration Plant was constructed in 1989 at the El Estero Wastewater Treatment Plant. It was one of the first recycled water facilities in California, and was designed to produce approximately 4 million gallons of recycled water per day, thereby reducing the need for potable water. Over the past 20 years, the Tertiary Filtration Plant has been subject to corrosion and is in need of significant refurbishment and optimization to allow for the effective production of recycled water. In addition, the existing filter complex has operational challenges, and operation and maintenance safety concerns that need to be addressed.

On January 24, 2012, Council awarded a contract with CDM, for engineering assessment and preliminary design services for the Project. CDM, working with staff, evaluated four filtration technologies, along with rehabilitating the existing filter complex. The Microfiltration/Ultrafiltration (MF/UF) alternative was the recommended alternative because it will provide reliable recycled water quality for users and address the various operation and maintenance issues that currently exist with the tertiary filter complex.

On February 26, 2013, Council awarded a contract with CDM Smith for final design services for the Project. Final design was completed.

The project was initially bid in November 2013 with bids due in January 2014. However, the City received timely bid protests from the second and third lowest bidders. Through analyzing the issues asserted by the protesting contractors, it was apparent that the City's specifications did not have the appropriate statements required by the state's Public Contract Code for sole sourcing City standardized equipment. Therefore, on March 4, 2014, per city staff's recommendation Council rejected the bids for construction and authorized re-bidding the project. Revisions were made to the project specifications and the project was promptly re-bid.

### **PROJECT DESCRIPTION**

The work generally consists of demolishing the existing Tertiary Filter Plant, and constructing the new MF/UF Filtration Complex, including ancillary facilities for cleaning the membranes and associated chemical systems. In the course of design, additional work was found to be necessary which included rehabilitation of the recycled water storage reservoir; replacement of the chlorine contact basin pumps, motors and variable frequency drives; reconfiguring piping and existing chemical storage sites; and improvements to the storm water drainage system.

As a means to accelerate the construction schedule, construction sequencing requirements were revised, which reduced the overall construction duration by

approximately 5 weeks. In addition, an incentive for early completion was added as a contract provision, which compensates the contractor \$1,500 per working day for each day the project is substantially complete and the City is able to produce recycled water ahead of schedule, with a maximum total incentive of \$30,000. If GSE is able to accelerate the work and receive the maximum total incentive, it would reduce overall construction by an additional 4 weeks and the project would finish ahead of the original bid schedule. Although the City would pay up to \$30,000 for schedule acceleration, the cost between purchasing water and producing recycled water is approximately \$3,300 per day, thereby reducing the overall cost difference by \$62,400.

## CONTRACT BIDS

A total of four (4) bids were received for the subject work, ranging as follows:

	<b>BIDDER</b>	<b>BID AMOUNT</b>
1.	<b>GSE Construction, Livermore, CA</b>	<b>\$8,010,600</b>
2.	Schock Contracting Corp, Santa Barbara, CA	\$8,490,000
3.	Stanek Constructors, Inc., Escondido, CA	\$8,802,000*
4.	Lash Construction, Santa Barbara, CA	\$9,496,000

\*Corrected Bid Amount

The low bid of \$8,010,600, submitted by GSE Construction (GSE) is an acceptable bid that is responsive to and meets the requirements of the bid specifications. Staff recommends that Council award and authorize the Public Works Director to execute a contract with [Cushman-GSE](#) in the amount of \$8,010,600.

The change order funding recommendation of \$801,060, or 10%, is typical for this type of work and size of project. In addition, \$30,000 will be added for the early completion incentive provision, bringing the total change order funding recommendation to \$831,060.

## CONSTRUCTION PHASE CONTRACT SERVICES

Staff recommends that Council authorize the Public Works Director to execute a contract with MNS Engineers Inc. (MNS) in the amount of \$706,154 for construction management services, and approve expenditures of up to \$70,615.40 for extra services that may result from necessary changes in the scope of work. The extra services funding recommendation of 10% is typical for this scope of work. MNS was selected by a Request for Proposal process. MNS is on the City's Prequalified Engineering Services list and is experienced in this type of work.

Staff recommends that Council authorize the Public Works Director to execute a contract with CDM in the amount of \$491,019 for design support services during construction, and approve expenditures of up to \$49,101 for extra services that may result from necessary changes in the scope of work. The extra services funding

recommendation of 10% is typical for this scope of work. CDM designed the Project and is experienced in this type of work.

Staff recommends that Council authorize the Public Works Director to execute a contract with Dudek in the amount of \$60,304.40 for environmental monitoring and support services, and approve expenditures of up to \$6,031 for extra services that may result from necessary changes in the scope of work. The extra services funding recommendation of 10% is typical for this scope of work. Dudek was selected by a Request for Proposal process to prepare environmental studies for the Project and is experienced in this type of work.

## FUNDING

The following summarizes the expenditures recommended in this report:

### CONSTRUCTION CONTRACT FUNDING SUMMARY

	Basic Contract	Change Funds	Total
GSE	\$8,010,600	\$831,060	\$8,841,660
MNS	\$706,154	\$70,615.40	\$776,769.40
CDM	\$491,019	\$49,101	\$540,120
Dudek	\$60,304.40	\$6,031	\$66,335.40
<b>TOTAL RECOMMENDED AUTHORIZATION</b>			<b>\$10,666,424.80</b>

The following summarizes all Project design costs, construction contract funding, and other Project costs:

### ESTIMATED TOTAL PROJECT COST

*\*Cents have been rounded to the nearest dollar in this table.*

Assessment and Preliminary Design (by Contract)	\$494,755
<b>Subtotal</b>	<b>\$494,755</b>
Final Design (by Contract)	\$816,646
Environmental Studies (by Contract)	\$11,700
City Staff Costs (Project Management, Survey, Environmental)	\$99,500
<b>Subtotal</b>	<b>\$927,846</b>
Construction Contract	\$8,010,600
Construction Change Order Allowance	\$831,060
Construction Management/Inspection (by Contract)	\$776,769
Construction Support Services (by Contract)	\$540,120
<b>Subtotal</b>	<b>\$10,158,549*</b>

Environmental Monitoring and Support Services	\$66,335
Other Construction Costs (permits, etc.)	\$10,256
Construction Management/Inspection (by City Staff)	\$153,061
<b>Subtotal</b>	<b>\$229,652*</b>
<b>TOTAL PROJECT COST</b>	<b>\$11,410,802*</b>

This project is funded by the Water Capital Fund, with portions funded by the Wastewater Capital Fund; however \$7,650,000 was anticipated and budgeted for construction costs in the Water Fund. Staff recommends that an additional \$2,738,201 budget expense be appropriated from Water Fund reserves to construct the Project. There are adequate reserves to cover this expense.

**SUSTAINABILITY IMPACT:**

Recycled water is an important part of our water supply that helps sustain our current water supplies and avoid the need to develop new ones. The new Tertiary Filtration Complex was designed to produce up to 3 million gallons of recycled water per day and should be producing recycled water in Summer 2015.

At their meeting on April 14, 2014, the Board of Water Commissioners voted X-~~X0~~-~~X0~~ to concur with staff's recommendation to appropriate money from the Water Fund reserves and construct the project.

**PREPARED BY:** Lisa Arroyo, Supervising Civil Engineer/mh

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

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