



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** March 13, 2012

**TO:** Mayor and Councilmembers

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

**SUBJECT:** Increase In Change Order Authority For Headworks Screening Replacement Project At El Estero Wastewater Treatment Plant

**RECOMMENDATION:** That Council:

- A. Authorize an increase in the Public Works Director's Change Order Authority to approve expenditures for extra work for the Headworks Screening Replacement Project at El Estero Wastewater Treatment Plant, Contract No. 23,881, in the amount of \$223,440, for a total contract expenditure authority of \$4,524,440;
- B. Authorize extra services amount with Carollo Engineering for construction support services for the Headworks Screening Replacement Project at El Estero Wastewater Treatment Plant, Contract No. 23,882, in the amount of \$4,192, for a total contract expenditure authority of \$224,192; and
- C. Authorize an increase in the extra services amount with Brown & Caldwell for design and construction support services for the Influent Pump Replacement Project, Contract No. 23,247, in the amount of \$40,522, for a total contract expenditure authority of \$380,394.

### **DISCUSSION:**

#### **BACKGROUND**

Staff has identified an opportunity to avoid an estimated \$1.3 million in bypass pumping costs for the construction of the Influent Pump Replacement Project (IPS Project) by doing additional work as part of the already awarded Headworks Screening Replacement Project (Headworks Project).

Two major projects, Headworks and IPS, are currently underway for the El Estero Wastewater Treatment Plant (El Estero). The Headworks Project, currently in construction, will replace the existing screening system, whereas the IPS Project, currently in final design, will replace the four influent pumps that hydraulically convey screened wastewater approximately 70 feet in elevation from the headworks screening facility to the first of El Estero's treatment tanks.

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In reviewing the IPS Project's 90 percent construction cost estimate, staff noticed that approximately \$1.3 million would be spent in sewage bypass to facilitate installation of the new pumps. However, in late spring the Headworks Project contractor, Stanek, will be required to bypass pump sewage flows around both the headworks screening facility and IPS to facilitate installation of the new sluice gates. The installation of the IPS infrastructure, critical to the IPS bypass pumping (four suction valves, four discharge valves, four inlet suction hoods, and other minor work) can be installed during the headworks' planned bypass pumping. This will allow the future IPS contractor to install the four new pumps without any significant shutdowns, eliminate the need for bypass pumping as part of the IPS construction work, and reduce the IPS Project cost by an estimated \$1.3 million.

#### CURRENT STATUS

Currently, the Headworks Project is in the submittal and equipment procurement phase. Stanek is scheduled to start major construction in April 2012, and expected to substantially complete this project well ahead of schedule.

As a cost savings measure, staff recommends increasing Stanek's contract by \$223,440, so that the IPS infrastructure critical to the bypass pumping can be installed as part of the headworks planned bypass pumping.

In addition, staff recommends increasing the current Carollo Engineering (Carollo) contract by \$4,192. Carollo was the Headworks Project design engineer and is currently providing construction support services for the Headworks Project. The contract increase is to cover the out-of-scope work necessary for coordination with the IPS Project design engineer for the installation of the IPS infrastructure work added to the Headworks Project, cursory review of the associated shop drawing submittals, and incorporation of the affected work into the Headworks Project record drawing set.

Staff also recommends increasing the current Brown & Caldwell (B&C) design services contract for the IPS Project by \$40,522 to cover the out-of-scope work necessary to revise the IPS drawings and specifications, evaluate the reuse of two existing pump motors, provide odor control in the headworks' room, coordinate the motor control center, which will be installed as part of the Headworks Project, and provide additional project management support. The original extra services amount of \$25,500 has been reduced by \$16,519 for preparation of the headworks' Change Order package and to provide construction phase engineering support for the installation of the IPS infrastructure work. Staff recommends maintaining the remaining \$8,981 of original extra services to address any issues that may arise in the original design work.

**BUDGET/FINANCIAL INFORMATION:**

FUNDING

The following summarizes the expenditures recommended in this report:

**HEADWORKS CONSTRUCTION CONTRACT FUNDING SUMMARY**

	<b>Base Contract</b>	<b>Change Order</b>	<b>Total</b>
Initial Contract Amount (Stanek)	\$3,910,000	\$391,000	<b>\$4,301,000</b>
Proposed Increase (non-participating SRF work)	\$0	\$223,440	<b>\$223,440</b>
<b>Totals</b>	<b>\$3,910,000</b>	<b>\$614,440</b>	<b>\$4,524,440</b>

**HEADWORKS CONSTRUCTION SUPPORT SERVICES  
 CONTRACT FUNDING SUMMARY**

	<b>Base Contract</b>	<b>Extra Services</b>	<b>Total</b>
Initial Contract Amount (Carollo)	\$200,000	\$20,000	<b>\$220,000</b>
Proposed Increase (non-participating SRF work)	\$0	\$4,192	<b>\$4,192</b>
<b>Total</b>	<b>\$200,000</b>	<b>\$24,192</b>	<b>\$224,192</b>

**IPS DESIGN SERVICES CONTRACT FUNDING SUMMARY**

	<b>Base Contract</b>	<b>Extra Services</b>	<b>Total</b>
Initial Contract Amount (B&C)	\$254,119	\$25,500	<b>\$279,619</b>
Previous Increase-March 15, 2011	\$0	\$60,253	<b>\$60,253</b>
Proposed Increase	\$0	\$40,522	<b>\$40,522</b>
<b>Total</b>	<b>\$254,119</b>	<b>\$126,275</b>	<b>\$380,394</b>

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

**HEADWORKS ESTIMATED TOTAL PROJECT COST**

<b>Design</b>	<b>Subtotal</b>	<b>\$561,494</b>
Construction Contract		\$3,910,000
Construction Change Order Allowance		\$614,440
Construction Management/Inspection (by City Staff)		\$91,157
Construction Management/Inspection (by Contract)		\$418,265
Design Support Services During Construction (by Contract)		\$224,192
<b>Construction</b>	<b>Subtotal</b>	<b>\$5,258,054</b>
	<b><i>Project Total</i></b>	<b>\$5,819,548</b>

There are sufficient appropriated funds in the Wastewater Fund to cover all remaining project costs.

**PREPARED BY:** Joshua Haggmark, Principal Civil Engineer/LA/sk

**SUBMITTED BY:** Christine F. Andersen, Public Works Director

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