



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: John Stufflebean

SUBJECT: SEE BELOW

DATE: 05-22-06

Approved

Date

5/30/06

SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT FOR THE SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT, FY 2005/2006 CAPITAL IMPROVEMENT PROGRAM, RELIABILITY IMPROVEMENT FOR SWITCHGEAR M3/M4 & S2/S2A PROJECT

RECOMMENDATION

Report on bids and award of contract for Part 1; and rejection of bids for Part 2 of the design-build project entitled, "San Jose/Santa Clara Water Pollution Control Plant, Fiscal Year 2005-2006 Capital Improvement Program, Reliability Improvement for Switchgear S2/S2A & M3/M4 Project," to the sole bidder, Rosendin Electric, Inc., in the amount of \$609,400; and approval of a budget contingency in the amount of \$60,000.

OUTCOME

The contract will provide for the installation of current-limiting reactors for M3/M4 that will improve the Plant's electrical reliability as described for Part 1, and will reject the bid for Part 2 relevant to S2/S2A for further consideration.

BACKGROUND

In October 2004, YEI Engineers completed a study of the electrical distribution system of the San Jose/Santa Clara Water Pollution Control Plant. Among the findings was the fact that Switchgear M3, M4, and S2 have inadequate short-circuit ratings. In the case of a short-circuit event, these switchgears could be damaged and temporarily diminish the Plant's ability to distribute power and treat wastewater. The recommended solution was the installation of current-limiting reactors (Part 1) and the overhaul of S2 (Part 2).

Switchgears at the Plant are the industrial; electrical-distribution centers that allow the facility to distribute power throughout the treatment process from both internally generated and purchased electricity.

In order to expedite project delivery, staff recommends that a design-build method would be the most effective means to complete this project. The design-build contractor is responsible for preparation of detailed design plans and specifications in addition to constructing the improvements. The Department conducted a pre-qualification process to identify design-build firms that met the qualifications necessary to perform the work. From the pre-qualification process, two firms were identified as eligible to bid, however, only one pre-qualified firm submitted a bid.

ANALYSIS

The bid was opened on April 6, 2006 with the following result:

<u>Contractor</u>	<u>Bid Amount</u>	<u>Variance Amount</u>	<u>Percent Over (Under)</u>
<i>Part 1</i>			
Engineer's Estimate	\$620,000		
Rosendin Electric, Inc.	\$609,400	\$(10,600)	(2)
<i>Part 2</i>			
Rosendin Electric, Inc.	\$1,043,100	\$443,100	74
Engineer's Estimate	\$600,000		

Part 1 of the sole bid submitted by Rosendin Electric, Inc., for the amount of \$609,400 is 2% under than the engineer's estimate. Staff considers this reasonable for the work involved. Rosendin Electric, Inc. successfully completed the MCC G1, G2 Replacement Project in 2005 as well as various CIP construction projects at the plant in the past.

Part 2 is 74% above the engineer's estimate because the contractor priced the replacement of a new switchgear as opposed to solely the design and upgrade of S2. This was outside the scope of the project and exceeds currently available funds. Staff is reconsidering all options for Part 2, including both re-packaging the project with other future projects or implementing internal City personnel towards accomplishing the project.

A contingency of \$60,000 is recommended due to the lack of record drawings, unknown conditions related to the underground work, and a restrictive shutdown schedule. The funds budgeted for this project are sufficient to provide for the recommended contingency.

ALTERNATIVES

Replacement of Switch Gears

This was the original recommendation from the initial study in 2004 for the items within this project. This recommendation, however, was projected at no less than \$5 million, which under current revenue constraints is not possible without deferring other critical projects.

Installation of Current Limitors

This option was considered, but deemed not desirable due to issues with protective relay coordination. By installing only current limitors, the electrical distribution system would be prone to losing power in a minor short-circuit event. This is due to the speed of current limitors and their reaction to even minor short-circuit events, which create a greater electrical response than desired. Moreover, this option is more costly than a complete rehabilitation of the switchgear.

Installation of Current Clippers

This option was considered, but was found to have the same problems as installing current limitors.

Installation of Current-Limiting Reactors

This option was deemed the most desirable due to the fact that it was the most cost-effective; and delivered the desired outcome by limiting short-circuit current and reducing the risk of damage to the system and possible interruption of the treatment process.

PUBLIC OUTREACH

Notice inviting qualified firms to submit bids was published by the City Clerk's Office in the *San José Post Record*, and by the City's Project Manager on the ESD Internet website and General Service's BidLine. The bid packages for all of the Environmental Services Department's construction projects are routinely provided to a standard list of contractor organizations and builder's exchanges.

COORDINATION

This project and memorandum have been coordinated with the Departments of Planning, Building and Code Enforcement, Public Works, Equality Assurance, Risk Management, the City Attorney's Office and the City Manager's Budget Office and is scheduled to be heard at the June 8, 2006 Treatment Plant Advisory Committee meeting.

COST IMPLICATIONS

- 1. AMOUNT OF RECOMMENDATION: \$669,400
- 2. COST OF PROJECT
 - Construction \$609,400
 - Contingency \$60,000
 - TOTAL PROJECT COSTS \$669,400**
 - Prior Year Expenditures \$0
 - REMAINING PROJECT COSTS \$669,400**

- 3. SOURCE OF FUNDING: 512 – San Jose/Santa Clara Treatment Plant Capital Fund.

Existing funds are available for this project. No additional appropriation action is required.

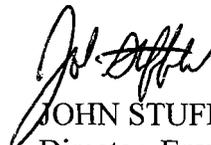
- 4. FISCAL IMPACT: This project is consistent with the Council approved Budget Strategy Economic Recovery section in that it will help spur construction spending in our local economy and protects a critical infrastructure component.

BUDGET REFERENCE

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Amt. for Contract	2005-2006 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
512	5690	Plant Infrastructure Improvements	042853	\$8,418,000	\$669,400	V-240	N/A

CEQA

Exempt, PP04-03-079


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For questions, please contact Thai Khuu, Associate Electrical Engineer, at (408) 277-5395.