

Orange County Sanitation District



Headquarters
18480 Bandilier Circle
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report Details (With Text)

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Title: BAY BRIDGE PUMP STATION VALVE REPLACEMENT, PROJECT NO. FRC-0002
Sponsors: Kathy Millea
Indexes:
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Attachments: 1. Agenda Report, 2. Presentation - Bay Bridge Valve Replacement

Date	Ver.	Action By	Action	Result
8/25/2021	1	STEERING COMMITTEE		

FROM: James D. Herberg, General Manager
Originator: Kathy Millea, Director of Engineering

SUBJECT:

BAY BRIDGE PUMP STATION VALVE REPLACEMENT, PROJECT NO. FRC-0002

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a contingency increase of \$269,100 (45%) to the service contract with Innovative Construction Solutions for Bay Bridge Pump Station Valve Replacement, Project No. FRC-0002, Specification No. S-2020-1192BD, for a total contingency of \$328,900 (55%).

BACKGROUND

The Orange County Sanitation District (OC San) owns and operates pump stations and a force main network along Pacific Coast Highway in Newport Beach. The Bay Bridge Pump Station, Rocky Point Pump Station, and the Lido Pump Station all pump into, and pressurize, this two-pipe force main system. Each pump station has an isolation valve to each force main pipe to allow separation of the internal pump station systems from the other pump stations. This is necessary to be able to isolate the suction and discharge headers and common flow elements so they may be maintained or repaired. These pump station isolation valves are also necessary to install temporary bypass pumping systems around any individual pump station.

Within each pump station, each pump has its own suction and discharge isolation valves so individual pumps and check valves can be maintained or repaired while the rest of the station is in service. When a pump isolation valve fails, its associated pump can no longer be taken out of service for repair with the overall pump station in service.

The Bay Bridge Pump Station was originally constructed in 1965 and is near the end of its useful life. Bay Bridge Pump Station Replacement, Project No. 5-67, is in design and is scheduled to replace the pump station by 2027.

The pump isolation valves at the Bay Bridge Pump Station are in urgent need of replacement. The replacement on these pump isolation valves cannot wait until the new pump station is completed. In November 2020, Board awarded a \$598,000 Contract to Innovative Construction Solutions for Bay Bridge Pump Station Valve Replacement, Project No. FRC-0002, to replace these valves. The work includes bypass pumping to take the pump station out of service to replace the individual pump isolation valves.

RELEVANT STANDARDS

- Ensure the public's money is wisely spent
- Maintain a proactive asset management program
- Achieve less than 2.1 sewer spills per 100 miles

PROBLEM

Replacement of the individual pump suction and discharge isolation valves depends on functioning pump station isolation valves to the force mains which cross under Newport Bay. When the contractor attempted to start the work, the force main isolation valves would not prevent back flow from the force mains to the pump station caused by the bypass pumps. The contractor was not able to begin the contract work within the pump station and was directed to demobilize until a solution could be found. On July 28, the General Manager declared an emergency to quickly replace the force main isolation valves so that this contract work can be restarted in the fall to be completed before the coming wet weather season.

Although the original contract scope of work has not been significantly changed, the contractor has incurred compensable costs to mobilize and demobilize. The mobilization and demobilization costs are much more significant than a typical construction contract and include significant traffic control measures (extended lane closure on Pacific Coast Highway), bypass pumping setup, and staging to perform the mechanical work. These costs will exceed the Board-authorized 10 percent contingency.

Necessary maintenance work on the individual pumps and flow control devices in the pump station is being deferred until these isolation valves are replaced.

PROPOSED SOLUTION

Increase the contingency to cover the costs for demobilization and remobilization, and to address other problems that may arise during the pump station valve replacement work.

TIMING CONCERNS

Without the additional contingency, the contractor will not be able to complete the valve replacements before this coming wet weather season. Without the new valves to isolate the pumps for necessary maintenance, there is a significant risk that the pump station might not be able to handle peak storm flows.

RAMIFICATIONS OF NOT TAKING ACTION

Without the additional contingency, staff would need to cancel the remaining work to cover the costs the contractor has already incurred. A new contract would have to be solicited, and that new contract would not be available in time for the wet season. Without the new valves, OC San staff would be unable to isolate and service the pumps if they become inoperable. As of mid-August, two pumps are leaking badly, but cannot be serviced because the isolation valves are not functional.

PRIOR COMMITTEE/BOARD ACTIONS

November 2020 - Awarded a construction contract to Innovative Construction Solutions for Bay Bridge Pump Station Valve Replacement, Project No. FRC-0002, for a total amount not to exceed \$598,000, and approved a contingency of \$59,800 (10%).

ADDITIONAL INFORMATION

N/A

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations Section 15301 because the project involves repairs, replacement, and or minor alteration of existing facilities involving no expansion of use or capacity. A Notice of Exemption was filed with the OC Clerk-Recorder on November 24, 2020.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This recommendation would be funded under the Repairs and Maintenance line item for the Operations and Maintenance Department (Budget Update Fiscal Year 2021-2022, Page 45), and the available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
11/04/2020	\$598,000	\$ 59,800 (10%)
08/25/2021		\$269,100 (45%)

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

- Presentation

RD:dm:gc