



Orange County Sanitation District

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OPERATIONS COMMITTEE

Agenda Report

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Agenda Date: 3/4/2020

Agenda Item No: 5.

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

SUBJECT:

OCEAN OUTFALL CONDITION ASSESSMENT AND SCOPING STUDY, PROJECT NO. PS18-09

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Services Agreement with Carollo Engineers, Inc. to provide engineering services for the Ocean Outfall Condition Assessment and Scoping Study, Project No. PS18-09, for an amount not to exceed \$2,744,000; and
- B. Approve a contingency of \$274,400 (10%).

BACKGROUND

Secondary effluent from both Plant Nos. 1 and 2 is either reclaimed through the Groundwater Replenish System or pumped five miles out to the ocean through a 120-inch diameter undersea ocean outfall pipeline from Plant No. 2. This ocean outfall has been in operation for nearly fifty years since its commissioning in 1971, and is vital to the mission of the Orange County Sanitation District (Sanitation District.)

Recently, an Integrity Assessment Report for the ocean outfall was completed in order to meet requirements of the lease agreement with the California State Lands Commission. The report was based on historical construction and inspection records as well as other documentation collected during prior inspections. This report included recommendations for future repairs, monitoring, and studies. The report concluded that while the overall structural integrity of the outfall appears to be suitable for continued use, additional inspection of the metallic components and the ballast is needed to determine the remaining useful life of the outfall.

RELEVANT STANDARDS

- 24/7/365 treatment plant reliability
- Comply with environmental permit requirements
- Maintain a proactive asset management program

PROBLEM

A detailed assessment of the ocean outfall's condition is needed to ensure that the outfall remains a viable and reliable asset. However, performing an assessment of the outfall is extremely difficult and expensive due to its location on the bottom of the ocean floor. Assessments to date have been primarily limited to external visual inspections.

PROPOSED SOLUTION

Perform a detailed inspection of the outfall including interior scanning and concrete testing; exterior testing of metal and concrete components, port cleaning and clearing, 3-dimensional scanning of the outfall's exterior including ballast, and subsurface profiling in order to make a comprehensive determination of its current condition. Utilize the detailed condition information collected to develop potential rehabilitation projects and prepare an implementation plan to extend the utility of this asset.

TIMING CONCERNS

The outfall is nearing 50 years old, which was the initial design life of the outfall. Detailed inspection/analysis is needed to develop a plan to extend the outfall's useful life and prevent unplanned failure of the outfall.

RAMIFICATIONS OF NOT TAKING ACTION

Outfall condition assessment would continue utilizing exterior visual inspection, which will not completely quantify the deterioration and remaining useful life of the metal components, and to establish a baseline survey of the ballast.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATIONConsultant Selection:

The Sanitation District requested and advertised for proposals for Ocean Outfall Condition Assessment and Scoping Study, Project No. PS18-09, on August 27, 2019. The following evaluation criterion were described in the Request for Proposals (RFP) and used to determine the most qualified Consultant.

CRITERION	WEIGHT
Project Understanding and Approach	40%
Related Project Experience	30%
Project Team and Staff Qualifications	30%

Two proposals were received on October 7, 2019 and evaluated in accordance with the evaluation process set forth in the Sanitation District's Purchasing Ordinance by a pre-selected Evaluation Team

consisting of the following Sanitation District staff: Senior Engineer (Project Manager), Senior Engineer (Project Engineer), Engineering Supervisor, Senior Scientist, and Engineer.

The Evaluation Team also included one non-voting representative from the Contracts Administration Division.

The Evaluation Team scored the proposals based on the established criteria as summarized in the table below.

	Firm	Approach (Max 40)	Related Experience (Max 30)	Team (Max 30)	Total Score (Max 100)
1	Carollo Engineers, Inc.	32	26	25	83
2	Black & Veatch	31	25	25	81

Based on this scoring, both Consultants were shortlisted for interviews that were held on October 29, 2019. Following the interviews, each member of the Evaluation Team scored the Consultants based on both the proposals and interviews using the evaluation criterion and weighting described above. Based on the scoring shown below, Carollo Engineers, Inc. was selected as the most qualified Consultant.

	Firm	Approach (Max 40)	Related Experience (Max 30)	Team (Max 30)	Total Score (Max 100)
1	Carollo Engineers, Inc.	37	26	25	88
2	Black & Veatch	34	24	25	83

The selected firm presented a clear understanding of the project's goals, identification of key risk and mitigation methods, and direct experience with the Sanitation District's ocean outfall. The proposed team's experience, qualifications, and staff utilization best match the Sanitation District's needs for this project

Review of Fee Proposal and Negotiations:

Proposals were accompanied by sealed fee proposals. In accordance with Sanitation District's Purchasing Ordinance, the fee proposal of only the highest-ranked firm was opened after approval by the Director of Engineering of the Evaluation Committee's recommendation.

Meetings were held with Carollo Engineers, Inc. to review the required project elements, clarify components of the Scope of Work, discuss any assumptions made for the estimated level of effort, and ensure a thorough understanding of the proposed approach to meet the goals and objectives for the project. These negotiations resulted in modifications to the level of effort for various project tasks and modified the original scope of work to include more detailed modelling, removal of interior sampling, and changes to some testing elements.

The negotiated hours and price are appropriate for the effort required to perform the work requested.

	Total Hours	Total Fee
Original Fee Proposal	8,302	\$3,139,295
Negotiated Fee Proposal	8,042	\$2,744,000

The Consultant's fringe and overhead costs, which factor into the billing rate, have been substantiated. The contract profit is 9.05%, which is based on an established formula included in the Sanitation District's standard design agreements.

Based on the above, staff has determined that the final negotiated fee is fair and reasonable for the level of effort required for this project and recommends award of the Professional Services Agreement to Carollo Engineers, Inc.

CEQA

The project is exempt from CEQA under the statutory exemptions set forth in CEQA Guidelines Section 15262 because it is a feasibility or planning study for possible future action which the Board has not approved or funded, does not require preparation of an Environmental Impact Report or negative declaration, but does require consideration of environmental factors. A Notice of Exemption will be filed with the OC Clerk-Recorder after the Sanitation District's Board of Directors approval of the Professional Services Agreement.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted. (FY2019-20 Update, Appendix A, Page A-9).

ATTACHMENT

The following attachment(s) may be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Professional Service Agreement

JF:sa:dm:sa