



**Board Operations and Engineering Committee
September 24, 2020**

SUBJECT:

Approve and Authorize Amendments with Black & Veatch (\$581,695) and Parsons (\$638,300) for Support Services During Construction of the Perris II Desalter and Additional Appropriation in the amount of \$7,873,400

BACKGROUND:

The Perris II Desalter expands use of local groundwater to meet the increasing demands within Eastern Municipal Water District's (EMWD) service area and enhances salinity management in the Perris South and Lakeview groundwater sub-basins. The District's Desalination Program facilities are depicted in Exhibit A.

On July 18, 2018, the Board approved and authorized a contract with Parsons for third party construction management and inspection services (for a 22-month period) during construction of the Perris II Desalter in an amount not-to-exceed \$2,180,939 and appropriated \$2,453,000 to fund project expenses.

On January 16, 2019, the Board approved and authorized a construction contract with Kiewit Infrastructure West, under Specification 1338W, in the amount of \$49,994,000, and appropriated \$57,979,500 to fund project expenses. The authorization included a professional services agreement with Black & Veatch, engineer of record, for engineering support services during construction in an amount not-to-exceed \$1,604,500.

On April 1, 2020, the Board approved and authorized a contract amendment with Black & Veatch in an amount not-to-exceed \$399,945. The total fee of \$611,436 negotiated with Black & Veatch and was offset with a credit in the amount of \$211,491 to the District as part of a Change Order Participation Agreement due to structural and mechanical design revisions.

The project construction is approximately 60-percent complete and based on review of project performance and schedule, additional services are necessary by consultants and EMWD staff as outlined below:

Parsons- Construction Management and Inspection Services:

- Based on the contractors observed performance to date, Parsons' construction administrative staff will be required to extend services for an additional 6-months to continue to support District staff. This effort will provide for continued services including assistance during commissioning and startup of facilities, schedule reviews, and additional effort for the geotechnical engineer for continued materials testing services as presented in Exhibit B.

Black & Veatch- Engineering Support During Construction:

- The total number of shop drawings, including resubmittals have exceeded the original anticipated level of effort for both submittal volume and level of effort. Based on the contractor's current submittal log, over 1,000 submittals and resubmittals are now anticipated. Therefore, review of an additional 150 submittals by consultant is required to complete the project.
- Engineering support - The total number of requests for information (RFI), design services, and field coordination meetings have exceeded the original anticipated level of effort. Based on the contractor's observed performance to date it is now anticipated that more frequent field coordination meetings are required, and an additional 100 RFIs (for a total of approximately 500) will be generated to complete the project.
- The total fee negotiated with Black & Veatch associated with the above noted scope of work (Exhibit C, Amendment No. 4) will be offset by a credit in the approximate amount of \$100,000 to the District as part of a Change Order Participation Agreement that is under negotiation, for design errors and omissions. The terms and conditions of the agreement will be consistent with prior Change Order Participation Agreement that was completed in October 2019. The proposed Amendment No. 4 in an amount not-to-exceed \$581,695 is commensurate with the required level of effort to complete the project. The appropriation request of \$1,040,179 for services by Black & Veatch is to fund proposed Amendment No. 4 and prior Amendments Nos. 1 thru 3 (\$458,484) as detailed in Exhibit D.

EMWD Labor:

- Additional labor expenses for engineering and construction staff - Initially, Staff estimated labor hours to support this project based on a project completion date of March 2021. Due to circumstances outside the control of all stakeholders (COVID, material deliveries, etc.) the current revised completion date is June 2021. Since there are still unknowns regarding project completion, Staff has revised the estimated labor hours to complete the project assuming an August 2021 completion date.

Project Contingency:

- The original construction budget included a 5-percent contingency rather than the typical 10-percent. As the project progressed, and challenges with Southern California Edison (SCE) and the bid documents came to light, it has become apparent that the project may require an additional 10-percent contingency budget appropriation. Staff is continuing to work with SCE, design engineer, construction manager, and the contractor to minimize and mitigate further changes on the project.

The additional funding request is summarized in the table below. The total project cost through project closeout is estimated at \$71,301,000 and is detailed in the attached project cost estimate (Exhibit D).

| Category | Amount |
|-------------------------------------|--------------------|
| Parsons (Construction Management) | \$640,000 |
| Black and Veatch (ESDC) | \$1,040,179 |
| Other Engineering Support | \$38,000 |
| Engineering Branch Labor | \$900,721 |
| Grant Administration | \$179,500 |
| Owner Furnished Materials | \$75,000 |
| Additional Construction Contingency | \$5,000,000 |
| Total | \$7,873,400 |

FINANCIAL IMPACT:

This project will be financed from the General District Restricted Water System Expansion Fund, with partial reimbursement from the Proposition 1 Groundwater Grant Program in an amount up to approximately \$22.5 million. Upon completion, this project will receive contributions through Metropolitan Water District's (MWD) Local Resources Program in an amount up to approximately \$196 per acre foot (Initially \$215 per acre foot adjusted for grant funding received), considering a maximum annual production yield of 5,500-acre feet. The finances for the project are still favorable at approximately \$899 per acre foot when compared to MWD's imported water cost per acre foot of \$1,104 (Tier 1 2021).

STRATEGIC PLANNING GOAL/OBJECTIVE:

Water Supply Diversity and Reliability: Develop and implement a portfolio of projects and management techniques to achieve a reliable and cost-effective balance of water supplies utilizing imported, local and recycled water sources.

ENVIRONMENTAL IMPACT:

This project is subject to the California Environmental Quality Act (CEQA) and in conformance of the California Code of Regulations Title 14, Chapter 3, Article 6, Section 15070, *et seq.*, a Notice of Intent to adopt a Mitigated Negative Declaration (IS/MND) was filed with the County of Riverside on February 17, 2015. Pursuant to State Guideline §15073, the IS/MND was made available for public review for a period of 30-days beginning February 20, 2015 and concluded on March 23, 2015. The Mitigated Negative Declaration was adopted by the EMWD Board of Directors on April 15, 2015.

RECOMMENDATION:

1. Approve and authorize execution by the General Manager, or his designee, of the District's standard form of contract amendment with Parsons for construction

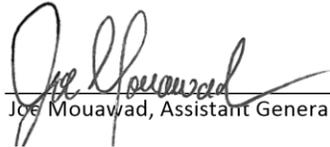
management and inspection services during construction of the Perris II Desalter in an amount not-to-exceed \$638,300;

2. Approve and authorize execution by the General Manager, or his designee, of the District's standard form of contract amendment with Black & Veatch for engineering services during construction of the Perris II Desalter in an amount not-to-exceed \$581,695; and
3. Additional appropriation of \$7,873,400, which brings the total estimated project cost to \$71,301,000.

SUBMITTED BY:


Paul D. Jones II, P.E., General Manager

9/21/2020


Joe Mouawad, Assistant General Manager

9/15/2020

Attachment(s):

Exhibit A - Desalination Program
Exhibit B - Parsons CM Amendment
Exhibit C - Black and Veatch ESDC Amendment
Exhibit D - Cost Estimate
Presentation

10/07/20 Board Meeting

Staff Contact: Greg Kowalski