



Wastewater
Treatment



TRANSFORMING
WASTEWATER
TO RESOURCES



Recycled
Water



Energy
Production



Biosolids
Reuse

Cogeneration System Improvements Project Construction Services Contract and Engineering Services Contract

Special Board of Directors Meeting
August 14, 2024

Overview

Cogeneration System Improvements

- Existing cogeneration system is critical element of District's efforts to **generate onsite renewable energy** via biogas use
 - 0.8-MW cogeneration system meets ~50-55% of WWTP power needs
- Board awarded detailed design contract in February 2023 to **replace existing aging infrastructure**
- Staff implemented accelerated project schedule to qualify for **federal tax credits** under Inflation Reduction Act (IRA)
 - ~\$6.5M in tax credits requires project to be in construction by December 2024
 - District intends to complete construction of concrete pads to meet “onsite physical work of a significant nature” requirement under IRA
 - Issued construction bid documents in June 2024



Cogeneration System Improvements Project Economics



- Significant increase in project cost as design progressed
 - \$20.0M at 100% design completion status
 - Staff has increased project cost in proposed 5-year CIP from \$7.0M to \$13.5M (assuming \$6.5M in federal tax credits)
- Staff has confirmed economic viability following receipt of construction bids in June 2024
 - Current low-bid construction cost = \$14.5M (**\$1.9M lower than Engineer's Estimate** of probable construction cost [\$16.4])
 - Payback period: **~20 years** (w/o tax credits); **~13 years** (w/tax credits)
 - Significant additional project benefits associated with non-economic factors (energy independence, resiliency)

Cogeneration System Improvements Construction Services Contract Award



- Four bids were received on July 18, 2024 with a low bid from Shimmick Construction Company, Inc. (\$14,540,000)
- Following detailed review of submitted bid documents, staff determined Shimmick Construction Company, Inc. is the lowest, responsive, and responsible bidder and is recommended for Construction Services Contract award

Cogeneration System Improvements Engineering Services During Construction



- As project transitions into construction phase, engineering services during construction are required to support successful project delivery
- Brown and Caldwell completed detailed design work and is the most qualified, cost-effective consulting firm to provide engineering services during construction as “Engineer-of-Record”
- Staff has negotiated scope of services and cost (\$788k)
 - Project Management (\$93k)
 - Coordination Meetings (\$98k)
 - Submittal Reviews (\$131k)
 - Responses to Requests for Information (\$170k)
 - Change Management (\$94k)
 - General Site Observations and Visits (\$75k)
 - Record Drawings (\$126k)

Recommended Actions

1. **Approve** the plans, specifications, and design for the Cogeneration System Improvement Project (Project).
2. **Award** a Construction Services Contract for the Project to Shimmick Construction Company, Inc. (Shimmick), the lowest responsible bidder, in an amount not to exceed \$14,540,000.
3. **Authorize** the General Manager to approve construction contract change orders up to 10% of the contract amount (i.e., up to an additional \$1,454,000), for a total contract authorization of \$15,994,000 with Shimmick.
4. **Authorize** the General Manager to execute Consulting Services Contract with Brown and Caldwell (BC) to provide engineering services during construction in an amount not to exceed \$788,181.
5. **Direct** that Shimmick present two good and sufficient surety bonds in the amount of \$14,540,000 and that the General Manager shall prepare the Construction Services Contract.
6. **Authorize** the General Manager to execute the Construction Services Contract after Shimmick has signed the contract and returned to it, together with the bonds, certificates of insurance, and other required documents, and after the General Manager or his designee has reviewed and found them to be sufficient.

Recommended Actions (cont'd)



7. **Direct** that, in accordance with the Project specifications and/or upon the execution of the contract by General Manager, any bonds posted by the bidders be exonerated and any checks or cash submitted for bid security be returned.
8. **Declare** that, should the contract awarded to Shimmick be invalidated for any reason, the Board in any event would not have awarded the contract to the other bidder but instead would have exercised its discretion to reject all bids received. Nothing herein shall prevent the Board from awarding the contract to another bidder in cases where the successful bidder establishes a mistake, refuses to sign the contract, or fails to furnish required bonds of insurance
9. **Determine** that the repair or replacement of the Cogeneration System Improvement is categorically exempt from the California Environmental Quality Act (CEQA), pursuant to Section 15302 (Replacement or Reconstruction) of the CEQA Guidelines, and direct the General Manager, or his designee, to file a CEQA Notice of Exemption (NOE) with the County Clerk-Recorder.