

STAFF REPORT

Meeting Type: Board of Directors

Title: Approval of Professional Services with TJC and Associates for the San

Geronimo Treatment Plant Clearwell Structural Evaluation and Condition

Assessment

From: Alex Anaya, Director of Engineering

Through: Ben Horenstein, General Manager

Meeting Date: April 15, 2025

TYPE OF ITEM: X Approve Information

RECOMMENDATION: Authorize the General Manager to execute a professional services agreement with TJCAA for the San Geronimo Treatment Plant Clearwell Structural Evaluation and Condition Assessment in an amount not to exceed One Hundred Sixteen Thousand Four Hundred and Eight Dollars (\$116,408)

SUMMARY: Staff presented this item at the March 25, 2025 Planning Committee Meeting sharing staff's proposal to perform the San Geronimo Treatment Plant (SGTP) Clearwell Structural Evaluation and Condition Assessment project. Staff went through a competitive request for proposal (RFP) process to solicit proposals from structural engineering firms to perform a seismic structural evaluation, provide recommendations for repairs as needed, and to perform a structural analysis for the installation of solar panels on top of the existing clearwells. Staff reached out to eight professional engineering firms, and conducted a site visit at the SGTP in January of 2025 to discuss the project objectives. After conducting a thorough interview process, staff selected TJCAA to perform the work.

DISCUSSION: The District is in the early stages of the San Geronimo Treatment Plant (SGTP) Clearwell structural evaluation and condition assessment project which aligns with the Five-Year Strategic Plan to improve the resilience of Marin Water's infrastructure and reduce the District's carbon footprint.

The SGTP is the District's largest energy consuming facility, accounting for roughly 25% of the District's annual electricity demands. The District's renewable energy analysis identified an action to further investigate the feasibility of installing solar panels on top of the existing clearwells in order to reduce the SGTP annual electrical demands. If solar panels were installed on top of the two clearwells, the District is estimated to reduce its PG&E demand at the plant by approximately 10%, equating to an annual savings of roughly \$100,000.

The SGTP has two circular partially buried concrete clearwells. Clearwell No. 1 was constructed in 1962 when the treatment plant was first commissioned, and Clearwell No. 2 was constructed in 1995. Clearwell No. 2 is critical to the District's treatment process due to its outer ring configuration whereby the production of chloramines is achieved to satisfy surface water treatment regulation requirements. Chlormaninated water from Clearwell No. 2 enters Clearwell No. 1 and is then pumped through the North Marin Line into the distribution system.

In 2024, Potable Divers Inc. entered the clearwells to perform routine inspections and tank cleaning. During these inspections, divers found evidence of standing water from the clearwell roofs infiltrating through cracks, and areas of spalled concrete, some of which was located around the perimeter of the roof and shell connection of Clearwell No. 1. Potable Divers Inc. recommended the District conduct additional structural assessment by a structural engineering firm to evaluate the extent of the damage and develop a repair plan and design.

Staff issued an RFP to solicit proposals from structural engineering firms to perform a seismic structural evaluation, provide recommendations for repairs for items identified, and to perform a structural feasibility analysis for the installation of solar panels on top of the existing clearwells. Staff reached out to eight consulting firms, and on January 25th conducted a site visit at the treatment plant to discuss the project and answer any questions. All eight consulting firms were present for the site visit. Staff performed a thorough interview process which ultimately led to the preferred selection of TJC and Associates, Inc. (TJCAA) to perform the work.

TJCAA is a local firm specializing in structural analysis and condition assessments of concrete water storage structures. TJCAA's related work experience, project management approach, budget and schedule were the leading factors which scored their proposal above the other engineering consultant firms. This contract will allow the District to consult with subject matter experts in structural evaluations and condition assessments to determine useful remaining service life of the clearwells, perform seismic structural evaluations, receive engineered repair details, and determine any structural improvements necessary to install solar panels on top of the existing clearwells.

Staff is recommending that the Board approve a professional services agreement with TJC and Associated and authorize the General Manager to execute the contract award for the San Geronimo Treatment Plant Clearwell Structural Evaluation & Condition Assessment project in an amount not to exceed One Hundred Sixteen Thousand Four Hundred and Eight Dollars (\$116,408).

BUDGET:

Professional Services Agreement: \$116,408
Total Budget: \$116,408
Budget Category: A1A04

ENVIRONMENTAL REVIEW: Not Applicable.

FISCAL IMPACT: Funding for this contract is identified in the adopted budget for Fiscal Year 2025 and 2026 under the A1A04 Treatment Plant fund center

ATTACHMENT(S): None.

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Engineering	Alex Aug	M. Harente n
	Alex Anaya Engineering Director	Ben Horenstein General Manager

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