

Santa Teresa Water Treatment Plant Filter Media Replacement Project Project No. 93284013

Engineer's Report



July 2021

Water Utility Capital Division



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SANTA TERESA WATER TREATMENT PLANT FILTER MEDIA REPLACEMENT PROJECT

PROJECT NO. 93284013

ENGINEER'S REPORT

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Under the Direction of:

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The Engineer's Report has been prepared under the direct supervision of the undersigned, who hereby certifies that he is a Registered Civil Engineer in the State of California



July 2021

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**Santa Teresa Water Treatment Plant
Filter Media Replacement Project
No. 93284013
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1. PROJECT DESCRIPTION

The proposed Project is located at the Santa Teresa Water Treatment Plant (STWTP) in San Jose, as shown in Figure 1. This treatment plant produces safe drinking water, both residentially and commercially, for most of South San Jose – Almaden Valley, Blossom Valley and Santa Teresa. As the largest of the three water treatment plants, Santa Teresa can treat and deliver up to 100 million gallons of water per day.

The STWTP first opened in 1989 and integrated the use of ozone into its water treatment process in 2006.

The Project will ensure that the STWTP Filters maintain operational capacity and provide the public with reliable, high-quality drinking water.

The Project will remove and replace Granular Activated Carbon (GAC) and sand filter media, remove and replace the influent valves and wash water valves, and remove and replace influent steel deflectors in 12 filters. This Project will remove and replace the underdrain nozzles in 10 filters (2 filters were completed in 2016), as well as inspect the filter basin concrete and metal coatings. This Project will also look at ways to prevent filter media loss and optimize filter performance as necessary. The plant will be operating at a slightly reduced capacity for the duration of the project construction.

2. ZONE BENEFITS

The proposed Project work will benefit the customers of Zone W-2 (North County).

3. PROJECT RIGHT OF WAY

The proposed Project would be constructed on District property.

4. MAPS AND FIGURES

Figure 1 - Project Location Map

5. PROJECT COSTS

The estimated cost for planning, design and construction of the proposed Project is \$10.1 million (in 2021 dollars). The proposed Project would be funded by the Water Utility Enterprise Fund.

6. PROJECT SCHEDULE

- Advertise for construction bids: November 2021
- Award construction contract: January 2022
- Complete construction: January 2024

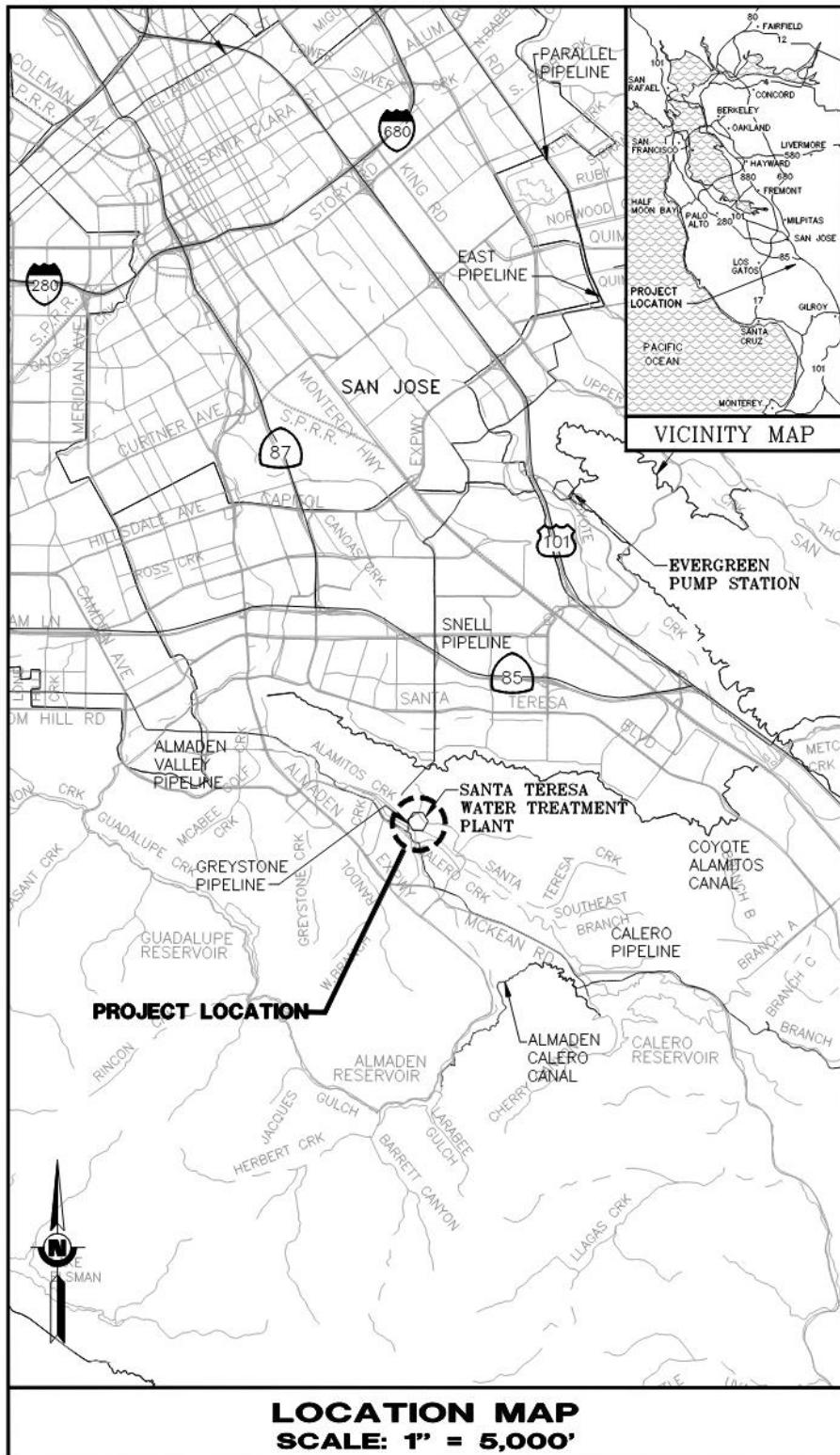


Figure 1 - Project Location Map