Penitencia Water Treatment Plant Rehabilitation of Flocculation and Sedimentation Basins Project

Engineer's Report

August 2020

Raw Water Division



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PENITENCIA WATER TREATMENT PLANT REHABILITATION OF FLOCCULATION AND SEDIMENTATION BASINS PROJECT

PROJECT NO. 93764004

ENGINEER'S REPORT

Prepared By:

David Kunz, P.E., Senior Engineer

Under the Direction of:

Joel Jenkins, P.E. Aaron Baker, P.E. Engineering Unit Manager Deputy Operating Officer

Garth Hall Rick Callender
Chief Operating Officer Chief Executive Officer

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



August 2020

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1. PROJECT DESCRIPTION

The proposed Project is located at the District's Penitencia Water Treatment Plant (PWTP) in San Jose (see Figures 1 for project location). The PWTP was built and placed in service in the early 1970's. An inspection of the flocculation and sedimentation equipment suggested its replacement. The objective of this Project is to extend the useful life and increase the reliability of the PWTP. The proposed Project, once completed, will ensure that the treatment plant can continue to efficiently and reliably provide potable water to water retailers, businesses, and residents within the District's service areas.

The Project will remove and replace all process-related mechanical and electrical equipment, inspect and refurbish the basin concrete coatings, and the upgrade the drive motor assemblies in all three (3) of the PWTP Flocculation and Sedimentation basins. Staging of this work will be coordinated between the three (3) basins of the plant. The plant will be on 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 design and construction of the proposed Project is \$4.2 million (in 2020 dollars). The proposed Project would be funded by the Water Utility Enterprise Fund.

6. PROJECT SCHEDULE

Advertise for construction bids: October 2020Award construction contract: January 2021

• Complete construction: April 2022

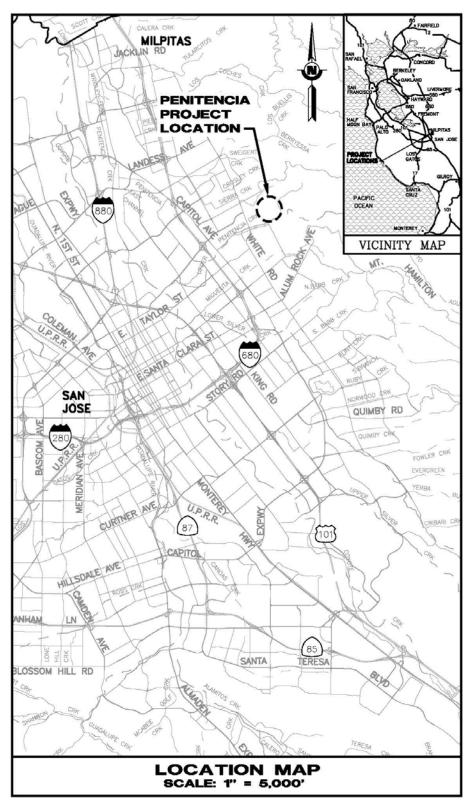


Figure 1 - Project Location Map