## Pacheco Pumping Plant Priority 1 Fire Alarm and Suppression System Improvements

## Engineer's Report



April 2019

Water Utility Capital Division



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# PACHECO PUMPING PLANT PRIORITY 1 FIRE ALARM AND SUPPRESSION SYSTEM IMPROVEMENTS

**PROJECT NO. 91214010** 

### **ENGINEER'S REPORT**

Prepared By:

Marisela Garcia, Assistant Engineer II

Under the Direction of:

Emmanuel Aryee, P.E. Engineering Unit Manager Katherine Oven, P.E. Deputy Operating Officer

Nina Hawk Chief Operating Officer Norma Camacho 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



April 2019

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#### 1. PROJECT DESCRIPTION

This project plans, designs, and constructs a new fire alarm and fire suppression system for the main facility building at the Pacheco Pumping Plant, Dinosaur Point, Merced County, CA. The project will include installation of a clean agent fire suppression system to work in conjunction with the existing water-based system. Major project features include the installation of a VESDA (Very Early Smoke Detection Apparatus) smoke detection system; replacement of the existing underfloor smoke detectors; installation or replacement of manual pull stations and heat detectors; installation of a new fire department standpipe connection; and retrofitting the fire hose nozzles.

The objective of the project is to reduce the risk of pumping plant shutdown due to fire damages.

#### 2. ZONE BENEFITS

The proposed Project work will benefit the customers of Zone W-2 (North County) and Zone W-5 (South County).

#### 3. PROJECT RIGHT OF WAY

The proposed Project would be constructed on District property. The Project would require a permit from the United States Bureau of Reclamation (USBR).

#### 4. MAPS AND FIGURES

Figure 1 - Project Location Map

#### 5. PROJECT COSTS

The estimated cost to design and construct the proposed Project is \$1,920,000 (2019 dollars). The proposed Project would be funded by the Water Enterprise Fund; a total of 20.8% cost will be allocated to Zone W-5 (South County) and the remaining 79.2% will be funded by Zone W-2 (North County).

#### 6. PROJECT SCHEDULE

Advertise for construction bids: July 2019

Award construction contract: September 2019

Complete construction: May 2020

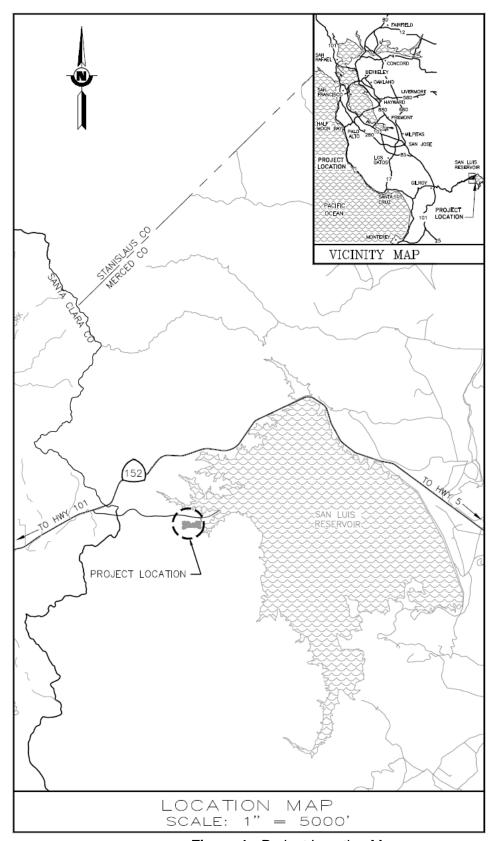


Figure 1 - Project Location Map