



Engineering Design Services

Operations Committee

April 5th, 2024

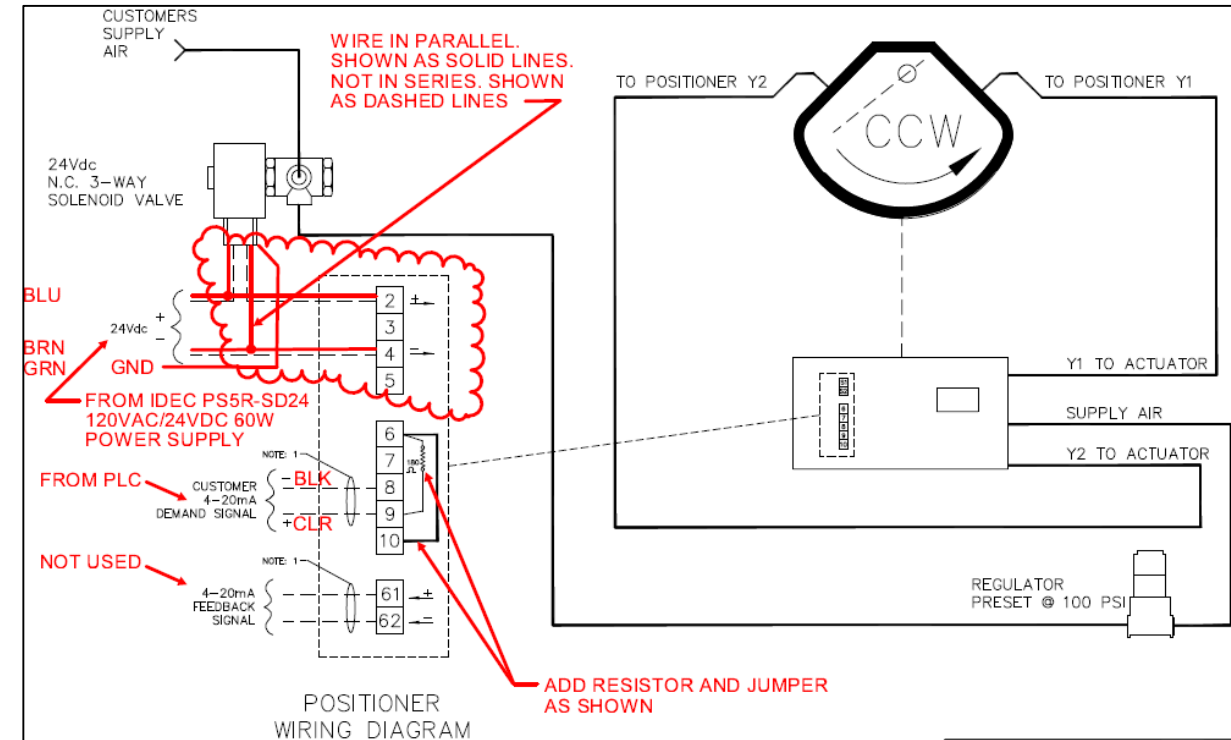


Agenda

- Background
- Manuel T. Freitas SCADA Control Valve (Freitas PRP)
- San Clemente SCADA Control Valve (Granada PRP)
- San Geronimo Treatment Plant – Filter Rate Control Valve Project

Background

- Three similar control valve projects are priority to address
- Staff proceeding with piping and valve component
- Outside support needed for more detailed electrical and instrumentation work
 - Will provide plans and technical specifications for construction contract



Instrumentation Wiring Diagram – Bon Tempe Treatment Plant

What Is a Control Valve?

Electrical power for valve operation

Control integration into SCADA for remote operation

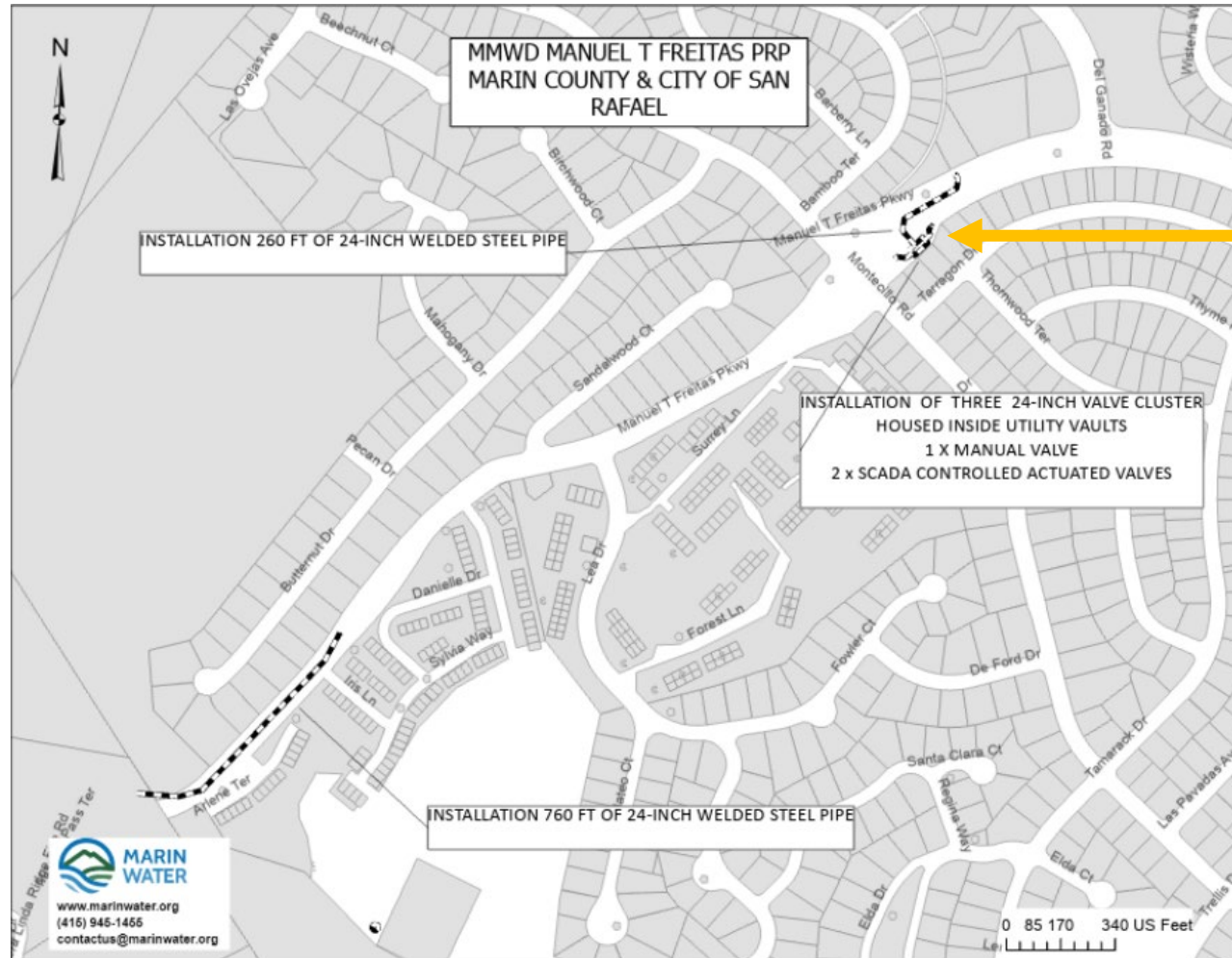


New buried vault, or enclosure

SCADA Control Valve – Summit Avenue, Peacock Gap

Freitas Pipeline Replacement Project

D21028

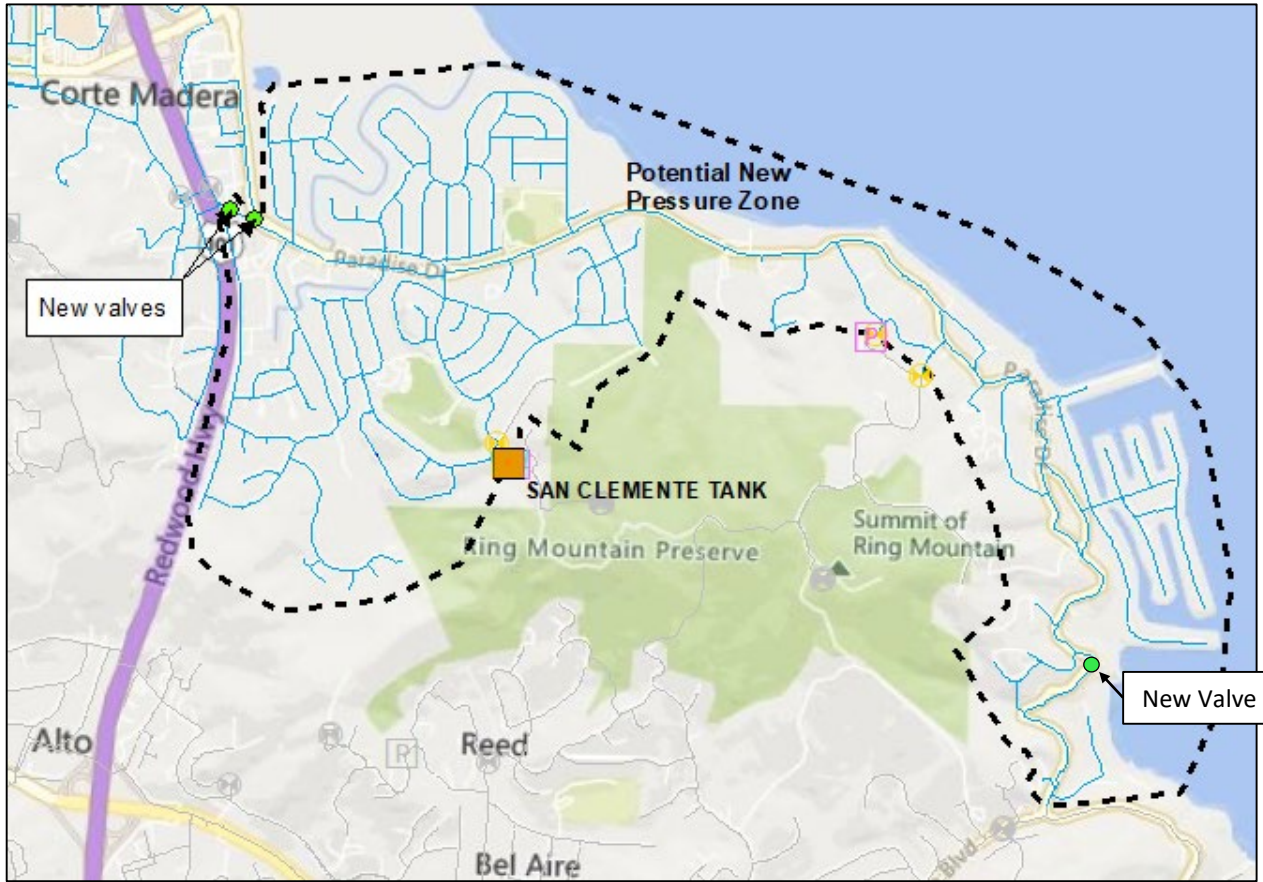


- New PG&E service
- New vault
- 2 New SCADA valves

- Valves are on the North Marin Line (transmission)
- To improve distribution of SCWA water out of Lucas Valley Tank
- Replace existing control valves removed under this project

Granada Pipeline Replacement Project

D23020



- Create a new pressure zone using San Clemente Tank as primary supply.
 - Increases turnover in the tank, thereby decreasing detention time
 - Decreases needed demand on the Ross Valley pressure zone

San Geronimo Treatment Plant Filter Rate Control Valve Replacement



Filter Rate Control Valve Assembly – Filter #4, SGTP

- Integral device for SGTP filtration process
- Controls how much water is leaving the filter
- Constantly moving valve programmed to “hunt”
- 6 existing valves, from 1972 plant expansion, all to be replaced

Summary

- Upgrading, installing, and replacing control valves on three distinct projects to improve District operations
- Leveraging internal staff resources with support in electrical and instrumentation