ENTERPRISE AUTOMATION
A TETRA TECH COMPANY

PROJECT PROFILE
Sewer Lift Stations
City of Huntington Beach

Client background

The City of Huntington Beach (the City) is a full-service residential city with a population of approximately 200,000 residents. The city owns and operates its water utility and wastewater collection system, which serves its citizens. The utility's assets include sewer lift stations, wells, reservoirs, flood stations, and turnouts for reselling imported water to local cities and agencies. The City engaged EA through consecutive 3-year professional services agreements to provide SCADA integration and support for its water utility department.

Project background

As a first step to modernize and rehabilitate the aging sewer lift stations, the City asked EA to develop a standardized panel design, PLC program, and OIT program that could be implemented whenever a full station rehab would be undertaken. By creating a standard panel layout and functional programs, new or rehabilitated sites could be implemented quickly and inexpensively. Additionally, the standard design would allow the City to reduce training and maintenance costs as all sites would operate the same and require the same spare components.

EA solution

EA designed two standard panels: one for retrofit sites where a new back panel could be placed inside an existing enclosure, and one for new sites that would require a new enclosure. Both layouts were internally consistent, allowing IO and hardware to be shared across all sites and programs. Engineers developed functional specifications, meaning the same tested programming could be deployed at any of the lift stations sites. This made upgrades more cost-effective and maintenance much easier.

Project Manager

Clarence Go

Project Technical Lead

Steven Drooz

Key Insights:
- Standardized Lift Station equipment and IO list
- Standardized control panel designs: retrofit panel for existing enclosure, new panel and enclosure
- Standardized Unity Pro PLC program

Key Technologies:
- Modicon Unity Pro M340
- Schneider Electric Magelis OIT

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