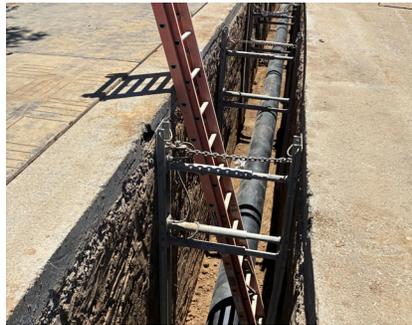


CUSTOMER CASE STUDY

IMPROVING PROJECT OUTCOMES THROUGH EARLY COLLABORATION



PROJECT OVERVIEW

PROJECT / CUSTOMER:

Donald C. Tillman Advanced Water Purification Facility (AWPF)

LOCATION:

Los Angeles, CA

PRODUCT / SOLUTIONS:

- Virtual Design & Construction (VDC) services
- Integrated preconstruction services (Waterworks Supply Chain Procurement Specialist)
- On-site Project Management

CHALLENGE:

Large, complex, and technically challenging project on the forefront of advanced treatment with groundwater injection, operating on a tight timeline due to the upcoming Olympics

SOLUTION:

A collaborative approach spanning multiple Ferguson customer groups, coordinated by an experienced project management team, working alongside project stakeholders in preconstruction to condense the project timeline, enhance transparency, mitigate risk, and optimize resources

OUR ADVANTAGES:

- Technical expertise in waterworks, strategic infrastructure, fire and fabrication, plumbing
- Local relationships with subcontractors and vendors
- Strategic Infrastructure Group's Collaborative Delivery Treatment Plant Team
- Deep understanding of design-build processes, including navigating preconstruction as a partner to the design builder
- Proprietary integrated collaborative delivery program (WSCPS)
- Ability to supply materials to multiple trades through a single team/PO
- Focus on best value, transparency, risk mitigation, and collaboration

BACKGROUND AND SCOPE:

The Donald C. Tillman Advanced Water Purification Facility (AWPF) in Los Angeles is a state-of-the-art facility representing a significant leap in sustainable water management, establishing itself as one of the most significant indirect potable reuse projects globally. As a vital solution to drought and water supply shortages in a city marked by its arid climate, this facility will transform Los Angeles' approach to water sustainability. Indirect potable water reuse combats drought conditions while enhancing the available water supply for residents and businesses alike.

Harnessing cutting-edge technologies such as microfiltration, reverse osmosis and advanced oxidation processes, the AWPF is designed to purify an impressive 30 million gallons of water per day (MGD), serving over 200,000 customers in the local community. With a price tag of over \$740 million—and approximately \$224 million in funding secured from the EPA—this ambitious project aims to revolutionize water management.

Ferguson proudly served as a collaborative delivery partner during preconstruction, contributing our expertise as Waterworks Supply Chain Procurement Specialists (WSCPS) across various disciplines and trades, including fire protection, commercial plumbing, mechanical process piping and utilities.

CHALLENGE:

With Los Angeles slated to host the Olympics in 2028, the city chose design-build to improve the project schedule and increase transparency in cost development. Looking for innovative ways to optimize preconstruction planning and design in order to shorten the project timeline, the contractor chose to work with Ferguson based on the qualifications of our people, our history of integrated collaborative delivery services, and the impressive capabilities of our BIM/VDC team.

SOLUTION:

Ferguson played a pivotal role as the WSCPS, getting involved early in preconstruction to set a solid foundation for the project's success. For this project, a single Ferguson Project Management team coordinated efforts across our Waterworks, Fire & Fabrication, VDC, Strategic Infrastructure Group, and Commercial Mechanical divisions. Our multi-disciplinary team reviewed the project documents at each design stage, providing estimating, scheduling, risk mitigation, value engineering, and constructability feedback to the design-build team, along with other services and support.

The Fire & Fabrication team designed a comprehensive fire system, complete with accurate Bills of Material (BOMs) that could flow directly into fabrication. The Waterworks VDC team created intelligent constructible models, providing a visual representation of the facility's piping systems. These models enhanced collaboration among stakeholders, including engineers, the city, and contractors, by offering an intuitive view of the design. This clarity allowed for early identification and resolution of potential challenges, improving communication and understanding across disciplines and reinforcing the effectiveness of the project. From these models, we created BOMs for accurate estimation and procurement.

By providing expert preconstruction support, we enabled the contractor and subcontractors to focus on what they do best without having to worry about constructability, material availability, or costly rework for the scope of our involvement. When the material began arriving on-site, we provided warehouse management services to offload trucks, organize material, and pull material for subcontractors when necessary. The on-site project management team coordinated deliveries with the subcontractors, tracked material locations and levels, maintained material need timelines, and scheduled inspections.

THE FERGUSON ADVANTAGE:

Our multi-faceted, every-phase support for large-scale construction projects uniquely positions us to serve as a single-source design, supply, fulfillment, and project management resource for our customers. This emphasis on collaboration through the integration of various specialties, such as collaborative delivery treatment plant specialists and fire protection, aligned with the customer's vision for a cohesive project environment. This synergy underscores the value of collaboration in achieving complex project outcomes effectively and the value of having Ferguson as a project partner from the earliest stages of design.