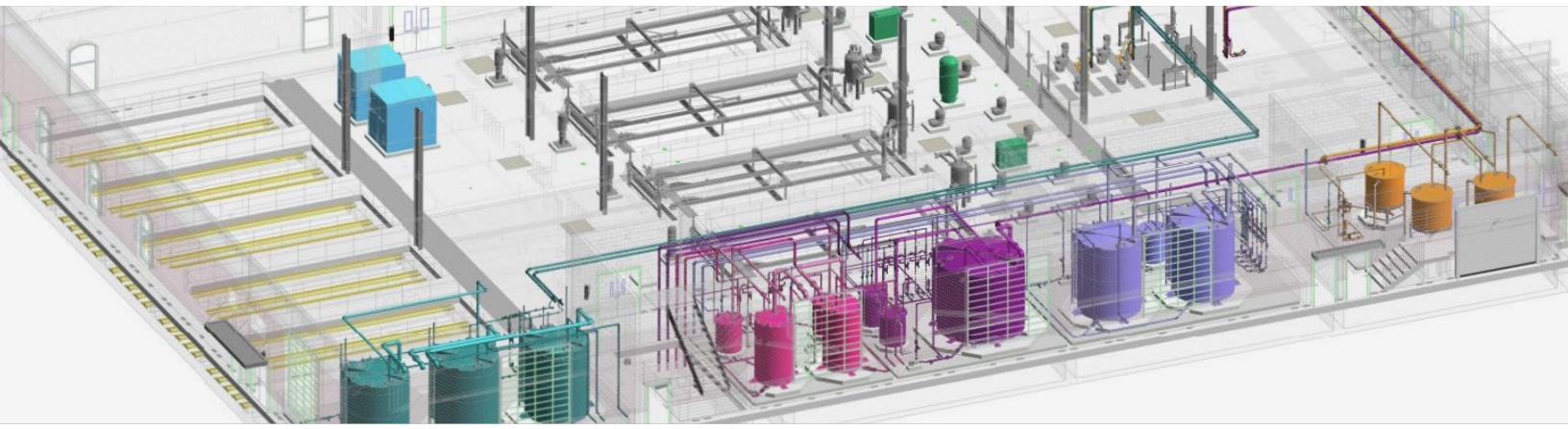
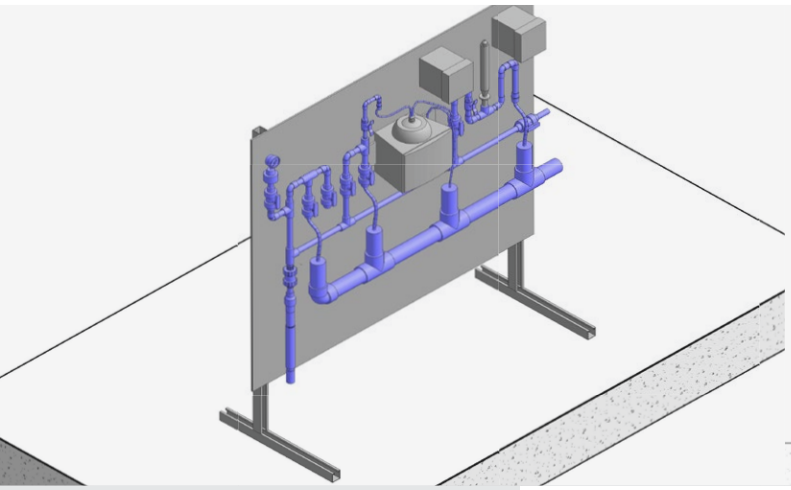
CUSTOMER CASE STUDY

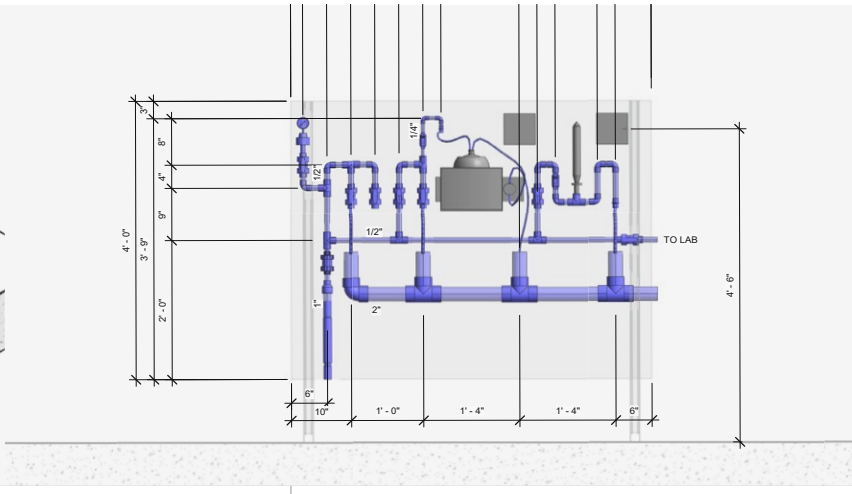
Tri-Town Regional Water Treatment Plant

Braintree, MA

FERGUSON WATERWORKS







PROJECT OVERVIEW

LOCATION:
Braintree, MA

SOLUTION USED:
Ferguson Virtual Design & Construction (VDC) services

CHALLENGE:

Customer needed modeling support beyond their in-house capabilities during new construction of a 12.5 MGD treatment plant

SOLUTION:

Ferguson Virtual Design & Construction team with myriad experience in treatment plant construction

THE FERGUSON ADVANTAGE:

- Expert associates with experience in digital modeling and treatment plant construction
- Cutting-edge Building Information Modeling (BIM) technology
- Automatically generated Bill of Materials (BOM) for seamless procurement and fabrication

BACKGROUND AND SCOPE

The Tri-Town Water District, which services drinking water to the municipalities of Randolph, Holbrook and Braintree, Massachusetts, announced the highly anticipated Tri-Town Regional Water Treatment Plant. This project was a vital community infrastructure development including the construction of the state-of-the-art 12.5 MGD (million gallons per day) Tri-Town Regional Water Treatment Plant.

The project required a detailed model of the chemical feed piping to facilitate visualization of pipe installation, as well as the location of anchors and supports. Additionally, our client needed a comprehensive model that was detailed enough to create an accurate bill-of-materials the team could quote and procure from. At the time, the customer didn't have the resources to dive into the chemical feed piping.

CHALLENGE

The client needed specialized expertise in modeling and plant-type projects and a team that could integrate a model into their federated project file so that our team and theirs could collaborate in sync.

Additionally, they wanted a lump-sum model-based estimate that was transparent for all parties involved and limited excess or waste in the process. Finally, they needed help relieving some of their management limitations and capacity to dive into the chemical feed piping, thus leveraging our services.

METHOD

We leveraged our skills and knowledge to provide an intricate and accurate model of the chemical feed piping system for this project. The model was designed to assist the field crews in visualizing the entire process and avoiding other MEP systems. By clearly marking the locations of anchors, supports and pipe routing, we enabled a more precise planning and execution workflow. Our team was also asked to model the prefabricated analyzer panels to help streamline installation.

We leveraged our capabilities to generate a detailed BOM that included the required specs for the piping, allowing the Outside Sales team to present a lump-sum proposal that granted the client a clear understanding of project costs and components. This reduced the client's in-house management burden by offering a complete package that included the pipe material and the modeling necessary to complete the job correctly.

THE SOLUTION: FERGUSON WATERWORKS

Our unique expertise in BIM tools and plant-type construction enabled us to create a complex and unique model of the chemical feed piping. This allowed the client's mechanical site crew to accurately visualize the pipe, support and anchor installation locations before mobilizing.

Our effective communication resulted in high-quality work tailored to meet the project's specific needs. The collaboration was marked by early deliverables, effective information exchanges and a client-focused approach. All of these positioned us as a key partner for the client on this state-of-the-art infrastructure project.