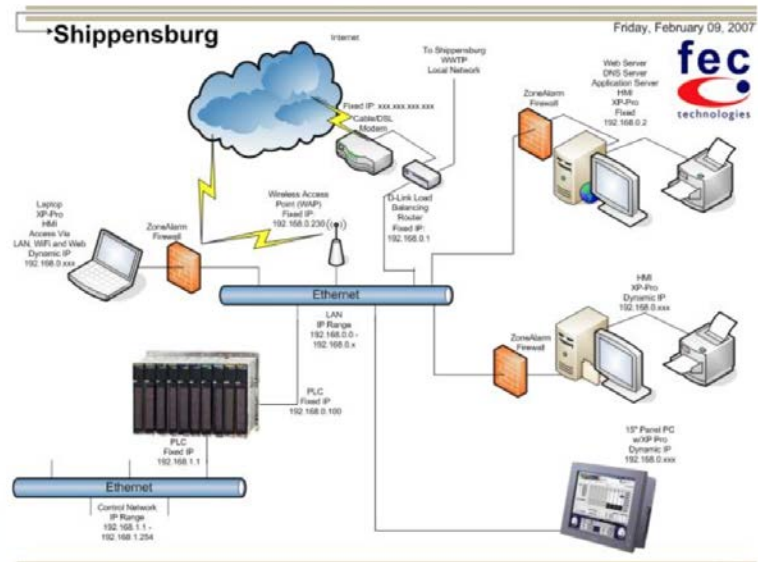# SHIPPENSBURG WWTP

**Customer: Trademark Contracting Corp.**
**14219 Rockdale Road, Clear Springs, MD.**
**Project Size: $450,000.00**

## SHIPPENSBURG WWTP FIVE STAGE BNR UPGRADE

### PROCESS DESCRIPTION

Shippensburg WWTP is a 3.0 MGD facility servicing the city of Shippensburg PA, and is the first plant of its kind in Pennsylvania to respond to tighter government regulations regarding the discharge levels of ammonia, phosphorous and nitrogen. The process required the control of the level of nitrates in the effluent stream based on influent flow and current levels of dissolved oxygen in the system. Furthermore, nitrate re-circulation based on flow needed to be controlled, while also monitoring the dissolved oxygen levels in each tank based on flow and existing DO levels. Another need was the consistent control of Ferric Chloride to the system as required, and based on influent flow.



### PROJECT DESCRIPTION

As a Subcontractor to the General Contractor on a multi-million dollar plant expansion, FEC supplied a turnkey control and information system in full compliance with the project's plans and specifications. As such FEC contributed to the plan as follows:

- Defined the Control and Information System architecture
- Developed a detailed sequence of operation, graphic operator interface and plant reporting requirements
- Created detailed control panel construction drawings, including Bills of Material and schematic wiring diagrams
- Manufactured and tested 23 PLC and motor control panels
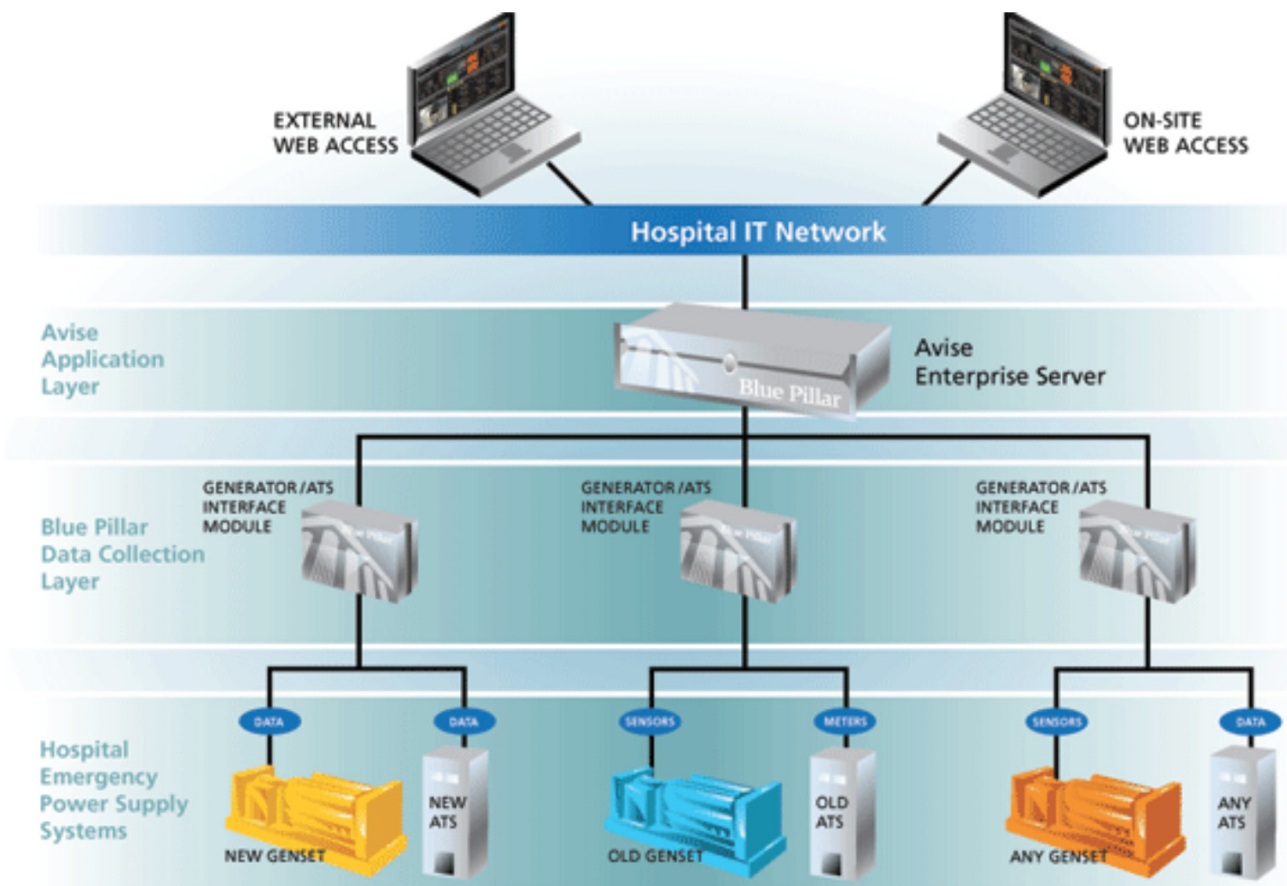- Performed Factory Acceptance Testing, start-up site acceptance, and operator training.

### SYSTEM COMPONENTS

- Custom .Net Smart Client SCADA application using Open Automation Software and OAS Servers. Providing remote access without the use of web browser.
- (2) Microwave Data radios for remote pump station communications
- (2) Dell computers – Model Precision 380
- Uninterruptible Power Supplies (UPS)
- (1) Laptop computer
- Remote Alarm Notification
- Modicon PLCs (Quantum & Momentum)
- Square D Model VFDs, variously sized
- Networking devices

# BLUE PILLAR

## ALARMING

- Alarm notifications sent to personnel via email
- Alarm interface included on detail and summary screens, with a summary display available from everywhere in the application
- Supports both database and file-based logging



> *"OPC Systems.Net is a product that takes all of the work out of creating .Net applications that quickly address the business needs at hand. Instead of spending hours upon hours creating OPC level communications and worrying about functionality such as data logging, alarming, remote communication, and GUI component develop, this toolkit provides this functionality at our fingertips that allows us to very quickly get an enterprise-level application based on the .Net framework up and running very quickly. Scalability? Not a problem..."*
>
> **Brad Witter – CTO and Co-founder Blue Pillar, Inc.**

For more information on the avise product visit **www.bluepillar.com.**