Project Profile

Water Treatment Plant Phase II
Smyrna, TN

Filter building entrance

Settling basins, chemical feed building, and tanks

Inside permanganate building

Filter gallery

Revere Control Systems
ENGINEERED TO SERVE

WATER TREATMENT PLANT PHASE II
SMYRNA, TN

Owner: Town of Smyrna, TN
Contact: Allan Cranford (Plant Manager) **(**615) 459-3574

Engineer: Nelson & Company
Contact: Stan Nelson (205) 823-4423
Contractor: Brasfield & Gorrie
Contact: Darryl Vines (205) 328-4000

Description: Complete Water Plant Monitoring and Control System

A. Five Control Panels utilizing Allen-Bradley PLC-5's, communicating via fiber optics over Ethernet Network, plus one Control Panel utilizing Allen-Bradley Block I/O communicating via fiber optics over Remote I/O network.
B. Four Filter Operating Consoles with Total Control Products QuickPanel Operator Interfaces and Allen-Bradley SLC 5/04 Controllers, communicating via Data Highway plus to an Allen-Bradley ControlLogix DH+ to Ethernet Gateway. Incorporated eight (8) similar existing Filter Operating Consoles into system.
C. Extensive field instrumentation, including particle counters, turbidimeters, differential pressure transmitters, venturi flow elements, ultrasonic level transmitters, capacitance level transmitters, pH analyzers, ORP analyzers, chlorine residual analyzers, potassium permangante residual analyzers, streaming current monitor, fluoride analyzer, and a manganese monitor.
D. Computer and Information System including:
- Eight IBM compatible computer workstations communicating via Ethernet LAN using Windows NT 4.0 operating systems.
- One notebook computer with full docking station using Windows
- NT 4.0 operating system.
- Wonderware InTouch 7 graphical user interface software.
- Automatic daily, monthly, and yearly report generation using Microsoft Excel.
- Audio alarm annunciation and paging via existing local PA system and telephone using AlarmWorX+.

E. Miscellaneous systems include:
- CCTV system made up of 10 cameras, 1 multiplexer, 1 time-lapse VCR, and two monitors (8 cameras communicate via fiber optics)
- Telephone system with a capacity of 12 in-coming lines, 60 digital phones, and 8 analog single-line phones.
- Time clock and reporting system.
- Seven remote VGA monitors connected to one of the operator computers
-

Accepted: July 1997

Approximate Value: $ 1,400,000.00