



Robert E. McQuade Water Treatment Plant

Client: Town of Andover, MA

Location: Andover, MA



System Features

- DYNAC® Software •
- “Tri-ndant” 64-bit RISC Servers •
- Automatic Ozone Injection •
- 1800 DYNAC™ Points •
- Redundant PLC’s •
- Redundant Ethernet Fiber Optic LANs •



Located thirty miles north of Boston, MA, the Robert E. McQuade Water Treatment Plant supplies the Town of Andover, MA and six surrounding towns with up to twenty-four MGD of purified water. The plant derives the water from the Merrimack River via a twenty MGD pump station and retention pond. In the seventeen years that the plant has been in operation, the water purity always exceeded state mandated requirements. The plant employs state-of-the-art ozone injection processes to reduce the need for heavy chemical treatment.

Transdyn, working under a prime contract, provided the distributed control system that monitors and controls all aspects of plant operation including filtration, chemical/ozone introduction, and potable water distribution. The system constantly monitors the water volume, flow and quality and provides computer managed responses to optimize plant efficiency and water quality.

The system is managed by Transdyn’s DYNAC® software suite running on triple redundant servers and distributed operator workstations. Process control is accomplished with redundant Programmable Logic Controllers (PLC’s) located throughout the facility. A redundant high-availability communications-plant-wide fiber optic Ethernet network provides high-availability communications between the servers and field controllers.