



RAW WATER SYSTEM IMPROVEMENTS & WATER STORAGE TANK REPLACEMENT HAVERHILL CORNER, NH



Dufresne Group completed an evaluation of the existing raw water transmission main and storage facilities for the Haverhill Corner Precinct. Two existing masonry reservoirs were in poor shape with one of the two 180,000 gallon reservoirs completely out of service after several failed repair attempts. An 8,000 foot raw water transmission main sometimes was air bound and subjected to negative pressures. In addition the raw water main is only 2 feet deep in places leaving it susceptible to freezing in the winter. With no flow control on the raw water main the Precinct wasted approximately 47,000 gallons per day of chlorinated water through the existing tank overflow.

Dufresne Group evaluated alternatives for replacement of the existing storage based on desired system fire flow and developed plans for tank replacement as well as improvements to the upper raw water transmission main to eliminate the overflow of chlorinated water at the tank site while maintaining flow within the main to prevent freezing. Final plans included options for either precast prestressed concrete and glass fused to steel water storage tank to provide a minimum of 360,000 gallons of storage, bid separately from the raw water transmission main improvements.

All water system improvements were complete and in service by August of 2012.

Reference:
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KEY FEATURES

- Completed project using RD loan/grants.
- Maintained existing reservoir for Historical Compliance under section 106.
- Storage tank designed for both precast prestressed concrete and glass fused to steel alternative materials of construction to maximize competition.