



*Project site*

A comprehensive evaluation of the Barre water system treatment, storage and transmission distribution piping system was completed by Dufresne Group principals as a project while employed at Dufresne-Henry. The Basis of Design Report for the Barre Water Treatment Facility contained the following specific analyses:

- Source evaluation and improvements investigations.
- Comprehensive hydraulic investigations of the complete water system including in-depth computer modeling.
- Storage tank sizing and siting evaluation.
- Alternative treatment process comparison.
- Service area delineation for setting water system connection policies.

The recommendations for water treatment were implemented with the 1992 construction of a 6.0 mgd treatment plant. The City of Barre continues to rely on the Basis of Design report for planning of storage and piping system improvements.

## KEY FEATURES:

- Identification of long-term water main improvements for providing fire flow protection.
- Water storage evaluation for correcting system hydraulic deficiencies and providing for future needs.
- Proactive planning for THM control by recommending chlorine dioxide and PAC treatment.
- Additional barriers of protection and filtration criteria recommended in excess of regulating requirements.