

WATER MAIN IMPROVEMENTS

VILLAGE OF BELLOWS FALLS, VERMONT



*Hydrant Installation
(School/Henry Project)*



*Water Main Installation on Industrial Drive
(Route 5 North Project)*

A water system evaluation report prepared by Dufresne Group identified several deficiencies within the water distribution system, including hydraulic deficiencies and undersized piping. The report identified 16,915 lf of water main as having hydraulic deficiencies. These water mains were designated as a high priority for replacement and categorized as Phase 2. An additional 15,515 lf of undersized water mains were identified for long term replacement in Phase 3. The Village decided to proceed with an \$8.2 million project that included Phase 1 improvements at the Water Treatment Plant, a source control valve vault, and 20,000 lf of water main improvements, including all of Phase 2 water mains and some of Phase 3 water mains.

The improvements were designed as seven separate construction projects. After the first four construction projects were completed, it was determined that there were significant cost savings to date in the project, which allowed the Village to add an additional 6,100 lf of water main improvements to the project without increasing the budget. The following projects were completed:

- Phase 1 WTF Improvements
- Morgan's Field Water Main (5,100 lf and source control vault)
- School/Henry Streets Water Main (2,800 lf)
- Route 5 North Water Main (6,230 lf)
- Route 5 Water Main (7,070 lf)
- Lockwood/King/Pleasant Streets Water Main (1,050 lf)
- Hadley/Chase/Oak Streets Water Main (1,040 lf)
- Burt Street Water Main (1,550 lf)
- Mill Street (1,270 lf)

KEY FEATURES:

- \$8.2 million funded by DWSRF with a -3% interest rate, equating to approximately a 40% grant.
- Replacement of over 26,000 LF of water main on 22 different streets through 9 separate projects.
- Hadley, Chase, Oak, Burt and Mill Streets were also coordinated with sewer main replacements.
- Construction on the first project began in late 2014 and all projects are anticipated to be completed by fall of 2016.
- DG provided preliminary, final design and construction phase engineering services, as well as funding assistance.