

# WEATHERSFIELD MIDDLE SCHOOL RENOVATIONS

TOWN OF WEATHERSFIELD, VERMONT



*Stormwater Chamber Construction*



*Stormwater Treatment Tank*

The Weathersfield Middle School underwent a complete renovation in 2007 to accommodate students and staff from the Perkinsville Elementary School. Dufresne Group designed the civil improvements including replacement wastewater disposal fields, new parking and drive areas, reconstructed playing fields and new stormwater collection and treatment systems.

Dufresne Group designed the stormwater treatment system to meet State water quality standards. Runoff from 2.5 acres of impervious surface (a 200% increase) is collected by two separate stormwater collection systems which discharge to two underground sand filters under the playing fields.

The sand filters, combined with rooftop and non-rooftop disconnects, provide treatment to meet the Water Quality Treatment and Groundwater Recharge Treatment Standards. The sand filters are followed by detention chambers that provide treatment to meet the Channel Protection and Overbank Flood Protection Standards. The discharge from the detention chambers is combined in one common storm drain piped to the discharge point to the Mill Brook tributary.

## KEY FEATURES:

- Stormwater treatment for a 200% increase in impervious area.
- Credits for rooftop and non-rooftop disconnects.
- Underground sand filters and detention chambers sited below playing fields.
- Native sandy soils increased stormwater treatment efficiency.