

Cabot School Stormwater Planning and Implementation, Cabot, Vermont



Services / Expertise

Water Quality
Stormwater Management
Stormwater Retrofit Design
Construction Oversight
Hydrogeologic Evaluation

Markets

Local Government
Watershed Organizations

Project Location

Cabot, Vermont

Date Completed

October 2016

Project Owner

Friends of the Winooski River

Project ID#

14-193

This project was completed on time and within budget.



THE Cabot School generates runoff that enters the local stormwater system before being discharged to the nearby Winooski River without treatment, some of which is generated by nearby properties including 900 feet of Danville Hill Road. The goal of this project was to complete a stormwater master plan for the Cabot School campus and its associated drainage area, including upland “run on” water. The result was 100% designs for and implementation of three treatment areas on school property, along with a list of other runoff control projects that can be pursued in the future.

The Friends of the Winooski River retained Stone to assess the drainage area and identify possible practices for stormwater mitigation and water quality improvements. An initial list of seven opportunities was narrowed to three implementation projects using three broad criteria: greatest stormwater reduction and water quality benefits, projects that required detailed engineering design to implement, and projects that Cabot School was interested in pursuing. The three highest-priority practices, which Stone designed and oversaw construction of in 2016, were:

- Expanding, reshaping, and rock-lining an existing swale to reduce bank slumping, restore swale profile, and install check dams to create storage and treatment for a 1.5-acre drainage area, including approximately 900 feet of Danville Hill Road. The swale provides water quality treatment for the first 0.75 inches of runoff (or about 85% of the full WQv of 1,700 cubic feet).
- Expanding, reshaping, and rock-lining an existing swale, and installing a series of six check dams, to address significant erosion along the footpath connecting the main parking area to the high school building, treating 0.2 acres of impervious surface with a WQv of 620 cubic feet).
- Enlarging, reshaping, and replanting a vegetated swale and pooling area at the north end of campus, to improve treatment of water drained from the school’s athletic area.