

REINFORCED CONCRETE RETAINING WALL

TOWN OF ARLINGTON, VERMONT



Existing Wall



New Wall

Dufresne Group provided civil and site engineering for the replacement of a deteriorating concrete retaining wall along Old Mill Road in Arlington. The existing 220 linear foot long retaining wall suffered damage as a result of Tropical Storm Irene. The wall's proximity to Peter's Brook left it susceptible to further damage. The design provided for the replacement of the existing damaged wall with a new 240 linear foot long reinforced concrete retaining wall. The project also included replacing rip rap for bank stabilization to the north of the wall and impact protection along the face of the wall.

This project was funded by the Federal Highway Administration. Dufresne Group worked with VTrans District 1, Vermont Watershed Management Division – Rivers Program and the US Army Corps of Engineers to provide topographic survey, soil borings and bid documents within three months for a Fall 2013 construction schedule. However, due to the biological species in the stream, construction was suspended until June 1, 2014 to comply with the Stream Alteration Permit.

During the design phase, the Town requested assistance from DG for the Stream Alteration Permit from the VT Watershed Management Division, the Category 2 approval from the US Army Corps of Engineers and approval from VTrans Historic Preservation. DG worked with all three agencies to obtain approvals for a June 1 start date. DG was able to provide all permit assistance within the original design budget.

KEY FEATURES:

- Met design schedule of 3 months from notice to proceed to bid documents.
- Worked with the State Stream Engineer and VTrans District 1 to obtain approval for the design.
- Prepared an Erosion Prevention and Sediment Control Plan with requirements for stream bypass, dewatering and sediment control.
- Prepared multiple Special Provisions for use with the VTrans Standard Specifications for Construction.