



Vermont Better Roads Grant Program Application

Please complete one application per category and/or project you are applying for. You may make copies of the application for multiple applications per category and/or multiple categories.

Please check the Category you are applying for:

- B. Correction of a Road Related Erosion Problem and/or Stormwater Mitigation Retrofit for both gravel and paved roads
- C. Correction of a Stream Bank or Slope Related Problem
- D. Structure/culvert upgrades

Town/Organization: Town of Windsor

Project Name: Maple Street Bank Stabilization - Phase 1

Road Name: Maple Street TH #: 45 Structure # (if applicable): _____

Road Type: Paved Uncurbed
Class 3

Watershed: Mill Brook

Please provide a thorough description of the problem (ex. Roadway has steep slope with no ditch which is causing roadway erosion):

Steep bank between paved roadway and Mill Brook has been destabilizing over the last five years. This stretch of river has particularly deteriorated after several high flow events: Tropical Storm Irene in 2011, July rain event 2013 and August rain event 2014.

Description of Project and how you plan to complete the work (ex. Stone line 500' of ditch by reshaping ditch and stone lining, working from the top of the project down to the bottom):

The town intends to address the issues in two phases. Phase 1, as included in this application, involves rebuilding the slope using rip-rap and vegetation to hold together the bank at the northern end where the bank is most destabilized. It also involves repairs to a culvert and replacing the roadside bollards. Phase 2 involve future improvements to rebuild the slope using rip-rap and vegetation at the southern end where the bank is not yet destabilized, but would in a future high-water event. +

Expected Effects (+ & -) on water quality (ex. Erosion will be eliminated by placing the stone ditch):

The project will eliminate erosion by placing rip-rap and re-vegetating the slope between the river and Maple Street. The vegetation along the edge of the roadway will also help to reduce the amount sediment going directly from the road to the river.



Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). 0-50'

Progress to Date:

An engineer was hired to help prepare this application. No additional work has been completed to date.

Is there an emergency reason this project must be completed quickly? If yes, please explain:

No

Has this project been identified through a municipal road inventory, capital budget plan, tactical basin plan, culvert inventory, or other management plan? If yes, please list which.

Yes: _____

No

Please list any professionals you may have contacted for assistance with this project (ANR River Management Engineer, Army Corps of Engineers, VTrans District Technical staff, Basin Planner etc.):

- Alan May, Better Roads Program
- Jason Rasmussen and Katharine Otto (SWCRPC)
- Todd Menees, Stream Alteration Engineer
- Chris Bump, VTrans District 4
- Michael Hildenbrand, DuBois & King

Is the project located in the town "Right of Way?" Yes, No, Both (if "Both" please explain further).

Both. A portion of the project is located on 33 Maple Street. See the attached form.

Will the town road crew complete this work? Yes, No, Some (if "some" please explain further).

No. The town intends to hire a contractor to complete this work.



Describe how the grant funds will be spent and/or attach a project budget:

The funds will be spent procuring engineering services to design a solution to the erosion problem.

How do you plan to meet the required 20% match on this grant?:

The local match will be met using approved municipal highway bond funds.

Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$ 17,000.00

Estimated Total Project Cost (including 20% local match): \$ 20,400.00

Estimated Completion Date: 09/30/2016

REQUIRED ATTACHMENTS:

- Itemized Cost Estimate (labor, equipment, materials)
(For assistance, call Better Backroads at 802-828-4585)
- Project Location Map
(Please show location of affected water; 1:12,000 USGS map, if possible)
- Sketch of proposed erosion control measures, including:
 - Distances (ft.)
 - Estimate of waste & borrow quantities
 - Approx. location of town/other right-of-way and/or property lines
- Photo(s) of the project area.
- Agreement for Entry and/or Deed of Easement (if project is outside Town ROW).
- If project involves stream or river/road conflict, include documentation of consultation with a River Management Engineer.
- Other appropriate supporting documents.

By signing this application I certify that all the information provided is accurate to the best of my knowledge. We will comply with all the requirements of the grant including making our books available for audit if required.

SIGNATURE OF APPLICANT: (Must be Town Administrator/Manager or Select Board Chair)

Name:

Title:

Town Manager

Cost Estimate Worksheet

Town and Road Name:

Project Name:

Labor	Rate	# Hours	Total (Rate x Hours)
Labor Total			

Equipment	Rate	# Hours	Total (Rate x Hours)
Equipment Total			

Materials	Rate	Amount	Total (Rate x Amount)
Materials Total			

Miscellaneous	Rate	Amount	Total (Rate x Hours)
Miscellaneous Total			

Grand Total _____
Match _____



FY17 Vermont Better Roads Grant Application
Town of Windsor
Maple Street Bank Stabilization Project



Figure 1: The bank between Mill Brook and Maple Street in Windsor is eroding. Note how soil is sloughing off along the edge of the roadway and the bollards are listing.



Figure 2: This culvert is located near the southern end of the project and will be repaired as part of this project.



Figure 3: This project will involve placing riprap to stabilize this bank, replacing the bollards and establishing roadside vegetation

TOWN OF WINDSOR, VERMONT

AGREEMENT FOR ENTRY; LIMITED RELEASE

THIS AGREEMENT, made and entered into this 10 day of April, 2016 by and between the Town of Windsor, in the State of Vermont, (hereinafter "Town"), and Dennis Lavanway (Name), of 33 Maple Street (address), in the Town of Windsor, Vermont (hereinafter "Owner").

WHEREAS, the Owner owns certain land and premises in the Town of Windsor, which adjoin Town Highway No. 45 (Maple Street) maintained by the Town; and

WHEREAS, the Town desires, at its own expense, to perform certain work on or for the benefit of the highway (described more particularly below) (hereinafter "the Work"), which Work also will be of benefit to the Owner's property; and

WHEREAS, performance of the Work may require the Town, with its own forces or those of contractors, to enter upon the Owner's property, in areas outside the existing highway right-of-way;

NOW, THEREFORE, the parties, intending to be legally bound, hereby agree as follows:

- 1. Description of the Work.** The Work will consist of the following:
Construct improvements to stabilize the bank to reduce the erosion that is occurring to the steep bank that is located between Maple Street and the Mill Brook.
- 2. Right of Entry; Limited Release.** The Owner hereby grants the Town, with its own forces or those of contractors, the right to enter upon the Owner's property, with workers and equipment, for the purpose of undertaking the Work, and hereby waives, releases and discharges any claims, whether styled as trespass or otherwise, that may arise from such entry.
- 3. Retention of Certain Other Rights.** Notwithstanding paragraph 2 of this Agreement, the Owner retains the right to assert against the Town, its contractors or other parties any claims that may arise from negligent acts or omissions during performance of the Work.

(Over)

4. Waiver: The Owner having been informed of its right to an appraisal to estimate the value of the right-of-entry herein granted and to receive just compensation based on that appraisal, hereby waives these rights.

5. This Agreement for Entry; Limited Release is not binding unless one of the parties signing below receives a Better Backroads grant to perform the Work set forth above in Paragraph 1.

For The Town:

Lynn Grace
Signature

LYNN GRACE
Printed Name

Acting Town Manager
Title (must be authorized agent)

Owner:

Dennis R LaVanway
Signature

Dennis R LaVanway
Printed Name (must be owner)

In Presence of:

Sandra H. Micka
Signature

Sandra H. Micka
Name of Witness

4/5/2016
Date

In Presence of:

Lynn Grace
Signature

LYNN GRACE
Name of Witness

4/10/16
Date

PLEASE NOTIFY ME by phone (674-4040) or mail when construction will start on the bank between Maple St and Mill Brook.

Dennis LaVanway



Ascutney Professional Building, Route 5
Post Office Box 320, Ascutney, VT 05030
802 674-9201 www.swcrpc.org

April 11, 2016

Alan May
Vermont Agency of Transportation Municipal Assistance Bureau
1 National Life Drive
Montpelier, VT 05633

Subject: Maple Street Project in Windsor - 2016 Better Roads Application

Dear Alan,

We are writing in support of Windsor's application for the Maple Street project. Katharine Otto from our office visited the site in January 2016 with Alan May and town representatives, and again in March 2016 with Todd Menees and town representatives. An engineer hired by the Town to help with the application also visited the site in March 2016. The proposed work should significantly reduce erosion and address slope instability issues along Maple Street.

This project supports the following goals and policies of the 2014 Southern Windsor County Regional Transportation Plan:

- Goal 6 - Strive to provide transportation infrastructures that are resilient to changing weather patterns and that efficiently and safely handle traffic during natural hazard events and other emergency situations.
- Policy 11 - Maintenance of the existing transportation system shall minimize water pollution, in accordance with the current Vermont Town Highway Codes and Standards, State stormwater rules and other best management practices.

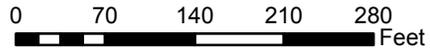
This is a high priority project for the town due to increasing river bank/slope instability in the last few months. We look forward to working with Windsor on their Road Erosion Inventory next year where we will help to identify other priority sites.

Thank you for your consideration of this important project.

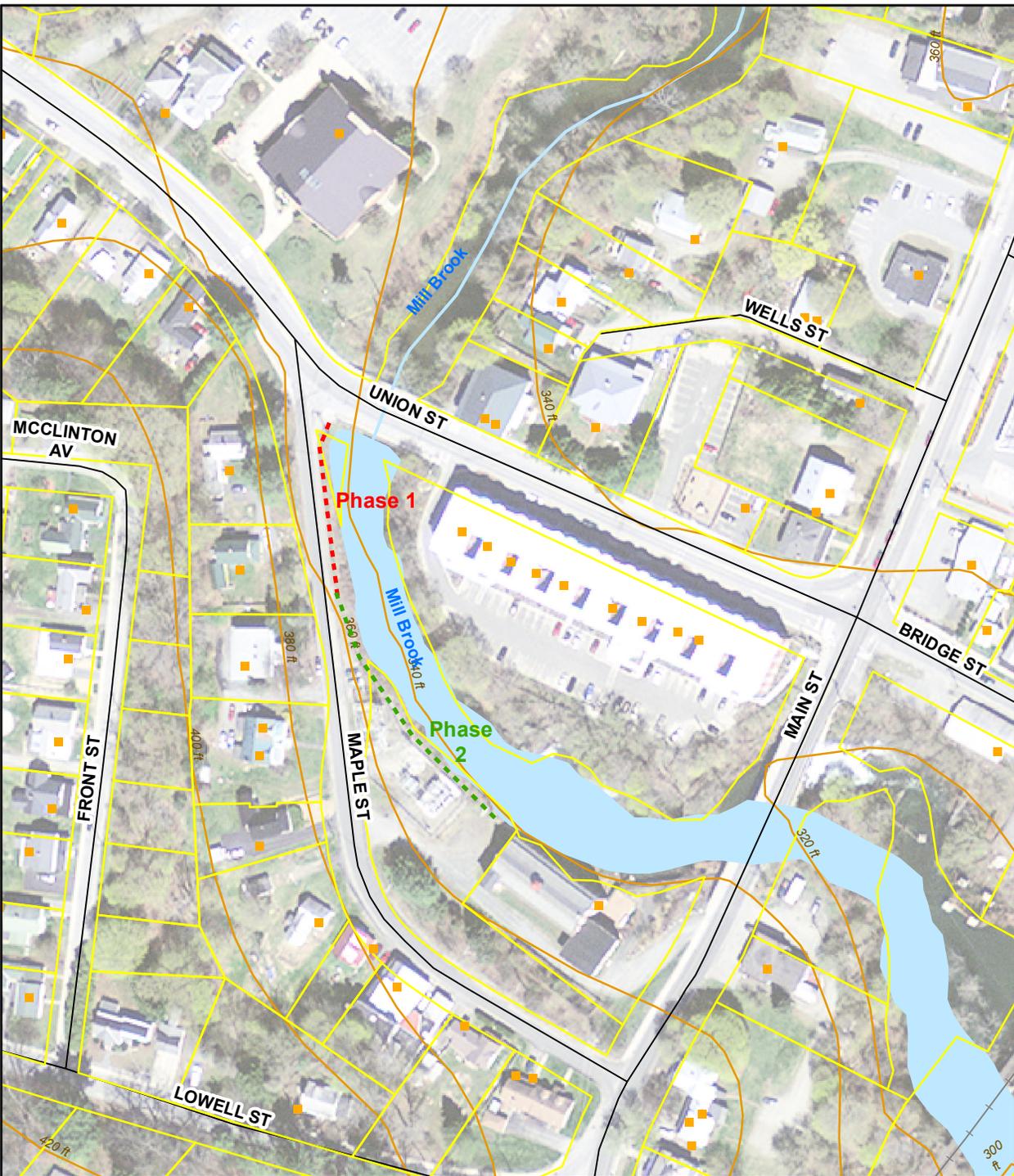
Sincerely,

Thomas Kennedy
Executive Director

**Maple St Bank Stabilization Phases I & 2
Town of Windsor
Better Roads Application - April 2015**



- Building
- Parcels
- Interstate Highway
- State or US Highway
- Town Highway
- Other
- Railroad
- 20ft Contours
- Rivers and Streams
- Lakes and Ponds
- Town Boundary



Data Sources: Roads (Vermont Agency of Transportation 2015),
20ft Contour Lines (United States Geological Survey 2012),
Rivers and waterbodies (Vermont Hydrographic Dataset 2008),
Parcels (Russell Graphics 2014),
Town Boundaries (Vermont Center for Geographic Information 2012),
Railroad (Vermont Agency of Transportation 2014),
Aerial (National Agricultural Imagery Program 2011)

VT State Plane Meters, NAD 83

Map for planning purposes only.
Not for regulatory interpretation.

Map drawn January 29, 2016

