



# FY17 Vermont Better Roads Grant Application

**Please complete this page ONCE and return with your Grant Category Application(s)**

Town/Organization: \_\_\_\_\_ Contact Person(s): \_\_\_\_\_

Address: \_\_\_\_\_

*Street Address*

*Town*

*Zip*

Email: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

DUNS #: \_\_\_\_\_ Fiscal Year End Month (MM): \_\_\_\_\_

Accounting System:  Automated  Manual  Combination

Please use the suggested documentation checklist below to ensure that all of the relevant items regarding your application have been included.

- Grant application cover sheet (Only submit one)
- Grant application form (One per category/project)
- Itemized Cost estimate for labor, equipment, and materials (see enclosed Cost Estimate Worksheet). If applicable, please break down funding by source (i.e. different grant sources)
- Project Location Map (please show location of affected water)
- Sketch of proposed erosion control measures or other management practices, including distances in feet
  - Also show approximate location of town/other right-of-way and/or property lines
- Photo(s) of the project area
- Letters of Support (RPC, VTrans District Technical Staff, ANR Rivers and Streams Engineers, etc.)
- If Category C River/Road Conflict or Category D River/Stream Structure or Culvert, you must attach ANR/ACOE consultation



# 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: \_\_\_\_\_

Project Name: \_\_\_\_\_

Road Name: \_\_\_\_\_ TH #: \_\_\_\_\_ Structure # (if applicable): \_\_\_\_\_

Road Type:    Paved or Unpaved (circle one)                      Curbed or Uncurbed (circle one)

Class 1    Class 2    Class 3    Class 4 (circle one)

Watershed: \_\_\_\_\_

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

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):

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



Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). Please circle one:      0-50'                      50-250'                      250'+

Progress to Date:

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

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.):

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

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



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

How do you plan to meet the required 20% match on this grant?:  
In-kind labor and equipment.

Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$ 40,000.00  
Estimated Total Project Cost (including 20% local match): \$ 58,125.00  
Estimated Completion Date: 09/01/2016

**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.

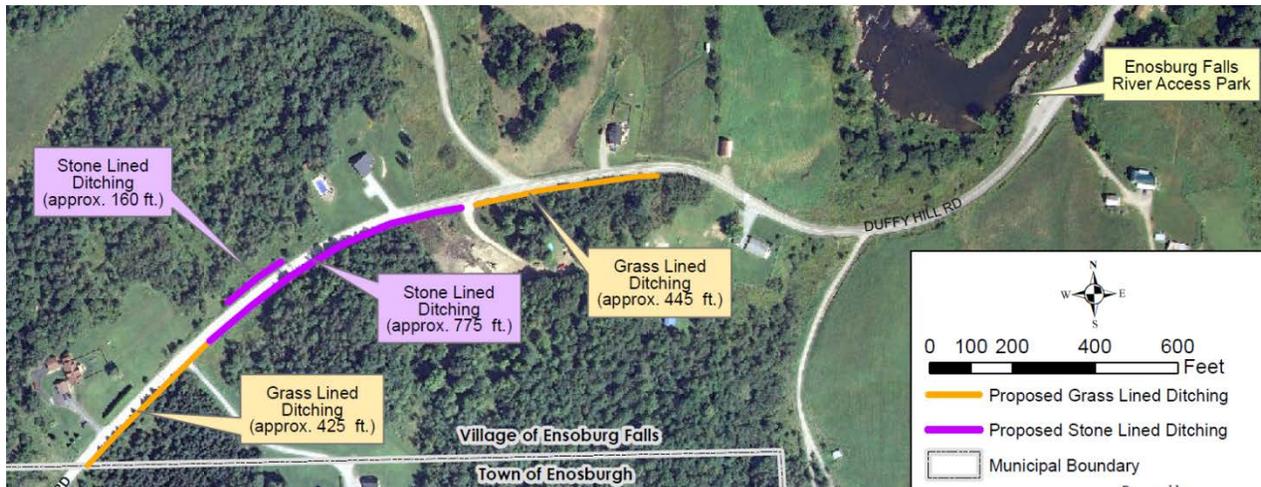
By signing this application I certify that all the information provided is accurate to the best of my knowledge. We will comply with all the requirements of the grant including making our books available for audit if required.

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

Name:  Title: Village Manager

# Proposed Project on Duffy Hill Road to Address Erosion Issues

In 2015, the Village received a Better Back Roads Category B grant to perform ditching work which will start on May 1<sup>st</sup> with an anticipated completion date of May 6, 2016. As the map below illustrates, the ditching project will begin at the very top of Duffy Hill Road. With the exception of Culvert #1, the proposed culvert project will continue from the end of the ditching project to the bottom of the hill which drains directly into the Missisquoi River.



A Category D – Culvert project grant will enable the Village of Enosburg Falls to completely address the issue of silt and sediment reaching the Missisquoi River - top to bottom – on Duffy Hill.







**Culvert #2 Outlet**

**EXPLANATION OF PROPOSED WORK TO BE PERFORMED ON CULVERT #2:**

**#2:**

Replace the 30" culvert pipe.  
Increase length from 38' to 50'.

Install riprap plunge pool at the outlet.



**Culvert #2 - View Downstream from Outlet**



**Culvert #3 - Outlet Invert Pipe Corrosion**



**Culvert #3 - Outlet from Above**



**Culvert #3 - View Downstream from Outlet**



**Culvert #3 - Inlet**

**EXPLANATION OF PROPOSED WORK TO BE PERFORMED ON CULVERT #3:**

15" undersized culvert to be replaced with 18" culvert. Length increased from 33' to 40'.

Install riprap plunge pool at outlet.

**Culvert #4 - Outlet**



**EXPLANATION OF PROPOSED WORK TO  
BE PERFORMED ON CULVERTS #4 AND  
#5:**

#4: 15" undersized culvert to be replaced with a 18" culvert.  
Length increased from 41' to 50'.

#5: Replace 24" culvert. Increase length from 76' to 80'.

**Culvert #5 - Inlet**



**Culvert #5 - Inlet Header Failing**



**Culvert # 5 - Outlet  
and Side View**





**Culvert #6 - Inlet**



**Culvert #6 - Outland and Incised Ditch**



**Culvert #6 - Outlet**

**EXPLANATION OF PROPOSED WORK TO BE  
PERFORMED ON CULVERT #6:**

Replace 18" culvert. Increase length from 59' to 70'. Install riprap plunge pool at outlet to reduce erosion leading to the Missisquoi River.



**Culvert #7 Outlet**



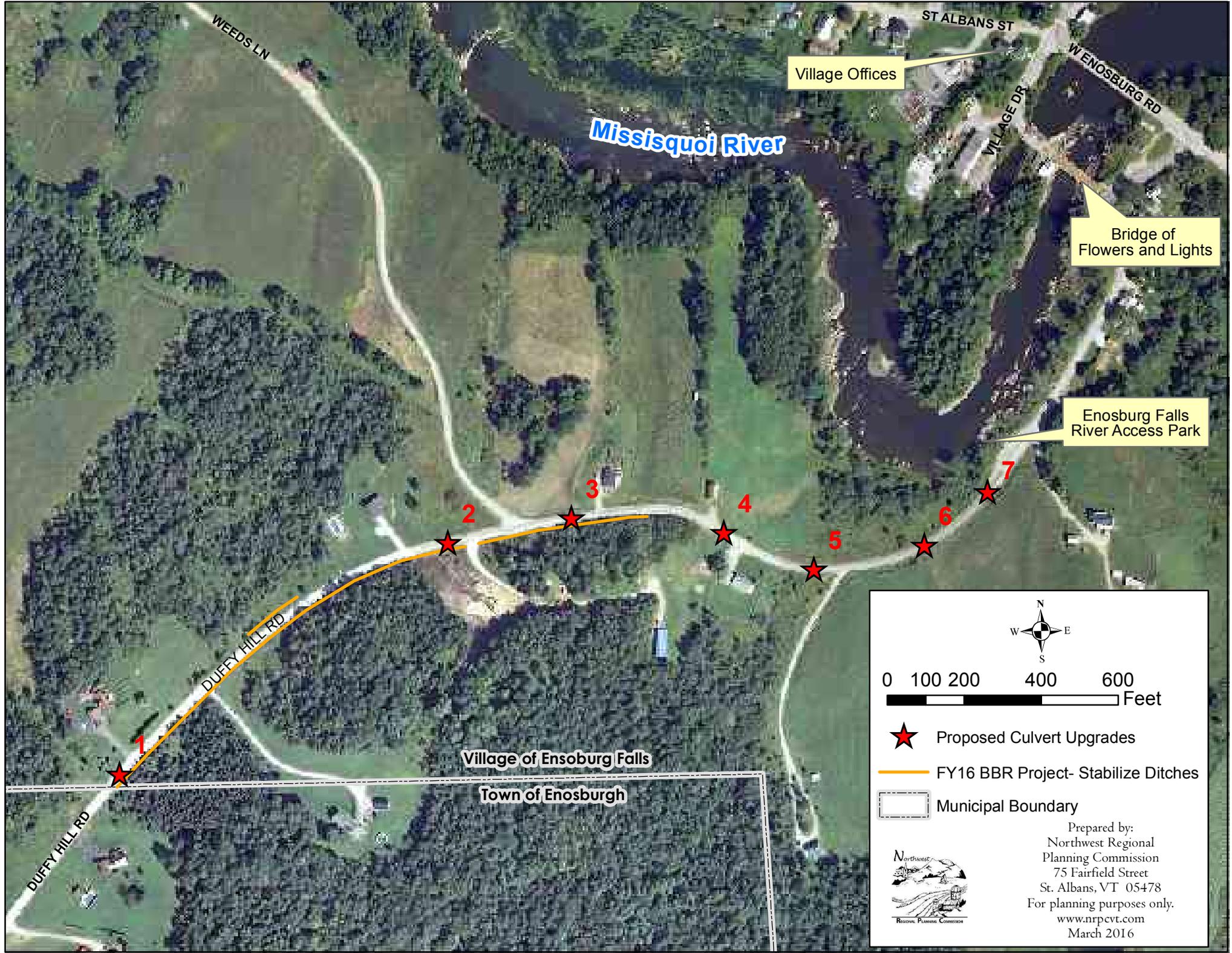
**Culvert #7 Outlet less than 100 feet from Missisquoi River**



**Culvert #7 Inlet**

**EXPLANATION OF PROPOSED WORK TO BE PERFORMED ON CULVERT #7:**

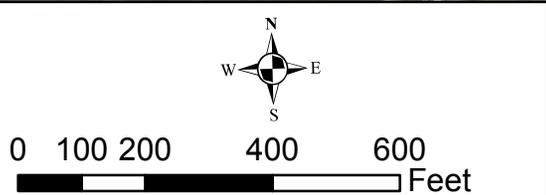
15" undersized culvert to be replaced with a 18" culvert. Length increased from 43' to 50'. Install riprap stone plunge pool on outlet.



Village Offices

Bridge of Flowers and Lights

Enosburg Falls River Access Park



-  Proposed Culvert Upgrades
-  FY16 BBR Project- Stabilize Ditches
-  Municipal Boundary



Prepared by:  
 Northwest Regional  
 Planning Commission  
 75 Fairfield Street  
 St. Albans, VT 05478  
 For planning purposes only.  
[www.nrpcvt.com](http://www.nrpcvt.com)  
 March 2016

Village And Town Lines

Duffy Hill Rd.

#1 15'x33'  
45'

#2 now 30'x38'  
50'

Green Dr.

#3 45'

#4 48' now 15'x41'  
15'x33'

Barb Winst

#5 now 24'x76'  
76'

Mc Dermott

Mark Larose

need Rip Rap Pool \*

Weed Ln

?? RipRap pool

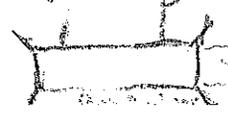
#6 new 18'x59'  
66'

new 5'x43'  
50'

need Rip Rap Pools \*

Island

Missisquoi River



# Cost Estimate Worksheet

Town and Road Name:

Project Name:

Labor	Rate	# Hours	Total (Rate x Hours)
<b>Labor Total</b>			

Equipment	Rate	# Hours	Total (Rate x Hours)
<b>Equipment Total</b>			

Materials	Rate	Amount	Total (Rate x Amount)
<b>Materials Total</b>			

Miscellaneous	Rate	Amount	Total (Rate x Hours)
<b>Miscellaneous Total</b>			

Grand Total \_\_\_\_\_  
 Match \_\_\_\_\_





75 Fairfield Street • St. Albans, VT 05478 • (802) 524-5958 • Fax (802) 527-2948

April 14, 2016

Caroline Marcy, Director of Finance  
Village of Enosburg Falls  
42 Village Drive  
Enosburg Falls, VT 05450

Dear Caroline:

The Northwest Regional Planning Commission (NRPC) is pleased to support the Village of Enosburg's Better Roads Program grant application. It is my understanding that the Town is seeking funds to replace seven cross culverts along Duffy Hill Road. When I toured the project site with you in March, I could clearly see the need for these upgrades and think the culvert upgrades will complement the ditch stabilization already planned for this field season.

This project will have positive water quality benefits. In conjunction with rock lining the ditch, upgrading the culverts along this roadway will reduce erosion and eliminate potential sediment and nutrient from entering the Missiquoi River and ultimately Lake Champlain.

Good luck with your project!

Sincerely:

Bethany Remmers  
Assistant Director