



# 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:

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

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

Estimated Total Project Cost (including 20% local match): \_\_\_\_\_

Estimated Completion Date: \_\_\_\_\_

**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: \_\_\_\_\_



# 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

(Young Rd Section) As referenced in the Vermont Betterback Road Manual, efficient removal of runoff from the roadway is imperative to preserve the roadbed and banks. This approximately .4 of a mile section of roadway, does not have ditches on either side, nor is it crowned. Lack of ditching and crown is causing roadway erosion, and, sediment deposit in the Lamoille River. Although, most of the roadway is considered "low-risk" on the ANR Atlas, the end section near Rt 16 is high, and is also the closest point to the Lamoille River.

(Lauredon Ave Section) During heavy rain events and spring thaws, water follows the path indicated on the satellite image and dumps into the Greensboro Brook. In the process, storm water overwhelms the capacity of the wetland, floods the yards of homes on Wilson St and periodically erodes the gravel parking lot next to East St. Stormwater is then conducted directly into the Brook through a storm drain and eventually the Lamoille River

(Young Rd Section) The project will start at the top and work down to the bottom. The Ditches will be located on the up slope side of the road in order to prevent water from flowing onto the road from uphill. Ditching will be done by the Town Road Crew, using the Town's excavator. We will also remove all old material using Town Equipment and provide all new material as needed. Depending on the grade of the ditch, it will either be stone lined or reseeded, ditches with less than a 5% slope will be grass and sections over 5% will be rip-rapped. Near the Route 16 end of the project, which has been determined to have the highest risk of erosion by the Agency of Natural Resources, a check dam will be created to slow the velocity.

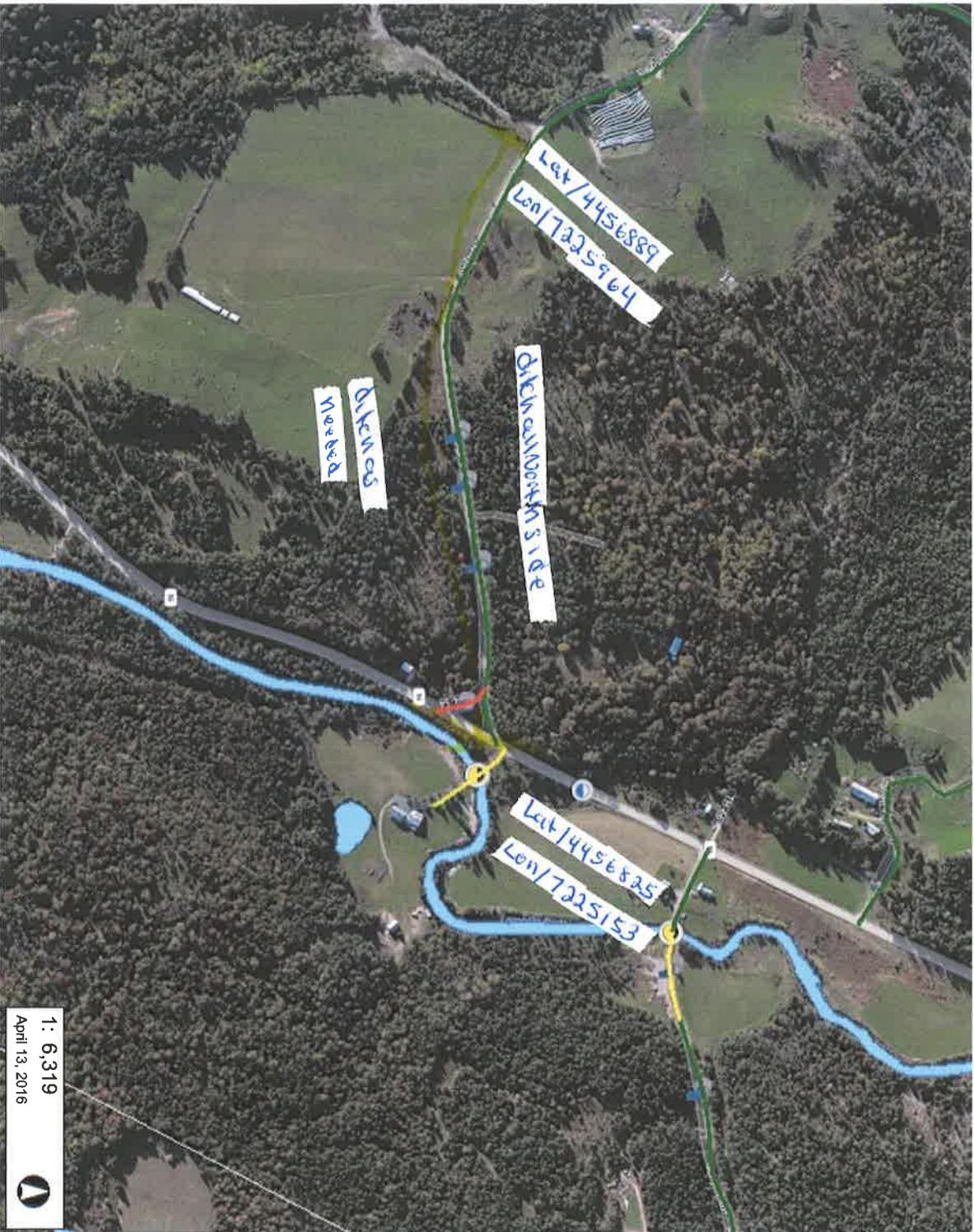
(Lauredon Ave Section) The Town is interested in addressing the problem at its source, from the height of the drainage area down to the wetland area. Eventually our plan may include multiple treatment areas but we have identified several roadside tasks that will immediately provide some relief to the problem. Starting at the top of the hill, a ditch is needed to divert water before the school parking lot. Photos #1 and 2. Similarly, the ditch below school needs improvement and cleaned catchment area above Town hall. Photos #3,4. Below Town Hall, our plan is to build a catchment area below the parking area (photo #9), remove pavement in channel and grass berm to promote sheet flow onto the Town Hall Green. Photos #5,6.

(Young Rd Section) Properly designed ditches will provide an opportunity for sediments and other pollutants to be removed from runoff water before it enters surface waters; significantly reducing the amount of sediment and pollutants entering the Lamoille River

(Lauredon Ave Section) These tasks are intended to remove excessive storm water volume that eventually washes gravel from this parking area and into the Brook. Photos #7,8. The final photo shows flood water leaving wetland and heading for the town parking lot and the Lamoille river.

(Young Rd Section) I wouldn't call it an emergency, but it is a high risk area if we receive heavy rains.

(Lauredon Ave Section) We have been experiencing heavy rains, flooding and washouts, particularly in the parking lot area. We would like to correct this situation as soon as possible to prevent additional sediment entering the waterways.



321.0 0 160.00 321.0 Meters  
 WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere 1" = 527 Ft. 1cm = 63 Meters  
 © Vermont Agency of Natural Resources THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

1: 6,319  
 April 13, 2016



**LEGEND**

- Low Risk, 0.5 - 4
- Moderate Risk, 4.5 - 6
- High Risk, >= 6.5
- DFIRM - Letter of Map Revisio
- VTRANS State and Town Long
- VTRANS State Short Structure
- Town Bridge
- Town Culvert
- Waterbody
- Town Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas



During heavy rain events and spring thaws, water follows the path indicated on the satellite image and dumps into the Greensboro Brook. In the process, storm water overwhelms the capacity of the wetland, floods the yards of homes on Wilson St and periodically erodes the gravel parking lot next to East St. Stormwater is then conducted directly into the Brook through a storm drain. The Town is interested in addressing the problem at it's source, from the height of the drainage area down to the wetland area. Eventually our plan may include multiple treatment areas but we have identified several roadside tasks that will immediately provide some relief to the problem. These solutions were developed with the assistance of Jim Ryan, Alan May, and Rachael Beauregard.

Starting at the top of the hill, a ditch is needed to divert water before the school parking lot. Photos #1 and 2. Similarly, the ditch below school needs improvement and cleaned catchment area above Town hall. Photos #3,4. Below Town Hall, our plan is to build a catchment area below the parking area (photo #9), remove pavement in channel and grass berm to promote sheet flow onto the Town Hall Green. Photos #5,6. These tasks are intended to remove excessive storm water volume that eventually washes gravel from this parking area and into the Brook. Photos #7,8. The final photo shows flood water leaving wetland and heading for the town parking lot and the Lamoille river.

**Vermont Department of Environmental Conservation**

Watershed Management Division  
1 National Life Drive, Main 2  
Montpelier, Vermont 05620-3522

*Agency of Natural Resources*

[phone] 802-490-6176  
[e-mail] [danielle.owczarski@vermont.gov](mailto:danielle.owczarski@vermont.gov)

April 14, 2016

Alan May  
Better Backroads Coordinator  
Municipal Assistance Bureau  
Highway Division  
1 National Life Drive  
Montpelier, VT 05633

Dear Alan,

I'm writing in full support of the Town of Greensboro grant proposal to implement road stormwater practices along Lauredon Avenue in Greensboro, Vermont. The implementation proposed is the result of site visit with Jim Ryan, former VTDEC watershed coordinator and Greensboro selectboard member Peter Romans to identify and rectify stormwater runoff issues impacting town and residential infrastructure and Greensboro Brook.

This winter I met with Peter Romans and Jim Ryan to review plans to move forward and apply for funding. This project will be in combination with an Ecosystem Restoration Program grant application to scope stormwater treatment areas along Lauredon Avenue. Both projects will result in an overall benefit to water quality in Greensboro Brook and Caspian Lake and stormwater management in the town center.

The 2009 VTDEC Lamoille Basin Plan specifically identifies the action to inventory and prioritize transportation related projects for municipal officials, ultimately reducing maintenance, improving water quality and aquatic habitat, and saving funds for towns. This proposal will carry forward the inventory work into the implementation phase.

As DEC's Watershed Coordinator for the Lamoille River basin, I fully support this proposal.

Please feel free to contact me with any questions or if I can be of further assistance.

Sincerely,



Danielle Owczarski, VTDEC Watershed Coordinator

Cc: Peter Romans – Selectboard Member, Town of Greensboro  
Valdine Hall – Greensboro Town Clerk/Treasurer