



# 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: City of Montpelier

Project Name: Gould Hill Ditching

Road Name: Gould Hill TH #: 154 Structure # (if applicable): \_\_\_\_\_

Road Type: Unpaved Uncurbed

Class 4

Watershed: North Branch

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

Gould Hill is a steep roadway with little to no ditching causing roadway erosion. The existing ditch is insufficient and needs to be shaped in order to properly convey storm water. Driveway cross culverts are undersized.

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):

We plan on installing approximately 1500' of stone line ditch along the length of the road, starting from the top of the hill and working toward the bottom. Driveway culverts are not properly sized or aligned and will be replaced. As part of our regular grading maintenance we will regrade the road so that water will be able to enter the ditch.

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

Erosion at this project location will be significantly reduced. Erosion will not be completely eliminated until a second phase project is completed. A second phase project would include an additional 1500' of ditching and upgrades to both driveway and cross culverts.





Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). 250'+

Progress to Date:

Design Work Complete, No ROW needed

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: Storm Water Master Plan (In-progress)

No

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

Julie Moore- Stone Environmental  
Ann Smith- Friends of the Winooski River

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

Yes.

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

Some, the work will be completed by using a combination effort from our town road crew and Parks staff.



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

See attached project cost estimate

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

We plan to meet the 20% grant match by providing labor and equipment for ditching.

Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$ 15,100.00

Estimated Total Project Cost (including 20% local match): \$ 20,100.00

Estimated Completion Date: 10/15/2016

**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: City Manager





April 11, 2016

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

Dear Grants Review Committee,

I am writing in support of City of Montpelier's Better Roads grant application to improve drainage along Gould Hill Road. Stone Environmental is currently working for the City of Montpelier to develop a stormwater master plan. This on-going effort involves identifying existing stormwater-related water quality problem areas through a combination of GIS-based analysis of physical watershed characteristics, windshield and walking surveys and interviews with key local officials.

Through this effort, the existing drainage along Gould Hill Road identified as a stormwater concern; specifically, road-related erosion was found to be contributing sediment pollution to the North Branch of the Winooski River. A copy of the Problem Area Data Sheet prepared for Gould Hill Road is attached to this letter.

As someone who is personally and professionally committed to water quality, I am thrilled that the City is taking the initiative to pursue funding that would support improved stormwater management along this steep, gravel road. Please do not hesitate to contact me if you have questions or if I can provide additional information.

Sincerely,

Julia S. Moore, P.E.  
Water Resources Group Leader  
*Direct Phone / 802.229.1881*  
*Mobile / 802.279.5323*  
*E-Mail / [jmoore@stone-env.com](mailto:jmoore@stone-env.com)*

# Problem Area Data Sheet

<b>Problem Area ID:</b> NB-10	<b>Latitude:</b> 44.287871	<b>Longitude:</b> -72.574495
<b>Watershed:</b> _____ North Branch _____	[A large dark, blurry image, likely a photograph of the problem area, is placed here.]	
<b>Location:</b> _____ Gould Hill Road _____		
<b>Problem Type:</b> _____ Erosion, drainage _____		
<b>Identification Source:</b> _____ SWMP Assessment/VTRANS _____		
<b>Ownership:</b> _____ Public/Private _____		
<b>Classification:</b> _____ 4/5 _____		

**Date of Field Data Collection:** September 28, 2015

**Description of Observed Conditions:**

Rock-lined ditch at lat/long listed above needs improved stabilization (Photo 1). Oversteepened embanks are also causing roadside erosion is significant in places as well (Photo 2). Drainage along gravel portion of road is poor, partly due to challenging terrain. Significant gully observed below cross culvert outlet at 574 Gould Hill Rd. Boards and asphalt berms under guardrails further concentrate flows. Additionally, culvert 23055127 is classified in VOBCIT as being in "poor" condition.

**Field Photos**



Photo 1. Rock-lined ditch in need of improvement.

Photo 2. Erosion along the road.

**Prioritization Ranking Factors**

Relative Impact	Frequency	Current Condition	Urgency	Impact to public infrastructure?	Realistic to fix?	Impacts beyond water resources?	Part of a larger or systemic problem?
3	2	3	2	Y	Y	Y	Y



**Friends of the Winooski River**  
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Montpelier VT 05601

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April 12, 2016

Zach Blodgett, E.I.T.  
Staff Engineer  
City of Montpelier, VT  
Department of Public Works  
39 Main Street, City Hall 05602

Dear Zach:

The Friends of the Winooski River is pleased to provide this letter of support for the City of Montpelier's Better Back Roads application. Dirt roads are a major source of sedimentation and associated pollutants to our streams and rivers. It is great to see the City taking action to reduce road runoff.

Gould Hill Road, like so many Vermont roads, has a steep grade and is in close proximity to a water way. Due to this, the road was identified as a road erosion risk by the ANR road analysis as well as identified in the City's stormwater master plan. It is encouraging to see the City use both of these tools to identify priority projects.

The Friends currently have a grant to do stormwater education in Barre-Montpelier. This education includes highlighting the impact of roads and municipal actions.

We hope the City is successful in its grant application. We look forward to hearing more about the project.

Sincerely,

Ann Smith

# City of Montpelier

PUBLIC WORKS



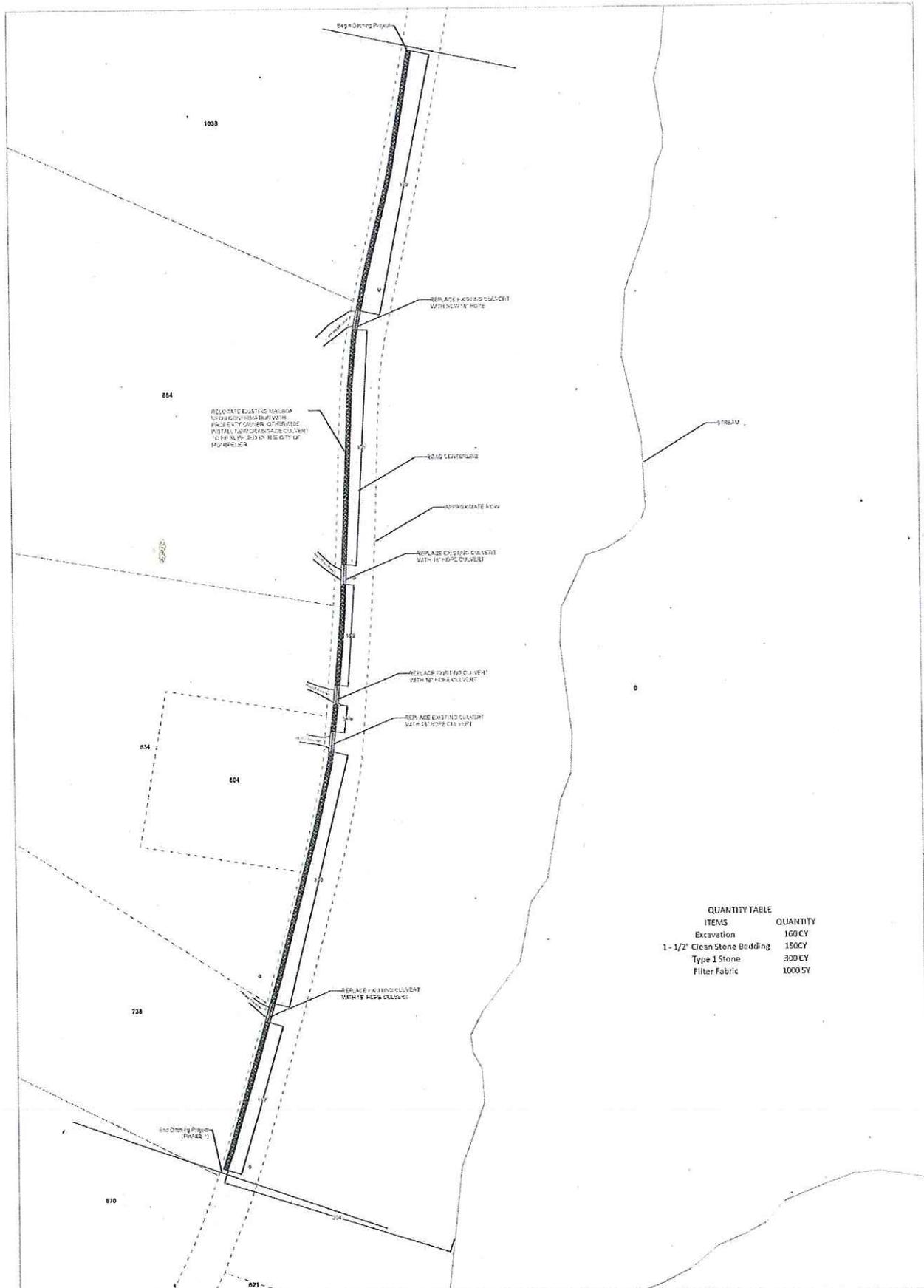
(802)-223-9508

39 Main Street, Montpelier, VT 05602

[www.montpelier-vt.org](http://www.montpelier-vt.org)



# GOULD HILL DITCHING



QUANTITY TABLE

ITEMS	QUANTITY
Excavation	160 CY
1 - 1/2" Clean Stone Bedding	150 CY
Type 1 Stone	300 CY
Filter Fabric	1000 SY