



Vermont Better Roads Grant Program



Cover Sheet

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

Town/Organization: Town of Eden

Primary Contact Person (Responsible for Signing Grant Agreement): Tim Bullard

Title: Selectboard Chair

Address: 71 Old Schoolhouse Rd, Eden Mills, VT 05653

Street Address

Town

Zip

Primary Contact Person Email: clerk@edenvt.org Phone: (802) 635 - 2528

SAM unique ID #: GVYQNFP6N939 Fiscal Year End Month (MM): 06

Town Clerk / Admin email: clerk@edenvt.org

Road Foreman Name: Ricky Morin Road Foreman Email: clerk@edenvt.org



Vermont Better Roads Grant Program



CATEGORY B/C/D

Please complete one application per project you are applying for.

Please check the Category you are applying for:

- B. Correction of a Road Related Erosion Problem and/or Stormwater Mitigation
- C. Correction of a Stream Bank, Lake Shore or Slope Related Problem
- D. Structure/culvert 36" diameter or greater

Municipality: Eden, VT

Road Name: Griggs Rd TH #: 31 Structure # (if applicable): 31-3

Road Type: Paved or Unpaved (select one) Road Class: 1 2 3 4 (select one)

Please provide a thorough description of the erosion/water quality problem (ex. Roadway has steep slope with no ditch which is causing severe roadway erosion, which outlets into the Lamoille River):

The current culvert is undersized so when strong storms swell the unnamed stream, the result is severe roadway and streambank erosion. This project will also stabilize the road slope, address road drainage, and limit the conveyance of sedimentation down the stream to Lake Eden. This will all be fully compliant with the MRGP to minimize water quality impact.

Has the town completed an MRGP compliant road erosion inventory?

Yes No In progress

Project Length (linear feet along roadway): 50 ft.

Number of structures/culverts replaced/repared: 1

Average slope of roadway: 0-5% 5-10% >10%

Provide a VERY detailed map of project location showing start and end points: Included

Provide a sketch of project location showing distances and project details: Included

Vermont Better Roads Grant Program
 Cost Estimate Worksheet

Town: Eden, VT
 Road: Griggs Rd

Project Name: VBR25

LABOR					
<u>Name</u>	<u># Hrs</u>	<u>Rate</u>	<u>Amount</u>	<u>Fringe</u>	<u>Total</u>
Ricky Morin	138.5	28.00	3,878.00	1,318.45	5,196.45
Ricky Morin	32.0	42.00	1,344.00		1,344.00
Ryan Morin	116.0	25.00	2,900.00	854.91	3,754.91
Ryan Morin	13.0	37.50	487.50		487.50
Rodney Burns	66.0	21.50	1,419.00		1,419.00
Teleia Pastore - Admin	15.0	22.00	330.00	153.41	483.41
TOTAL LABOR					12,685.27

EQUIPMENT				
<u>Type</u>	<u>Vendor</u>	<u># Hrs</u>	<u>Rate</u>	<u>Total</u>
Loader	Town of Eden	1.00	55.00	55.00
Truck #2 - Dump Truck	Town of Eden	51.00	65.00	3,315.00
Truck #3 - Pick Up	Town of Eden	11.00	1.00	11.00
Truck #4 - Dump Truck	Town of Eden	50.00	65.00	3,250.00
160 Excavator	Hired	123.00	120.00	14,760.00
Laser Rental	Hired	8.00	9.38	75.04
3" Pump & Hoses	Hired	80.00	6.25	500.00
Tri-axle & Trailer	Hired	2.00	150.00	300.00
Tri-axle Truck	Hired	6.00	85.00	510.00
TOTAL EQUIPMENT				22,776.04

MATERIALS				
<u>Description</u>	<u>Units</u>	<u>Qty</u>	<u>Rate</u>	<u>Amount</u>
1.5" Chestnut Stone	TNS	39.00	14.00	546.00
12"-24" Rip Rap	YDS	20.62	20.00	412.40
3/4" Fractured Stone	TNS	54.50	15.45	841.95
5"-8" Ditch Stone	YDS	56.00	22.00	1,232.00
Gas for Pumps	GAL	8.50	3.90	33.15
Bank Run Gravel	YDS	352.00	5.75	2,024.00
Stockpile - Crusher Run	YDS	226.00	13.63	3,080.38
Stockpile - Filter Fabric	100'	0.75	439.44	329.58
Stockpile - Mulch Hay	Bales	20.00	6.50	130.00
Stockpile - Road Sand	YDS	57.00	15.00	855.00
Stockpile - Seed Conservation Mix	LBS	20.00	3.20	64.00
Stockpile - Topsoil Fill	YDS	14.00	20.00	280.00
Stockpile - Used 24" x 38' Culvert	Units	1.00	464.24	464.24
2 Head Walls	YDS	25.50	550.00	14,025.00
Plastic Culvert 60"x5'x50'	Units	1.00	13,550.00	13,550.00
TOTAL MATERIALS				37,867.70

GRAND TOTAL **73,329.01**

Grant Total 60,000.00
 Town Total 13,329.01



Vermont Better Roads Grant Program



Budget:

Please attach a project budget and confirm below that is attached:

Project budget IS attached

Are you applying to other grant programs to help fund this project? If so, what programs? Please note that Better Roads requires a 20% local match and Better Roads funding may not be used as match for other state or federally funded programs.

Requested Grant Amount:	\$	60,000 00
+		
Local Match:	\$	13,329 01
=		
Total Project Cost:	\$	73,329 01

Requested Grant Amount Max:
 \$20,000 Category B
 \$40,000 Category C
 \$60,000 Category D

See page 6 for more information on calculating match

Estimated Completion Date: August 31, 2025

REQUIRED ATTACHMENTS:

Please use the documentation checklist below to ensure that all of the relevant items regarding your application have been included. It is **preferred** that your application is a **single PDF file**.

- Grant application cover sheet
- Grant application form, including chart with RSID and MRGP compliance before and after project completion
- 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).
- Detailed Project Location Map
- Sketch of proposed project and erosion control measures or other management practices, including distances in feet
 - o Also show approximate location of town/other right-of way and/or property lines and limits of work
- Photos must be color and clear to see.**
 - o Please make sure there are enough photos to get a good idea of the project area
- 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:

Name: _____

Title: _____

Chair of Select Board

MUST BE TOWN ADMINISTRATOR/MANAGER OR SELECT BOARD CHAIR



Vermont Better Roads Grant Program



Environmental Concerns:

All projects require a review of potential impacts by our environmental team. To expedite the review process, please check the boxes below that describe existing structures/conditions to be replaced/maintained (if any) and the project description that applies (if any).

Existing Structures:	
<input checked="" type="checkbox"/> Steel/Plastic Culvert	<input type="checkbox"/> Concrete Box Culvert
<input type="checkbox"/> Stone Culvert – Take pictures	<input type="checkbox"/> Concrete Bridge
<input type="checkbox"/> Ditch	<input type="checkbox"/> Rolled Beam/Plate Girder Bridge
<input type="checkbox"/> Foundation remains, mill ruins, stone walls, other – Take pictures	<input type="checkbox"/> Stone abutments or piers – Take pictures
<input type="checkbox"/> Buildings within 300 feet of work - Take pictures	
Project Description:	
<input type="checkbox"/> New ditches will be established	<input checked="" type="checkbox"/> All work will be completed from the existing road or shoulder
<input type="checkbox"/> Reestablishing existing ditches only	<input type="checkbox"/> There will be excavation within 300 feet or a river or stream – Take pictures
<input checked="" type="checkbox"/> The structure is being replaced on existing location/alignment	<input type="checkbox"/> Road reclaiming, reconstruction, or widening
<input type="checkbox"/> Excavation within a floodplain – Take pictures	<input type="checkbox"/> Temporary off-road access is required
<input type="checkbox"/> Tree cutting/clearing – Take pictures	<input type="checkbox"/> The roadway will be realigned

Please describe the project and how it will create a positive water quality benefit (ex. Reshape 500' of ditch and line with 12 inch minus stone, to prevent sediment from entering the Lamoille River at the bottom of the hill):

We will replace the undersized culvert with a corrugated metal 60"x50' culvert with headwalls. This will improve streamflow and lessen erosion, as well as preventing the conveyance of sediment from the segment to Lake Eden via stream.

Please list any professionals or partners that assisted with planning this project (ANR River Management Engineer, Army Corps of Engineers, VTrans staff, Basin Planner, RPC staff, etc.):

Keith Friedland, Hydraulics Tech -- VT Structures and Hydraulics Section

Chris Brunelle, ANR River Mgmt Engineer -- VTrans

Is the project located in the town "Right of Way?" (select one) Yes No Both

Please be aware, Municipalities are required to have an Agreement for Entry & Liability Release for any impacted properties (prior to the start of construction.)

State of Vermont
Structures and Hydraulics Section
Barre City Place
219 North Main Street | Barre, VT 05641
vtrans.vermont.gov

[phone] 802-371-7326
[fax] 802-828-3566
[ttd] 800-253-0191

Agency of Transportation

TO: Jim Cota, District 5 Project Manager
John Wilkin, District 5 Technician

CC: Chris Brunelle, ANR River Management Engineer

FROM: Keith Friedland, Hydraulics Technician

DATE: June 7, 2022

SUBJECT: Eden TH-31, Griggs Road, over unnamed tributary to Gihon River
Site location: 500 ft. east of TH-2
Coordinates: [44.709389, -72.506887](#)

We have completed our hydraulic study for the above referenced site and offer the following for your use.

Hydrology

The following physical characteristics are descriptive of this drainage basin:

Drainage Area	0.21 square miles
Land Cover	Forest
Avg. Drainage Basin Slope	10.7 %

Using the Rational hydrologic method, the following design flow rates were selected:

Annual Exceedance Probability (AEP)	Flow Rate in Cubic Feet per Second (cfs)
50 %	34
10 %	55
4 %	65 Design Flow – Local Road
2 %	76
1 %	86 Check Flow

Channel Morphology

The channel for this intermittent stream is straight with an estimated local channel slope of 6%.

Existing Conditions

The existing structure is a high-density polyethylene pipe with a diameter of 4 feet, providing a waterway opening of 12.6 square feet. The existing culvert is distorted and appears to be crushing. Our calculations, field observations and measurements indicate the existing structure does not meet current standards of the VTrans Hydraulic Manual.

This structure results in a headwater depth of approximately 3.6 feet at 4% AEP and 4.5 feet at 1% AEP.

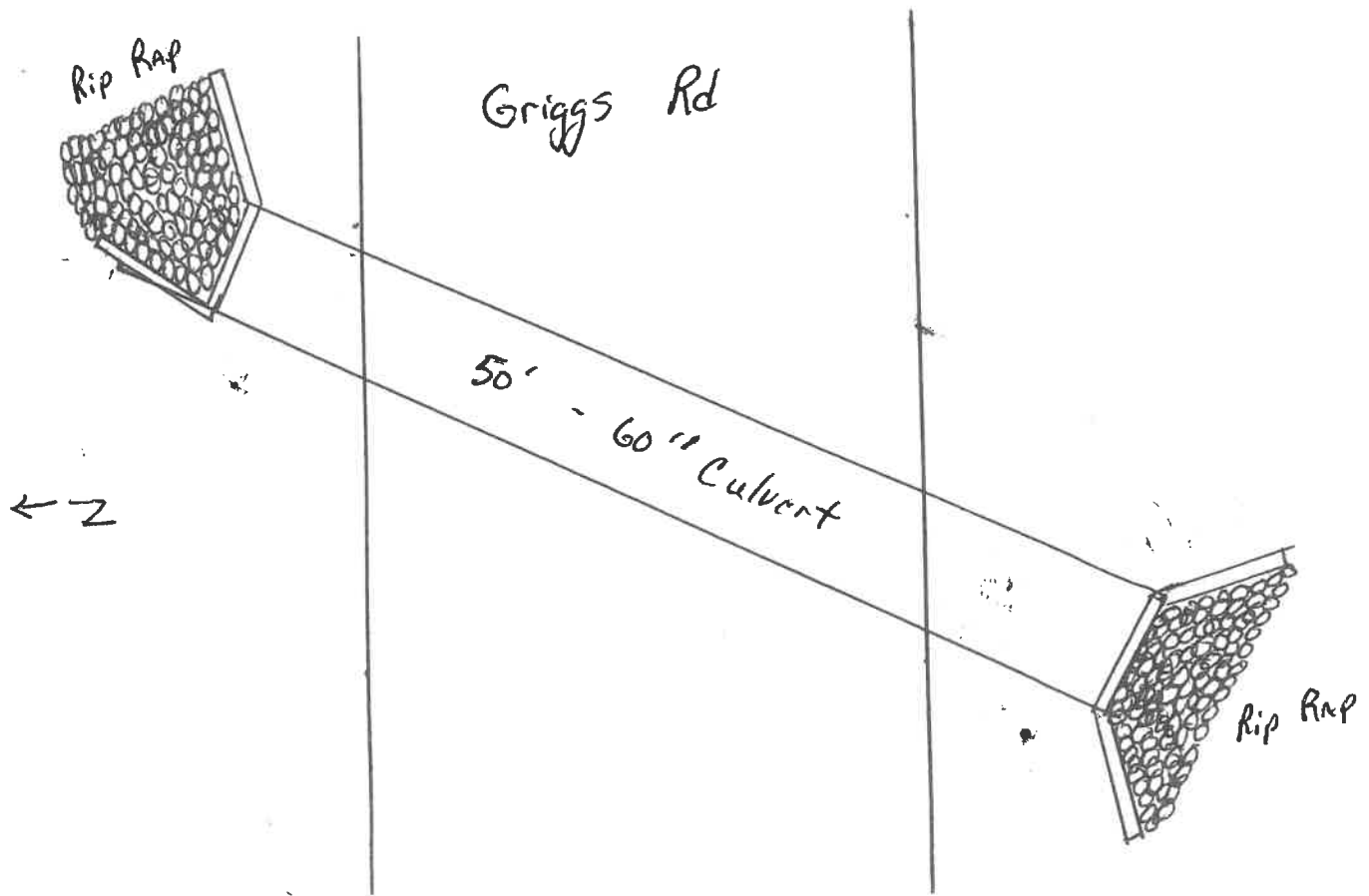
LAKE EDEN

N ↑



Site Location.

44.709343, -72.507044



Map of Lake Eden & Culvert 31-3



Down slope toward Lake Eden
←

←
Culvert 31-3 is the culvert just to the right of the pond

Culvert 31-3

Current: 42"x40'

Suggested Replacement: 60"x50'



Vermont Better Roads Category B/C/D Grant Proposal Scoring Criteria

All applications will be scored on a sliding scale elected by the Better Roads Grant Selection Committee. Road BMP upgrades are considered the highest priority for grant funding when road segments are “hydrologically-connected,” currently “not meeting” MRGP standards, and road slopes are greater than 10%

1. Is the project using Best Management Practices (BMPs) that are proven and likely to maximize long term success, such as practices contained within the new VTtrans Better Roads Manual and/or VT DEC MRGP Standards?? [maximum 20 points]

- The proposed project utilizes appropriate BMPs and has maximized the likelihood of long-term success (16-20 points)
- The proposed project utilizes some appropriate BMPs but more could be done to increase the likelihood of success (11-15 points)
- The proposed project does not utilize appropriate BMPs, or it is unclear whether the BMPs will be used appropriately and the likelihood of success is uncertain (0-10 points)

2. What are the expected Water Quality Benefits within the watershed? [maximum 25 points]

- Project will lead to significant improvements to water quality (21-25 points)
- Project will lead to moderate improvements to water quality (16-20 points)
- Project will lead to small improvements to water quality (1-15 points)
- Project will lead to no obvious improvements to water quality (0 points)

3. Is the project in or does stormwater runoff from the project area drain into a hydrologically connected segment? [maximum 20 points]

- Yes; the entire project is in connected segment(s) (20 points)
- Partially; part(s) of the project are in connected segments (5-19 points)
- No; this project is not in a connected segment (0-5 points)

4. Will the project result in full compliance of one or more segments in accordance with the Municipal Roads General Permit (MRGP)? [maximum 25 points]

- All segments within the project will be in full compliance (25 points)
- One or more segments will be in full compliance, with all other segments in partial compliance (11 – 24 points)
- One or more segments will be a minimum of partial compliance (1- 10 points)
- Project does not meet compliance or not applicable (does not have hydrologically connected segments) (0 points)

5. Is the project cost effective? [maximum 10 points]

- The cost of the project is low and the expected benefits are high (8-10 points)
- The cost of the project is average and the expected benefits are average (5-7 points)
- The cost of the project is high and the expected benefits are low (0-4 points)