FY17 Vermont Better Roads Grant Application

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

Town/Organization: Town of Richford Contact Person(s): John Nutting

Address: P.O. Box 236, Richford, VT
Street Address *Town* *Zip*

Email: _____ Phone: (800) 848 - 7751

DUNS #: 032165383 Fiscal Year End Month (MM): 12

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: Town of Richford

Project Name: Corliss Road Culvert Replacement and Bank Stabilization

Road Name: Corliss Road **TH #:** 11 **Structure # (if applicable):** _____

Road Type: Unpaved Uncurbed

Class 3

Watershed: Missisquoi Watershed

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

The existing culvert (local ID corlis060) is a combination of 4'x4' stone box, boiler tube and 48" CMP. It is undersized and in poor condition. The banks at the culvert outlet area have a very steep slope (more than 60%) that is eroding due to runoff from the roadway. In addition to being a water quality issue, it is also a public safety issue. Corliss Road is a dead-end road will over 33 homes with no established detour. An unplanned closure of the roadway (due to culvert failure) would be very disruptive.

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 existing culvert will be replaced with a 60" round double-walled HDPE culvert and steep banks at the culvert outlet will be stabilized. A hydraulic study has been requested but this size appears to be compatible with a similar-sized culvert 450 ft. upstream that was replaced in 2015.

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

The project will mitigate the continual erosion from the steep culvert banks. It also will prevent a mass-failure that would send a significant amount of sediment into the stream and eventually into the Missiquoi River 3/4 mile downstream.

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

Progress to Date:
The town has requested a hydraulic study and had the site reviewed by Chris Brunelle, ANR Rivers Engineer.

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: Identified through a Category A Inventory and Capital Budget ( ) 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.):

-Smith Technical Services prepared the preliminary project design and budget.
-Met with Chris Brunelle, VT ANR Rivers Engineer and incorporated his comments into design.
-Worked with the Northwest Regional Planning Commission.

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

Both.

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

Yes.

Better Roads
Clean Water You Can Afford

VTrans
VERMONT
AGENCY OF NATURAL RESOURCES

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

See attached budget.

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

The 20% match will be met through town 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): $ 58,036.64

Estimated Completion Date: 09/15/2017

REQUIRED ATTACHMENTS:

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

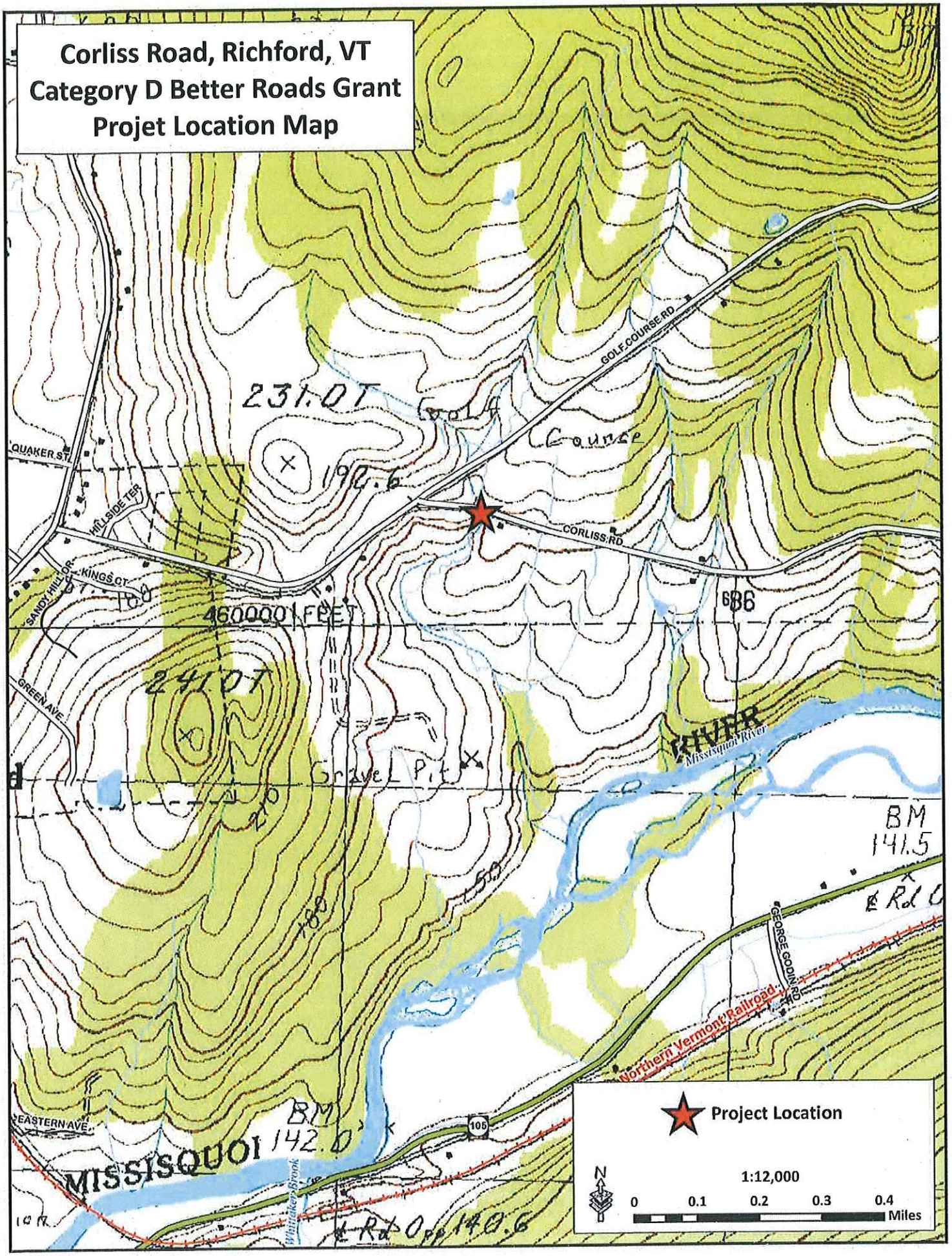
Name: _____ Title: Richford Road Foreman

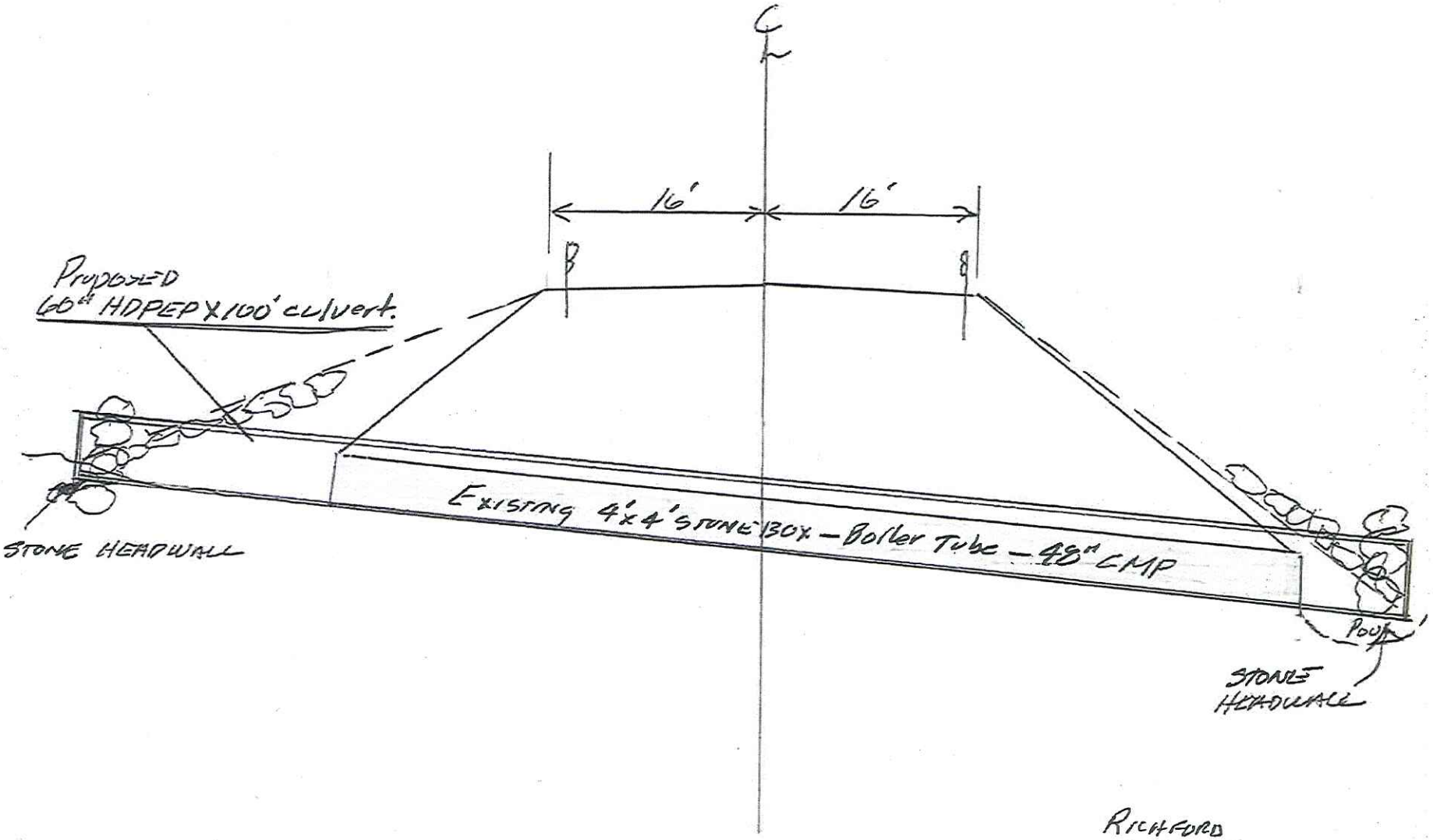
COST ESTIMATE WORKSHEET

TOWN & ROAD NAME: Richford-Corliss Rd. - TH 11 - Class 3 **PROJECT NAME:** **Corliss Rd. BR Culvert Project**

LABOR	RATE		Unit	# Units	TOTAL (Rate X Hours)		
Foreman	$ 30.00		Hrs.	40	$ 1,200.00		
Equipment Operator	$ 28.00		Hrs.	40	$ 1,120.00		
Maintenance Worker	$ 25.00		Hrs.	120	$ 3,000.00		
					$ -		
						TOTAL LABOR	$ 5,320.00
EQUIPMENT	**RATE**		**Unit**	**# Units**	**TOTAL (Rate X Hours)**		
Pickup Truck	$ 27.59	VTrans	Hrs.	16	$ 441.44		
Single Axle Truck	$ 112.13	VTrans	Hrs.	12	$ 1,345.56		
Tandem Truck	$ 128.55	VTrans	Hrs.	120	$ 15,426.00		
Excavator	$ 56.03	VTrans	Hrs.	40	$ 2,241.20		
Wheeled Loader	$ 52.72	VTrans	Hrs.	20	$ 1,054.40		
Wheeled Backhoe	$ 35.32	VTrans	Hrs.	15	$ 529.80		
Grader	$ 82.04	VTrans	Hrs.	6	$ 492.24		
						TOTAL EQUIPMENT	$ 21,530.64
MATERIALS	**RATE**		**Unit**	**# Units**	**TOTAL (Rate X Hours)**		
Culvert - 60" X 100" HDPEP	$ 86.26		L.F.	100	$ 8,626.00		
Type 3 Stone Fill { 2}{50X20X3=6000÷27=222 x 1.4=311	$ 14.00		C.Y.	300	$ 4,200.00		
Type 4 Stone Fill - Headwalls (2)10x4x12=960÷27= 35.55X1.2= 4266 C.Y.	$ 14.00		C.Y.	44	$ 616.00		
Grushed Stone For Bedding (100X10X1÷27X1.25=46.29	$ 18.00		Ea.	50	$ 900.00	1	
Granular Backfill For Structures (100X15X4÷27X1.25=278	$ 15.00		Ea.	280	$ 4,200.00		
Seed	$ 2.50		Lb.	100	$ 250.00		
Mulch	$ 3.00		Bale	50	$ 150.00		
Remove & Reset Guard Rail	$ 6.22	VTrans	L.F.	200	$ 1,244.00		
					$ -		
					$ -		
						TOTAL MATERIALS	$ 20,186.00
Contracted Labor & Equipment for Installing Culvert	$ 5,000.00	Contract	L.S.	2	$ 10,000.00		
Includes Large Excavator, Compactor, Pumps, Pipe Laying crew with all tools required)						Total Contracted Out	$ 10,000.00
MISCELLANEOUS							
Traffic Control	$ 500.00		L.S.	1	$ 500.00		
Layout - Inspection - etc.	$ 500.00		L.S.	1	$ 500.00		
						TOTAL MISCELLANEOUS	$ 1,000.00
						GRAND TOTAL	$ 58,036.64
						MATCH	$ 18,036.64

Corliss Road, Richford, VT
Category D Better Roads Grant
Projet Location Map

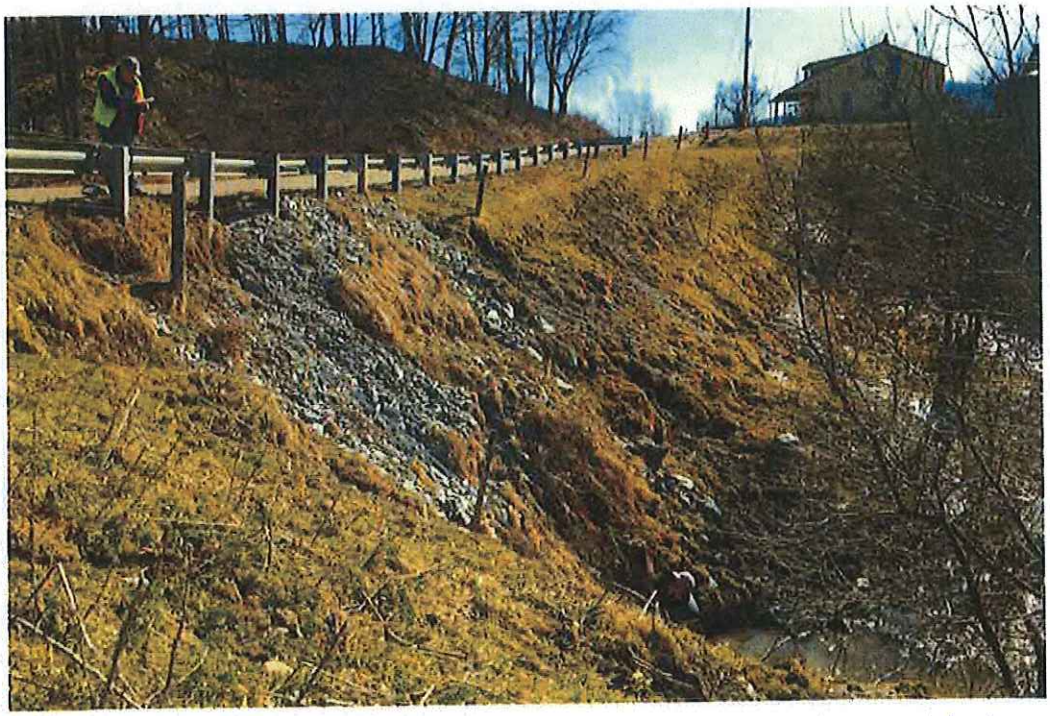




Richford
Corliss Road.
Scale 1" = 10'

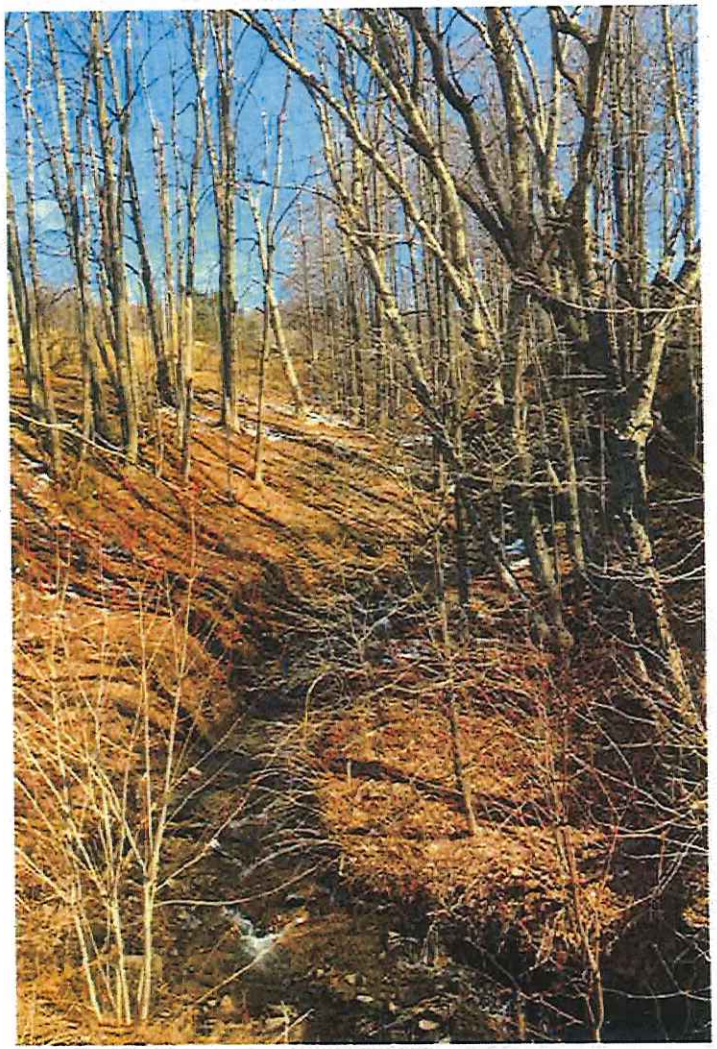
4/2/16 J. Smith
Smith Technical Services

Culvert Outlet



Sideview of eroding slope at culvert outlet.

Culvert inlet. Old stone box.



Upstream of culvert

Above view of culvert inlet

Culvert outlet

Northwest
Regional Planning Commission

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

April 15, 2016

John Nutting
Town of Richford
P.O. Box 236
Richford, VT 05476

Dear John,

The Northwest Regional Planning Commission (NRPC) is pleased to support the Town of Richford's Better Roads grant applications. It is my understanding that the Town is seeking funds for three projects that were identified in the Category A Inventory—ditching along Berry Road, replacing a culvert on Corliss Road and stabilizing the stream bank along North Branch Road.

These projects will have water quality benefits by reducing erosion and eliminating sediment and nutrient from entering the Missiquoi River and ultimately Lake Champlain.

Good luck with your project!

Sincerely,

Bethany Remmers
Assistant Director

Wheeler, Lawrence

From: Coulter, Steven <scoulter@vermontelectric.coop>
Sent: Thursday, April 14, 2016 6:19 PM
To: Wheeler, Lawrence
Subject: RE: Brunswick BF 0271(23) VT Route 102 BR # 6 @ MM STA 2.6

Lawrence,

This is Fairpoint New Hampshire's set area. Citizen's Utilities inherited the Rt 102 corridor from PSNH and I am not sure what we have in the way of easements. I will pass the information on to Rhoda Kimble, VEC Joint Use Utility Coordinator, to see if she can come up with anything. This is the first I have heard of the bridge project and I assume by the markings that it is the bridge over Paul Steam, on Rt 102, in Brunswick, that is located about 2000' north of the Maidstone Lake Access Rd. The pole numbers that you have assigned in your working drawing are probably Fairpoint or old PSNH numbers which don't mean anything to me. If you can identify this as the right bridge and let me know, I will have Rhoda see if she can come up with any easements.

Thanks

Steve

Steven Coulter
Vermont Electric Cooperative, Inc.
Field Engineer
Office 802-730-1171
Cell 802-673-5604
scoulter@vermontelectric.coop

From: Wheeler, Lawrence [mailto:Lawrence.Wheeler@partner.vermont.gov]
Sent: Thursday, April 14, 2016 11:36 AM
To: Coulter, Steven
Subject: FW: Brunswick BF 0271(23) VT Route 102 BR # 6 @ MM STA 2.6

From: Wheeler, Lawrence
Sent: Thursday, April 14, 2016 11:31 AM
To: 'scoulter@vermontelec.coop' <scoulter@vermontelec.coop>; 'ernest.kangas@fairpoint.com' <ernest.kangas@fairpoint.com>
Cc: Bonneau, Douglas <Douglas.Bonneau@vermont.gov>; Proulx, Andrea <Andrea.Proulx@vermont.gov>; Rutter, Melissa <Melissa.Rutter@vermont.gov>
Subject: Brunswick BF 0271(23) VT Route 102 BR # 6 @ MM STA 2.6

Good morning gentlemen

Our ROW Section is in the process of preparing the "take line" to acquire easements for the above referenced bridge project.