FY17 Vermont Better Roads Grant Application

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

Town/Organization: PAWLET Contact Person(s): Timothy Hughes-Muse

Address: PO BOX 128 PAWLET VT 05761

Street Address *Town* *Zip*

Email: pawletselectbrd@vermontel.ne Phone: ( ) 325 - 3099

DUNS #: 035883610 Fiscal Year End Month (MM): 06

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:

- [x] 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: PAWLET

Project Name: Warren Switch Rd and Rt 153 Drainage Project

Road Name: RT 153 Th# 1 & Warren Switch TH # 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: Mettowee River

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

Very wet location with inadequate drainage ditches resulting in very muddy road. A driveway culvert is misaligned, causing water to backup. Subsequently, the ditch fills with mud and road gravel, causing water to overtop road, channelize and wash road surface into adjacent wetland. The result is the sedimentation and contamination of wetland.

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):

Our goal would be to layback and increase the size of the ditches, Replace culvert with an appropirate size and with correct alignment. Increase ditch size by adding shotrock to road bed and the edge of the ditch. Reduce sedimentation of wetland by installing two armored settling pools, one at terminus of gravel road and one at the end of the treatment area, before wetland.

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

Eliminate sedimentation and contamination of adjacent wetland and Mettowee River.

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:
The town has designed and planned the project and has developed an estimate of costs.

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: Capital budget plan to be complete this summer. 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.):
Josh Carvajal, ANR
Hilary Solomon, Poultney-Mettowee Natural Resources Conservation District

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).
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:
Please see attached budget.

How do you plan to meet the required 20% match on this grant?:
Pawlet will provide labor, equipment, and in-kind materials.

Requested Grant Amount ($20,000 max Category B, $40,000 max Categories C & D): $18,721.29

Estimated Total Project Cost (including 20% local match): $23,401.61

Estimated Completion Date: August 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: Melvael Boucher Title: Selectboard Chair

Cost Estimate Worksheet

Town and Road Name: Pawlet VT Rte 153 TH#1 and Warren Switch Rd TH #1(**Project Name:** Switch Rd and Rt 153 Drainage

Labor	Rate	# Hours	Total (Rate x Hours)
Highway Crew	$26.00/ Hr	125	$3,250.00
		Labor Total	$3,120.00

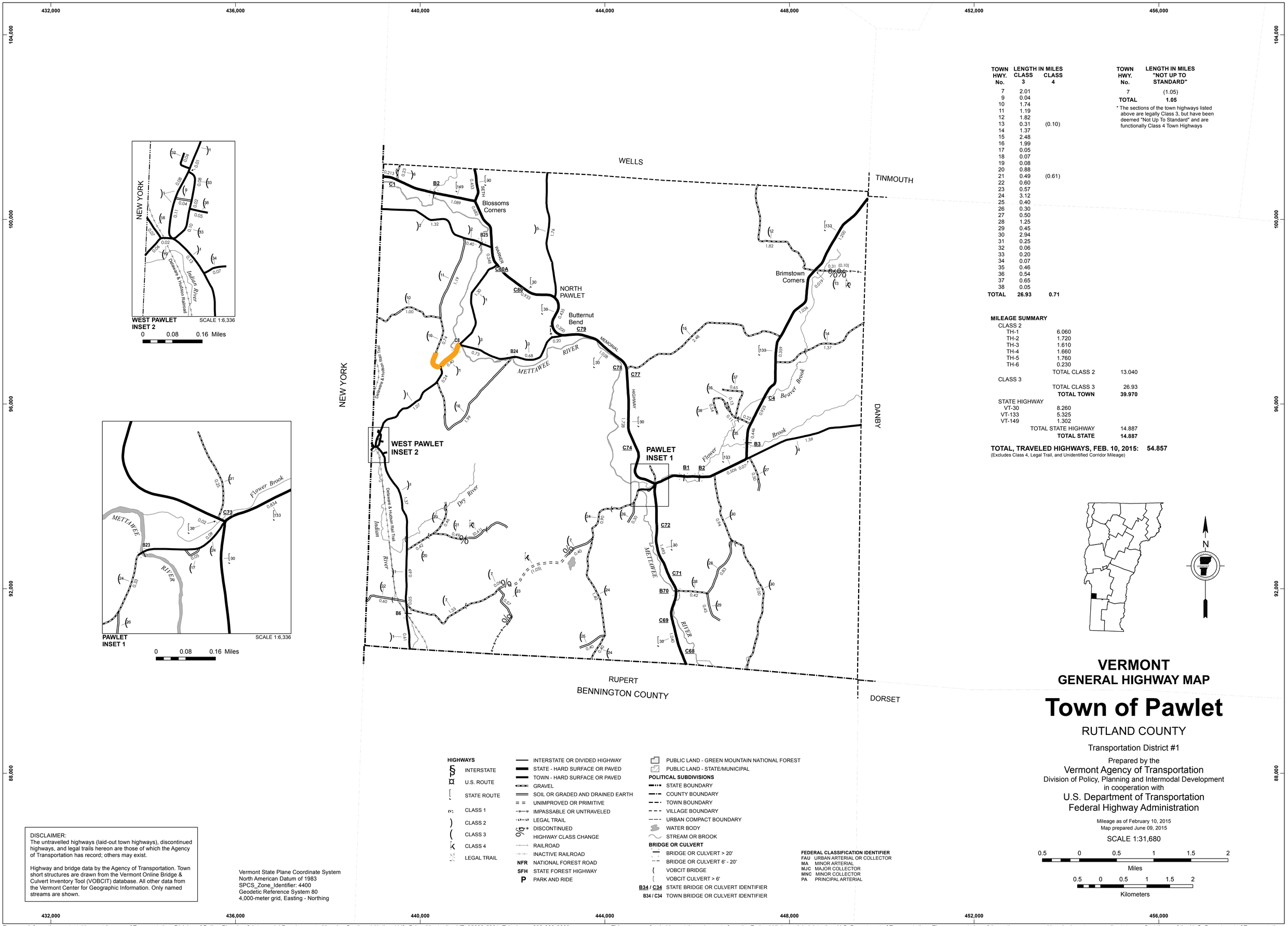
Equipment	Rate	# Hours	Total (Rate x Hours)
Excavator 28,000 lb - 1 week rental	$6,625.00	1 Week	$6,625.00
Tandem Truck 18 cubic Yard	$75	30	$2,250.00
Dozer - 1 week rental	$4062.00	1 week	$4,062.00
Town Owned Backhoe	$45	5	$225.00
		Equipment Total	$12,937.00

Materials	Rate	Amount	Total (Rate x Amount)
25' x 18" HDPE culvert	$10.01/ ft	25'	$ 250.25
16 rolls erosion netting	$65.71/roll	16 rolls	$1,051.36
Bank Run Gravel	$5.25/ cu yard	448 cu yds	$2,352.00
Shot Rock	$4.00/ cu yard	834 cu yds	$3,336.00
		Materials Total	$6,877.61

Miscellaneous	Rate	Amount	Total (Rate x Hours)
		Miscellaneous Total	
		Grand Total	$23,401.61
		Match	$4,680.32

County-Town Code: 1114

PAWLET, RUTLAND COUNTY - 2015



TOWN HWY. No.	LENGTH IN MILES CLASS 3	CLASS 4
7	2.01	
9	0.04	
10	1.74	
11	1.19	
12	1.82	
13	0.31	(0.10)
14	1.37	
15	2.48	
16	1.99	
17	0.05	
18	0.07	
19	0.08	
20	0.88	
21	0.49	(0.61)
22	0.60	
23	0.57	
24	3.12	
25	0.40	
26	0.30	
27	0.50	
28	1.25	
29	0.45	
30	2.94	
31	0.25	
32	0.06	
33	0.20	
34	0.07	
35	0.46	
36	0.54	
37	0.65	
38	0.05	
TOTAL	**26.93**	**0.71**

TOWN HWY. No.	LENGTH IN MILES "NOT UP TO STANDARD"
7	(1.05)
TOTAL	**1.05**

* The sections of the town highways listed above are legally Class 3, but have been deemed "Not Up To Standard" and are functionally Class 4 Town Highways

MILEAGE SUMMARY

CLASS 2		
TH-1	6.060	
TH-2	1.720	
TH-3	1.610	
TH-4	1.660	
TH-5	1.760	
TH-6	0.230	
	TOTAL CLASS 2	13.040
CLASS 3		
	TOTAL CLASS 3	26.93
	TOTAL TOWN	**39.970**
STATE HIGHWAY		
VT-30	8.260	
VT-133	5.325	
VT-149	1.302	
	TOTAL STATE HIGHWAY	14.887
	TOTAL STATE	**14.887**

TOTAL, TRAVELED HIGHWAYS, FEB. 10, 2015: 54.857
(Excludes Class 4, Legal Trail, and Unidentified Corridor Mileage)

VERMONT
GENERAL HIGHWAY MAP

Town of Pawlet

RUTLAND COUNTY

Transportation District #1

Prepared by the
Vermont Agency of Transportation
Division of Policy, Planning and Intermodal Development
in cooperation with
U.S. Department of Transportation
Federal Highway Administration

Mileage as of February 10, 2015
Map prepared June 09, 2015

SCALE 1:31,680

0.5 0 0.5 1 1.5 2
Miles
0.5 0 0.5 1 1.5 2
Kilometers

HIGHWAYS
- INTERSTATE
- U.S. ROUTE
- STATE ROUTE
- CLASS 1
- CLASS 2
- CLASS 3
- CLASS 4
- LEGAL TRAIL
- INTERSTATE OR DIVIDED HIGHWAY
- STATE - HARD SURFACE OR PAVED
- TOWN - HARD SURFACE OR PAVED
- GRAVEL
- SOIL OR GRADED AND DRAINED EARTH
- UNIMPROVED OR PRIMITIVE
- IMPASSABLE OR UNTRAVELED
- LEGAL TRAIL
- DISCONTINUED
- HIGHWAY CLASS CHANGE
- RAILROAD
- INACTIVE RAILROAD
- NFR NATIONAL FOREST ROAD
- SFH STATE FOREST HIGHWAY
- P PARK AND RIDE
- PUBLIC LAND - GREEN MOUNTAIN NATIONAL FOREST
- PUBLIC LAND - STATE/MUNICIPAL

POLITICAL SUBDIVISIONS
- STATE BOUNDARY
- COUNTY BOUNDARY
- TOWN BOUNDARY
- VILLAGE BOUNDARY
- URBAN COMPACT BOUNDARY
- WATER BODY
- STREAM OR BROOK

BRIDGE OR CULVERT
- BRIDGE OR CULVERT > 20'
- BRIDGE OR CULVERT 6' - 20'
- VOBCIT BRIDGE
- VOBCIT CULVERT > 6'
- B34 / C34 STATE BRIDGE OR CULVERT IDENTIFIER
- B34 / C34 TOWN BRIDGE OR CULVERT IDENTIFIER

FEDERAL CLASSIFICATION IDENTIFIER
FAU URBAN ARTERIAL OR COLLECTOR
MA MINOR ARTERIAL
MJC MAJOR COLLECTOR
MNC MINOR COLLECTOR
PA PRINCIPAL ARTERIAL

DISCLAIMER:
The untravelled highways (laid-out town highways), discontinued highways, and legal trails hereon are those of which the Agency of Transportation has record; others may exist.

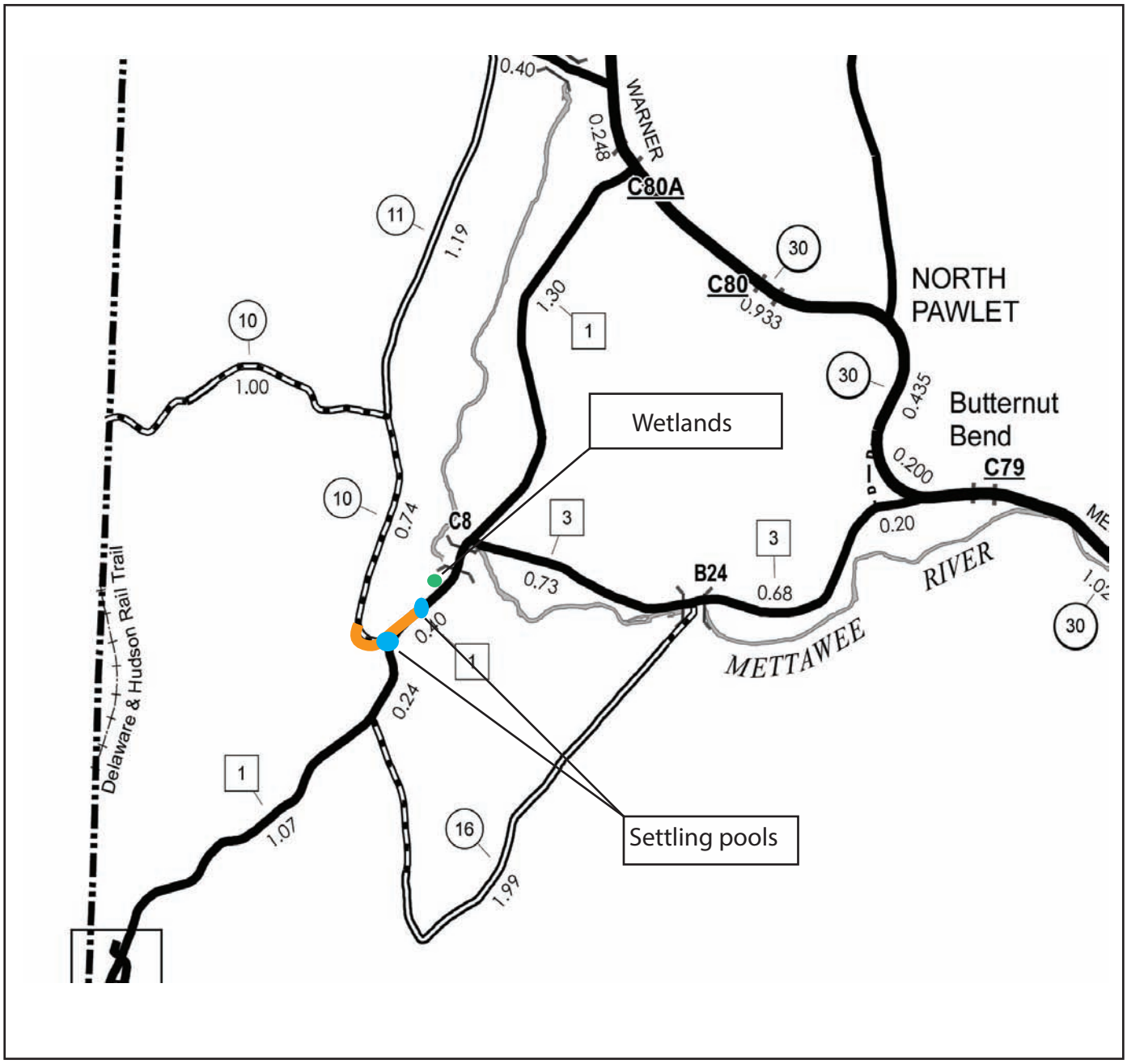
Highway and bridge data by the Agency of Transportation. Town short structures are drawn from the Vermont Online Bridge & Culvert Inventory Tool (VOBCIT) database. All other data from the Vermont Center for Geographic Information. Only named streams are shown.

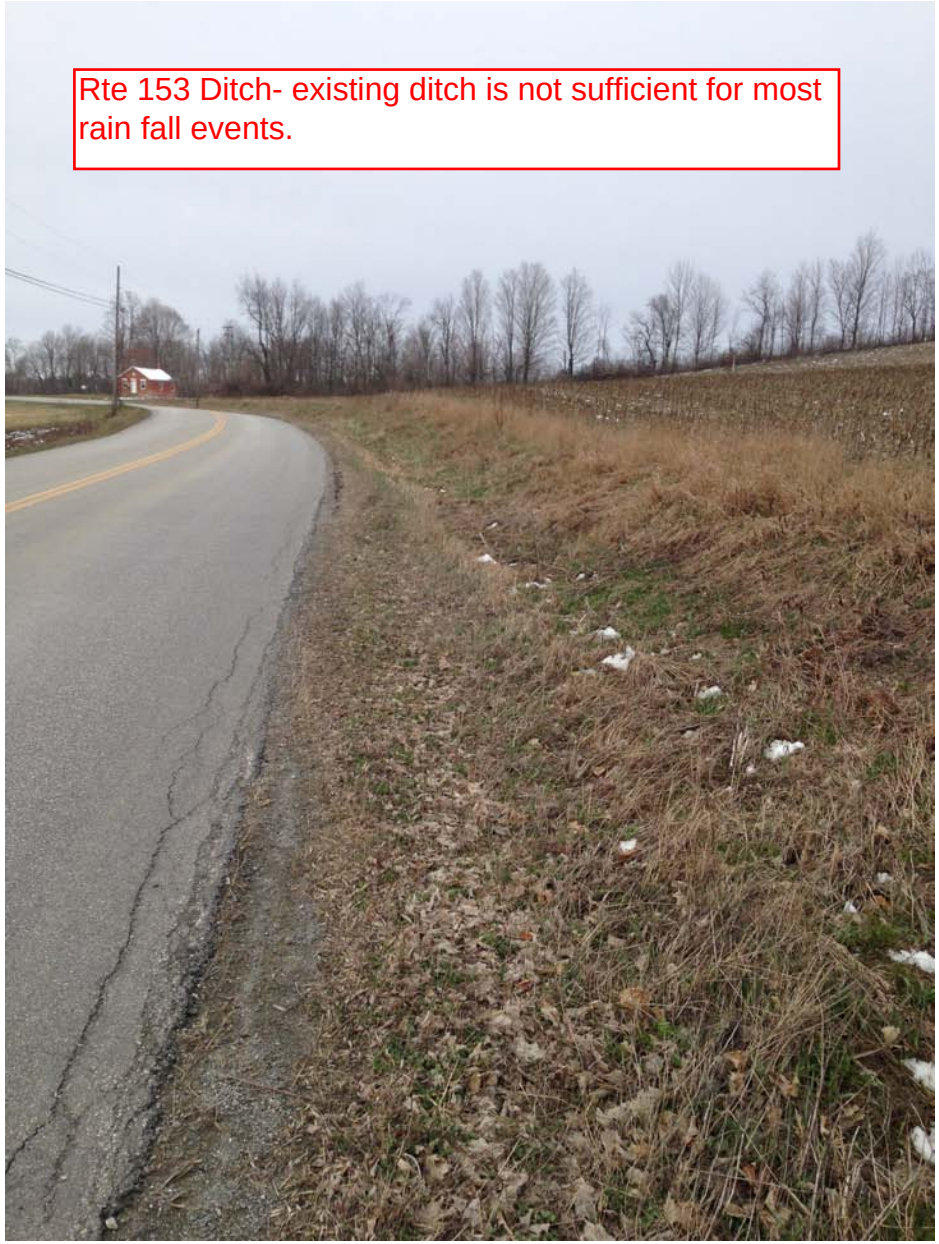
Vermont State Plane Coordinate System
North American Datum of 1983
SPCS_Zone_Identifier: 4400
Geodetic Reference System 80
4,000-meter grid, Easting - Northing

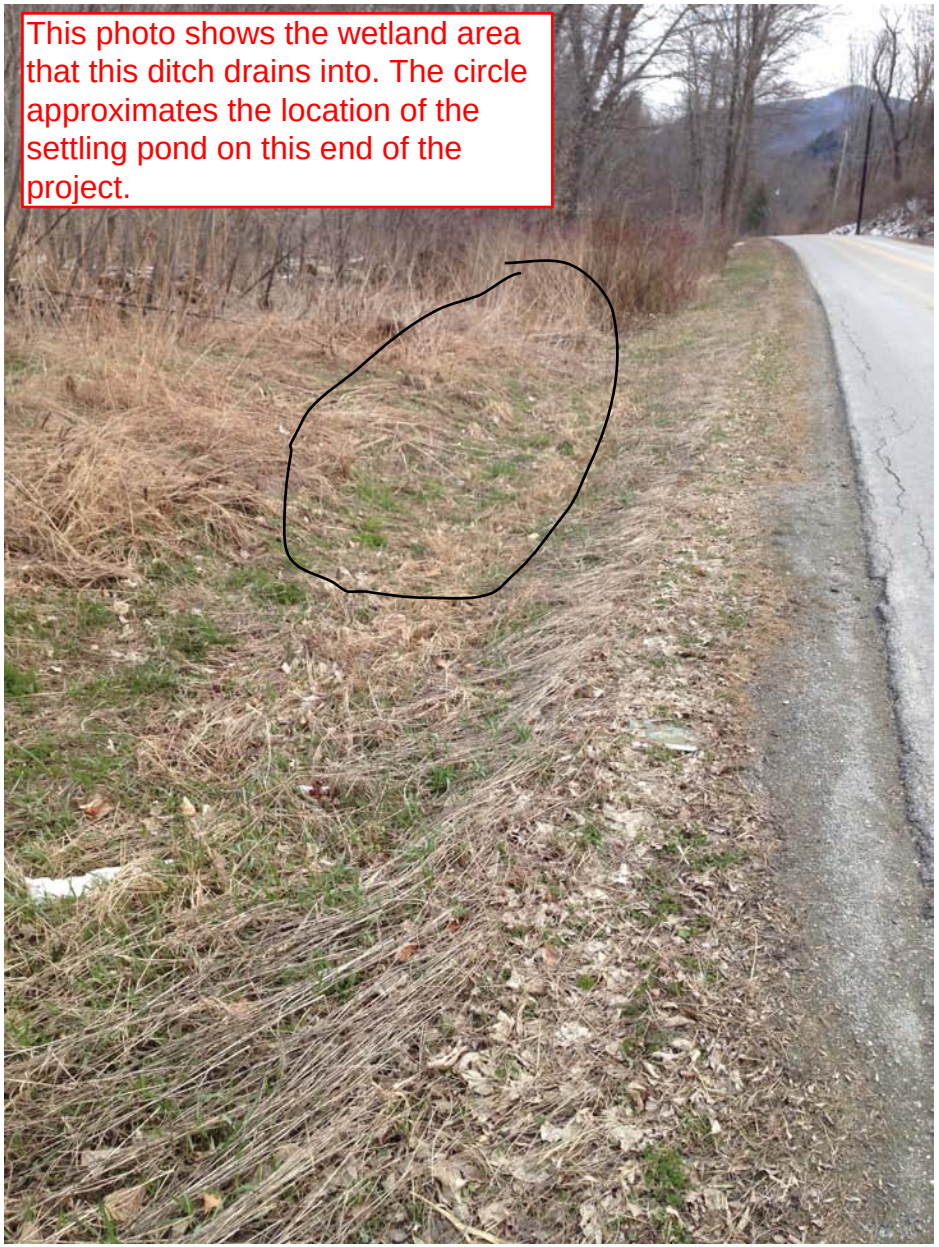
For more information contact: Vermont Agency of Transportation, Division of Policy, Planning & Intermodal Development - Mapping Section, 1 National Life Drive, Montpelier, VT 05633-5001 Telephone: 802-828-2600.

This map was funded in part through grants from the Federal Highway Administration, U.S. Department of Transportation. The representation of the authors expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.

Pawlet Rte 153 and Warren Switch Rd
Ditching Project




Rte 153 Ditch- existing ditch is not sufficient for most rain fall events.


This photo shows the wetland area that this ditch drains into. The circle approximates the location of the settling pond on this end of the project.

Looking west along Rt 153, standing approximately where settling pond is to be installed

Standing at the Junction of VT Rte 153 and Warren Switch Rd, looking east. Note the current ditch is not of adequate size.

Both photos are of the ditch along Vt Rte 153. Please note the sediment that fills the ditch. It is here and several other points that water overruns the bank and crosses the traveled portion of the highway.

Ditch along Vt Rte 153

Photo depicts inadequate culvert in ditch

Photo depicts Warren Switch Rd's inadequate ditch from crest of hill to the culvert.

Settling pond will go in just after culvert, in order to catch sediment from gravel road.