



FY17 Vermont Better Roads Grant Application

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

Town/Organization: TOWN OF DORSET Contact Person(s): ROB GAIOTTI

Address: 112 MAD TOM RD PO BOX 715 E. DORSET 05251
Street Address Town Zip

Email: TOWNMANAGER@GMAIL.COM Phone: (802) 362-4571 x3

DUNS #: 016216377 Fiscal Year End Month (MM): JUNE 30

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, VTtrans 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 DORSET

Project Name: NIMS ROAD CULVERT

Road Name: NIMS ROAD TH #: 12 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: METAWEE (CHAMPLAIN)

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

ATTACHED

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):

ATTACHED; ALL WORK TO BE DONE INSIDE

TOWN ROAD R-O-W.

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

ATTACHED



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:

NO CONSTRUCTION TO DATE

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: MUNI ROAD INVENTORY 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.):

ANR RIVER MANAGEMENT ENGINEER JOSE CARRANZA

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



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

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

CASH IN HAND TO PURCHASE 20% OF MATERIALS FOR PROJECT.

Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$9,349.12

Estimated Total Project Cost (including 20% local match): \$2,337.20 + \$9,349.12 = \$11,686.40

Estimated Completion Date: NOVEMBER 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.

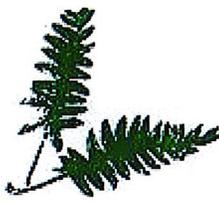
By signing this application I certify that all the information provided is accurate to the best of my knowledge. We will comply with all the requirements of the grant including making our books available for audit if required.

SIGNATURE OF APPLICANT: (Must be Town Administrator/Manager or Select Board Chair)

Name: [Signature]

Title: TOWN MANAGER

Town of Dorset, Vermont

**Dorset Town Offices:**

PO Box 715
112 Mad Tom Road
East Dorset, VT 05253

Dorset Town Manager's Office:

Phone: 802-362-4571 x 3
Fax: 802-362-5156
Email: townmanager@gmail.com
Website: www.dorsetvt.org

Chartered 1761

April 12, 2016

Town of Dorset – Better Backroads Category D Application -2016

Description of problem & project work plan:

Nims Road is an old gravel road on a side hill with a water crossing. The water crossing enters a 36" culvert with a 4' height drop from the inlet to the outlet of the culvert. The water entering the inlet comes in almost level with the road height. Due to this, during times of high flow, sections of the road around the culvert inlet have erosion problems. In addition when flows are high or if small amounts of debris get near the culvert inlet it can cause the water to overtop this part of the road. Nims Road is very narrow and built into a side hill, making culvert and ditch maintenance very difficult, by stabilizing the culvert inlet it will assist with this part of future maintenance as well.

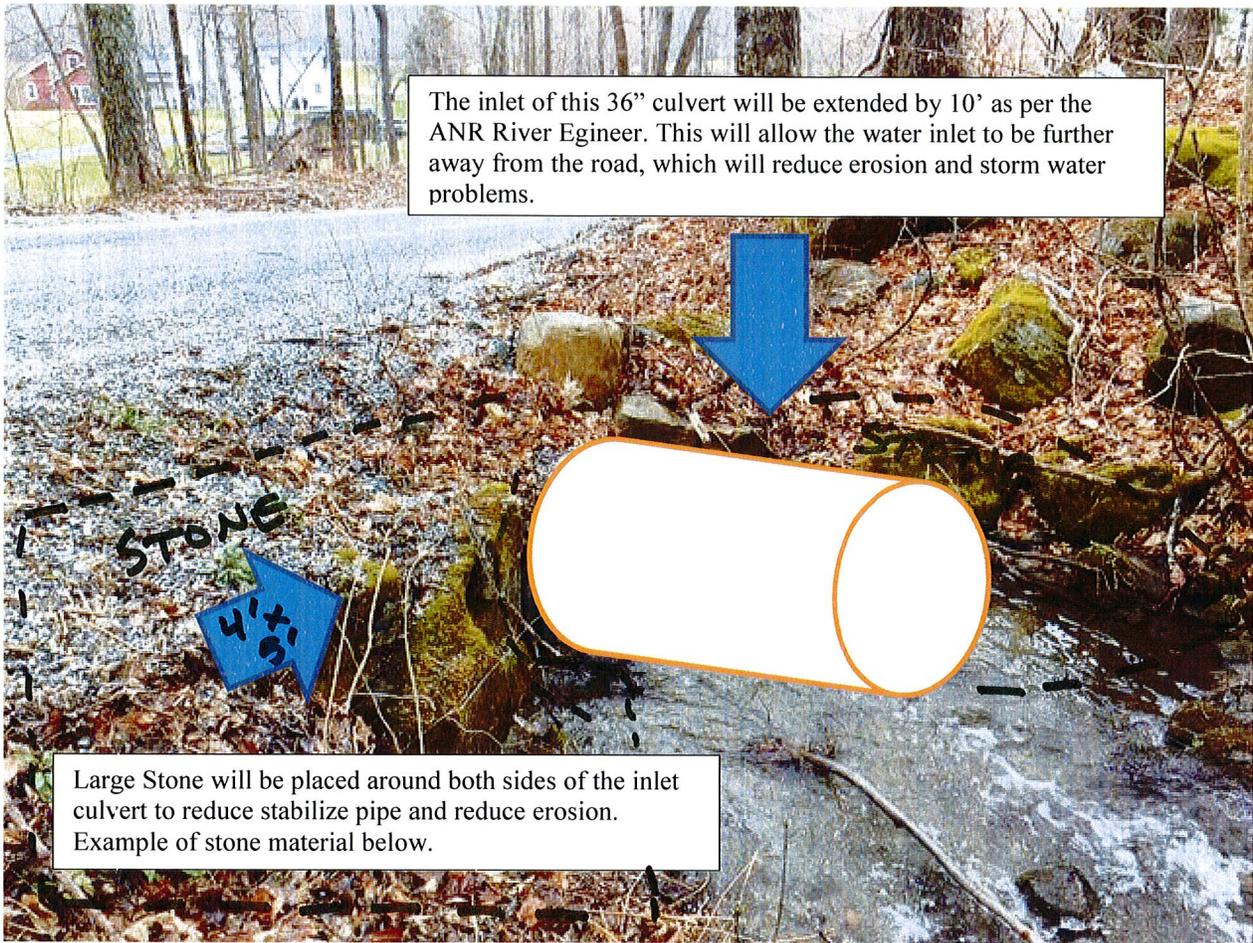
This culvert project located on Nims Road (TH #12) in Dorset will consist of a 10 foot extension on the existing culvert pipe on the uphill side of the road. In addition the inlet and outlet areas around the culvert will be stabilized with large rock. This will allow higher water flows to safely pass through the culvert and cause less erosion damage to the road. The area stabilized with large rock will be by installing 96 yards total of rip rap stone around the ends of the culvert. Channel is approximately 8' wide with 4' of rise. The stone placed on the outlet end of the culvert will help to prevent undermining of the outlet and a large scour hole filled in with stone to reduce scour and raise the bed elevation up to the pipe.

Expected Effects on water quality:

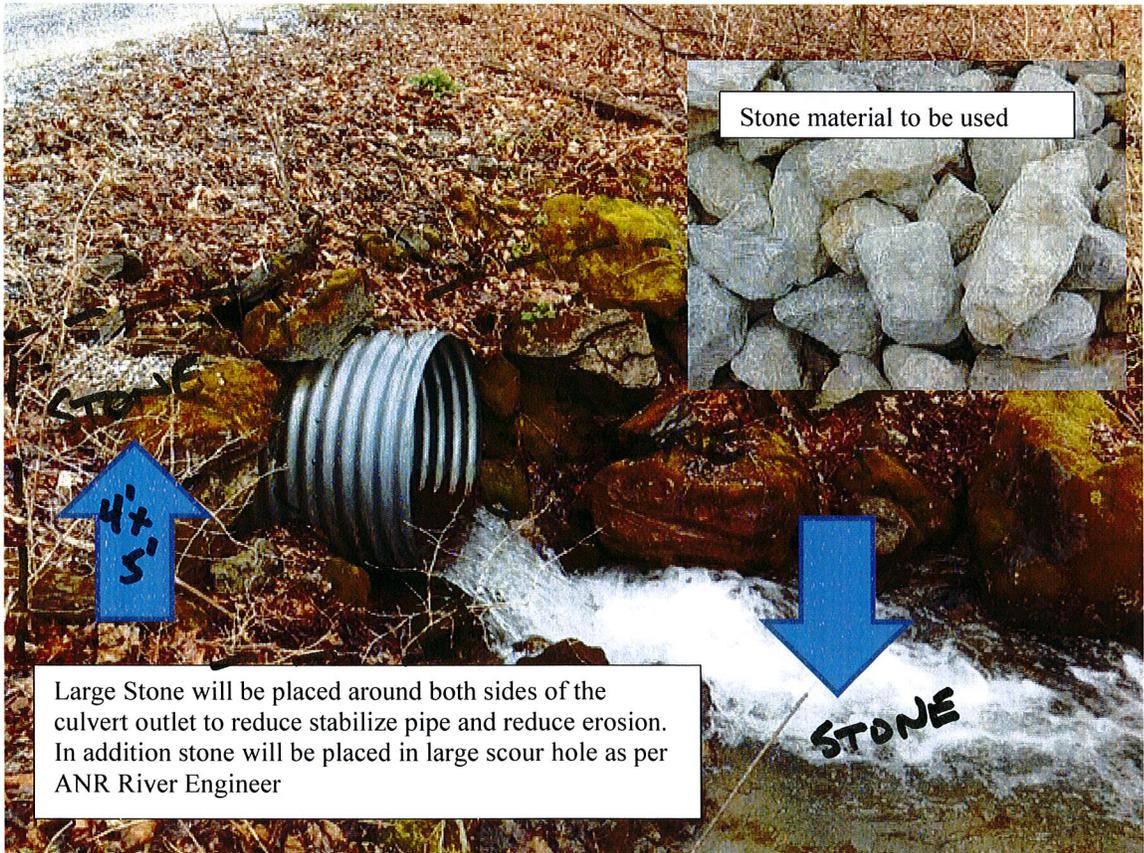
This project will help reduce road side erosion and storm water runoff. This erosion causes silt, stone, and road debris from the road to get into the storm water and ultimately into the stream channel. This stream channel is a tributary of the Mettawee, which ultimately feeds into Lake Champlain.

Attached:

- Permit consultation and support letter from ANR River Engineer
- Project Budget
- Project sketch & photos
- Map



Large Stone will be placed around both sides of the inlet culvert to reduce stabilize pipe and reduce erosion. Example of stone material below.



Large Stone will be placed around both sides of the culvert outlet to reduce stabilize pipe and reduce erosion. In addition stone will be placed in large scour hole as per ANR River Engineer



town manager <townmanager@gmail.com>

Dorset_Nims Road culvert

1 message

Carvajal, Joshua <Joshua.Carvajal@vermont.gov>
To: Rob Gaiotti <townmanager@gmail.com>

Sun, Apr 3, 2016 at 5:36 PM

Hi Rob,

Thank you for taking the time to discuss this potential Town project on Nims Road with me.

Either of the options below will be required to obtain coverage under the Stream Alteration General Permit (SAGP).

A) Extending the existing pipe is an option and should be done upstream to avoid pushing the scour hole at the outlet further away from the edge of the right of way. To prevent undermining of the outlet, this scour hole will need to be filled with large stone to reduce scour and raise the bed elevation up to the pipe invert.

B) Installing a replacement structure is my recommended option. Based on the bankfull measurements upstream and downstream, the structure will need a minimum an 8 ft span and 4 ft rise. The structure will need infill material satisfying ANR Type E stone to mimic the natural stream bed. Some of the available structure types for this minimum open area are an open bottom structure (abutments with a concrete deck), a pre-cast box culvert, or an arch pipe (squashed CMP).

A Vtrans hydraulics report will be needed to confirm design criteria in the Hydraulic Manual are also satisfied for this structure prior to applying for the SAGP.

There will be a \$200 fee for permit coverage and the fee form will need to be completed prior to commencing construction - http://www.anr.state.vt.us/dec/waterq/rivers/docs/SA/Stream%20Alt%20Application_11052015.pdf

Please let me know if you have any questions

Josh Carvajal, P.E. CFM

Rivers Program

Agency of Natural Resources

Department of Environmental Conservation

cell: (802) 490-6163

www.watershedmanagement.vt.gov/rivers.htm

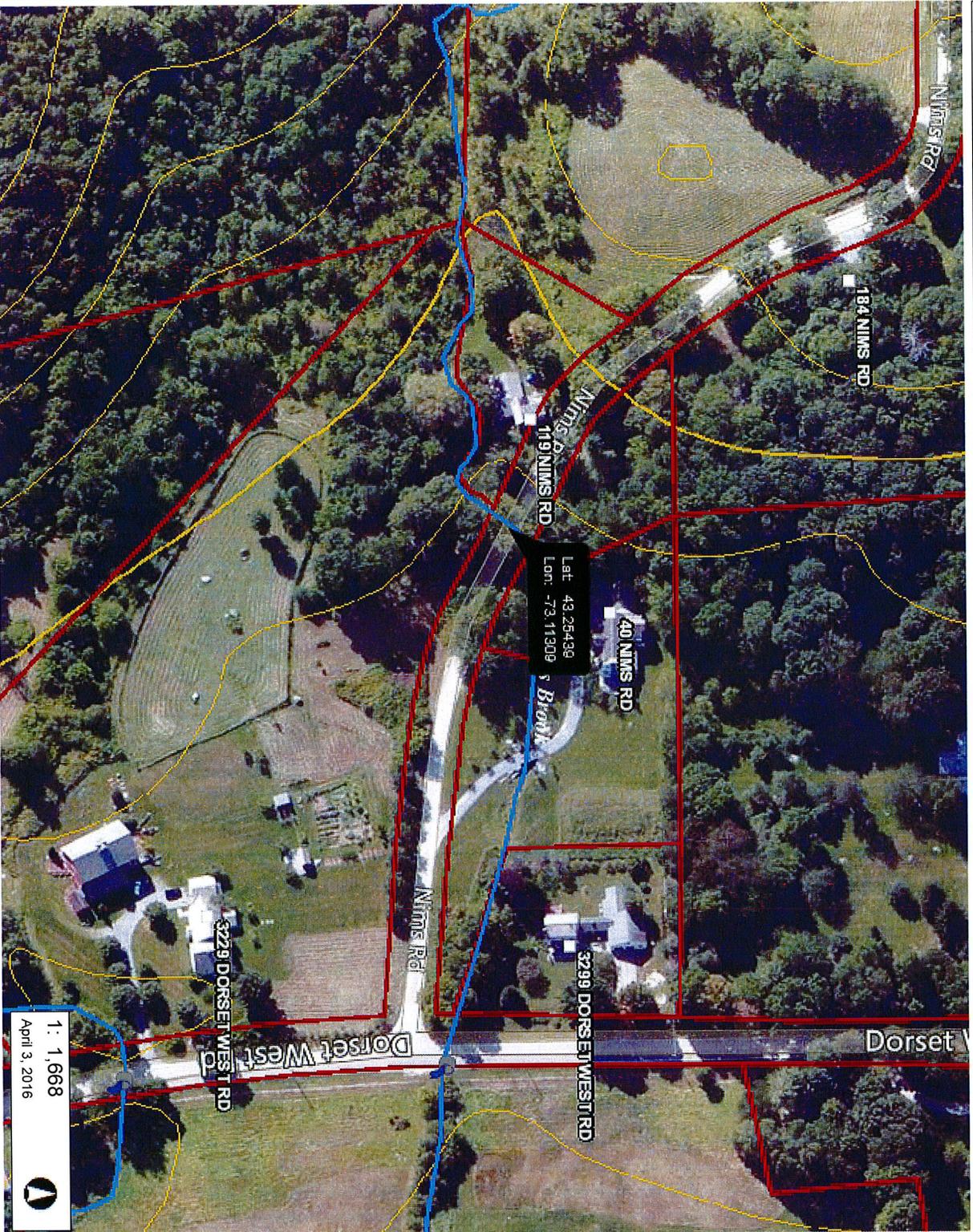
floodready.vermont.gov

Our email addresses have changed (@vermont.gov)

NEW: joshua.carvajal@vermont.gov

Please update your address book!

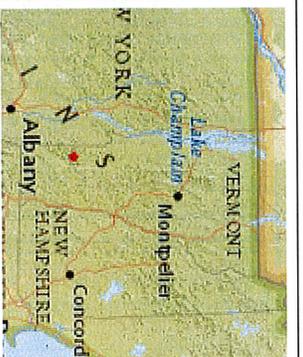
 **Dorset_Nims Road Atlas Map.pdf**
656K



1: 1,668
April 3, 2016

85.0 0 42.00 85.0 Meters
MGS_1984_Web_Mercator_Auxiliary_Sphere
© Vermont Agency of Natural Resources
1" = 139 Ft. 1cm = 17 Meters
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.



LEGEND

- Wetlands - VSWI
 - Class 1 Wetland
 - Class 2 Wetland
- Wetlands Advisory Layer
- River Corridor Easement
- DFIRM Floodways
- DFIRM Preliminary Floodways
- Special Flood Hazard Areas (A Counties)
 - AE (1-percent annual chance flood)
 - A (1-percent annual chance flood)
 - AO (1-percent annual chance zone feet)
 - 0.2-percent annual chance flood ha
- Special Flood Hazard Areas (F DFIRM)
 - AE (1-percent annual chance flood)
 - A (1-percent annual chance flood)
 - AO (1-percent annual chance zone feet)
 - 0.2-percent annual chance flood ha
- Buildings (E911)
- VTRANS State and Town Long
- VTRANS State Short Structure
- Town Bridge
- Town Culvert
- Waterbody
- Stream
- Parcels (where available)

NOTES

Map created using ANR's Natural Resources Atlas