



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 Roxbury

Project Name: Carrie Howe/Warren Mountain Road Road Erosion Problem

Road Name: Carrie Howe TH #: 23 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: _____

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

see 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):

see attached

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

see 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:

None

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: _____

(No)

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

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

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



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

see attached

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

Town employees - labor + equipment

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

Estimated Total Project Cost (including 20% local match): \$ 25,089.80

Estimated Completion Date: 9/1/2016

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.

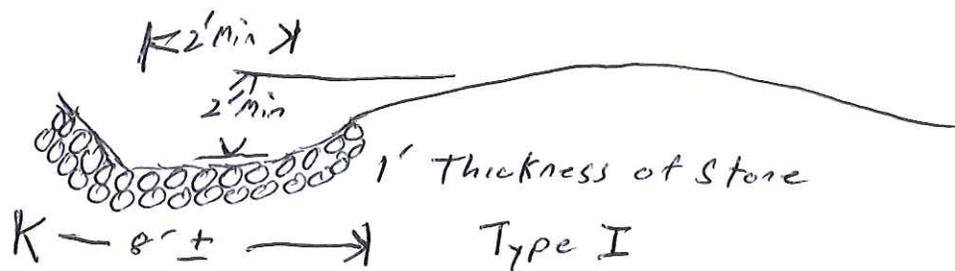
SIGNATURE OF APPLICANT: (Must be Town Administrator/Manager or Select Board Chair)

Name: Shu

Title: Chair

Carrie Howe Rd Town Hwy # 23
Warren Mtn Rd Town Hwy # 1

Typical Stone Lined Ditch Detail



BETTER BACK ROADS GRANT

CATEGORY B - ROAD RELATED EROSION PROBLEMS

TOWN OF ROXBURY

PROJECT NAME - CARRIE HOWE/WARREN MTN ROAD EROSION PROBLEM

ROAD NAME - CARRIE HOWE ROAD, TH #23
780' DITCH WITH STONE LINING

ROAD NAME - WARREN MOUNTAIN ROAD TH#1
700' SOUTH SIDE OF ROAD, DITCH WITH STONE LINING
350' NORTH SIDE OF ROAD, DITCH WITH STONE LINING

DESCRIPTION OF PROBLEM:

THIS SECTION OF CARRIE HOWE ROAD IS IDENTIFIED AS A HIGH RISK FOR EROSION SPOT. THIS PITCH EMPTIES DIRECTLY INTO THE DOG RIVER.

THESE TWO SECTIONS OF WARREN MOUNTAIN ROAD ARE LOCATED ADJACENT TO THE INTERSECTION OF CARRIE HOWE ROAD. BOTH SECTIONS EMPTY INTO THE DOG RIVER. THE NORTH SECTION IS APPROXIMATELY 100' SOUTH PARRELEL TO THE RIVER. THE SOUTH SECTION EMPTIES INTO A CULVERT CROSSING WARREN MOUNTAIN ROAD DIRECTLY INTO THE DOG RIVER.

DESCRIPTION OF PROJECT:

THE INSTALLATION OF STONE LINING WILL HELP STOP EROSION OF THE DITCHES AND SEDIMENT ENTERING THE DOG RIVER.

EXPECTED EFFECTS:

THE DITCHING WILL HELP PREVENT EROSION AND STOP SEDIMENT FROM WASHING INTO DOG RIVER.

MATERIALS

TYPE 1 STONE

1830' X 8' X 1' = 542 YARDS

NORTHEAST MATERIALS \$8.50 PER TON

542 X 1.5 = 813 TONS

\$6,910.50

TRUCKING

813 TONS DIVIDE 20 = 40.65 LOADS

41 LOADS AT 1.5 HOURS

TIM STONE TRUCKING - TRIAXLE \$75.00 PER HOURS

41 X 1.5 = 61.5 HOURS

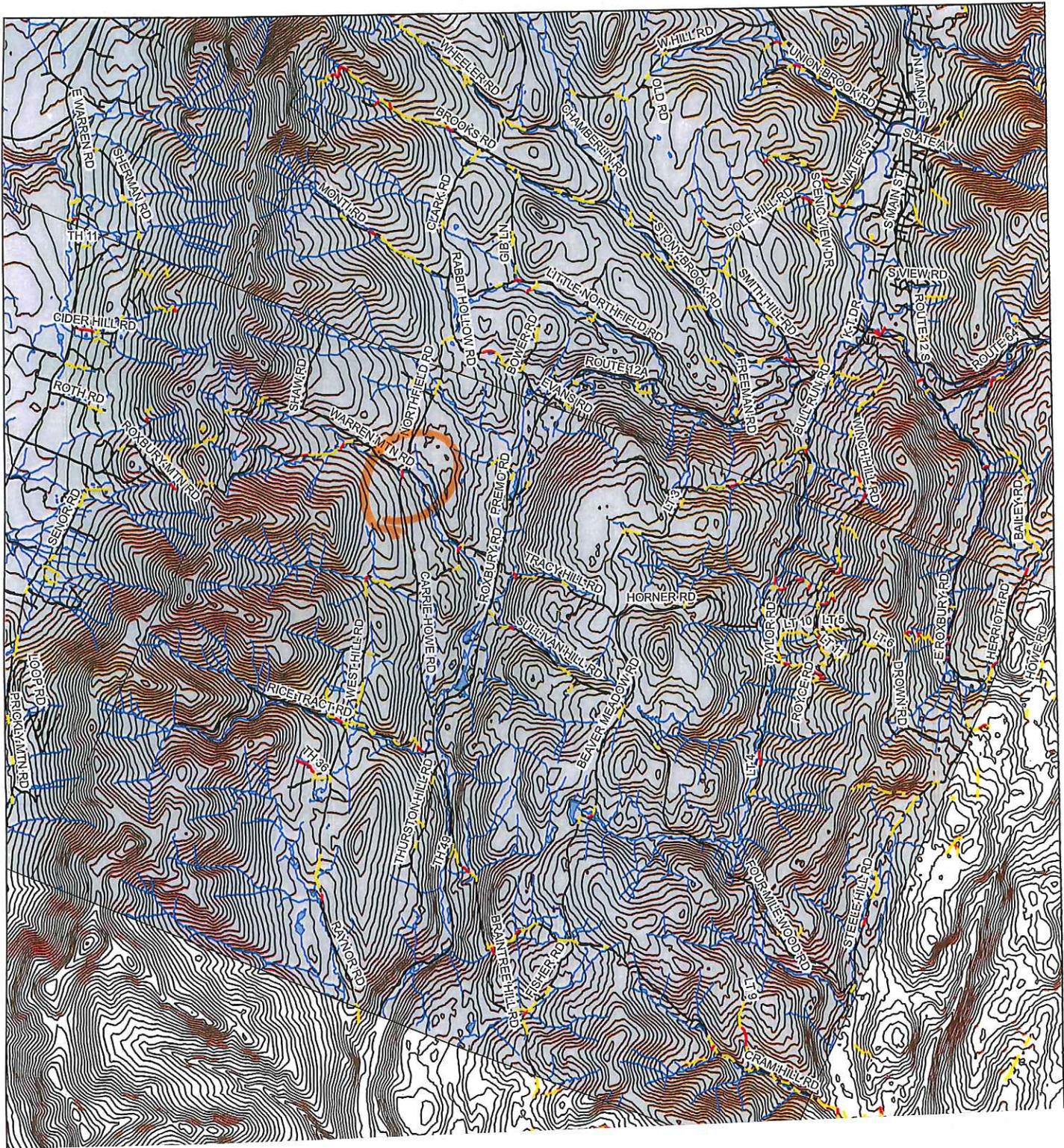
61.5 X \$75.00 = \$4,612.50

TOWN OF ROXBURY

JOHN DEERE 410 BACKHOE

6 WHEEL DUMP TRUCK

ROXBURY







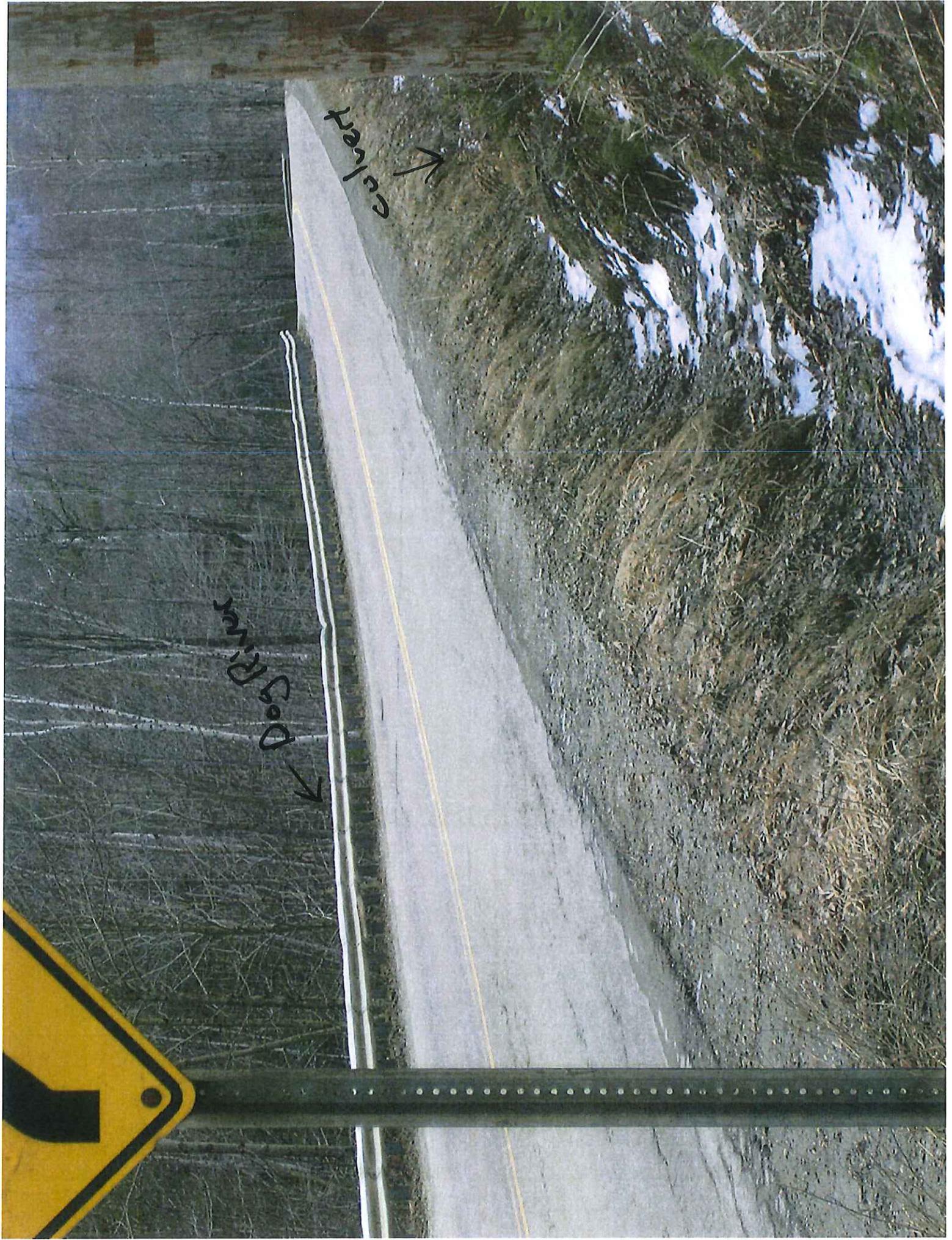
SPEED
LIMIT
40



Dog River

Bridge





Good Springs

Colbert





Poor Rivet

Poor Cement



← River



River →

