



# 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

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: Berry Road Ditch Stabilization

Road Name: Berry Road TH #: 8 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):

Box-shaped ditch has filled with sediment and there is incision erosion from adjacent roadway. Ditch slope ranges from 3.8-8%. There are three existing 12-15" driveway culverts and one cross culvert that are either undersized or failing which has impacted the effectiveness of the ditching and causing additional erosion.

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):

Beginning from the top of the hill, town will reshape and stabilize the ditch (seed/mulch or rock line depending on slope- see project sketch). Compost sock check dams will be installed on the upper portion of the ditching and Nilex temporary check dams will be installed in the lower portion. The town wishes to try both types of check dams to evaluate ease of installation, effectiveness and maintenance. Undersized/failing culverts will be replaced. A rock plunge pool will be installed at the outlet of the cross culvert and another at the end of the ditch to dissipate flow. Road will be re-graded so water goes into ditch instead of down embankment into stream.

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

Once completed, the project will stop erosion in ditch and roadway. Water will be redirected into ditch (and away from stream) and slowed through a series of check dams. The stone lined plunge pool at the end of the ditch will allow sediment to deposit.



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

Progress to Date:

None.

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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.

-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).

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:  
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): \$ 19,047.04

Estimated Total Project Cost (including 20% local match): \$ 23,808.80

Estimated Completion Date: 09/30/2016

**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: [Handwritten Signature]

Title: Board Chairman



# Berry Road, Richford, VT Category B Better Roads Grant Ditch Stabilization



Prepared by:  
Northwest Regional  
Planning Commission  
75 Fairfield Street  
St. Albans, VT 05478  
www.nrpcvt.com  
March 2016

Town of Richford  
Town of Berkshire

Existing 18" X 40' CMP  
(Replace)

Seed/Mulch 365', Stone Line 120'

Seed/Mulch 300'

Stone Line 130'

Grass Line 36'

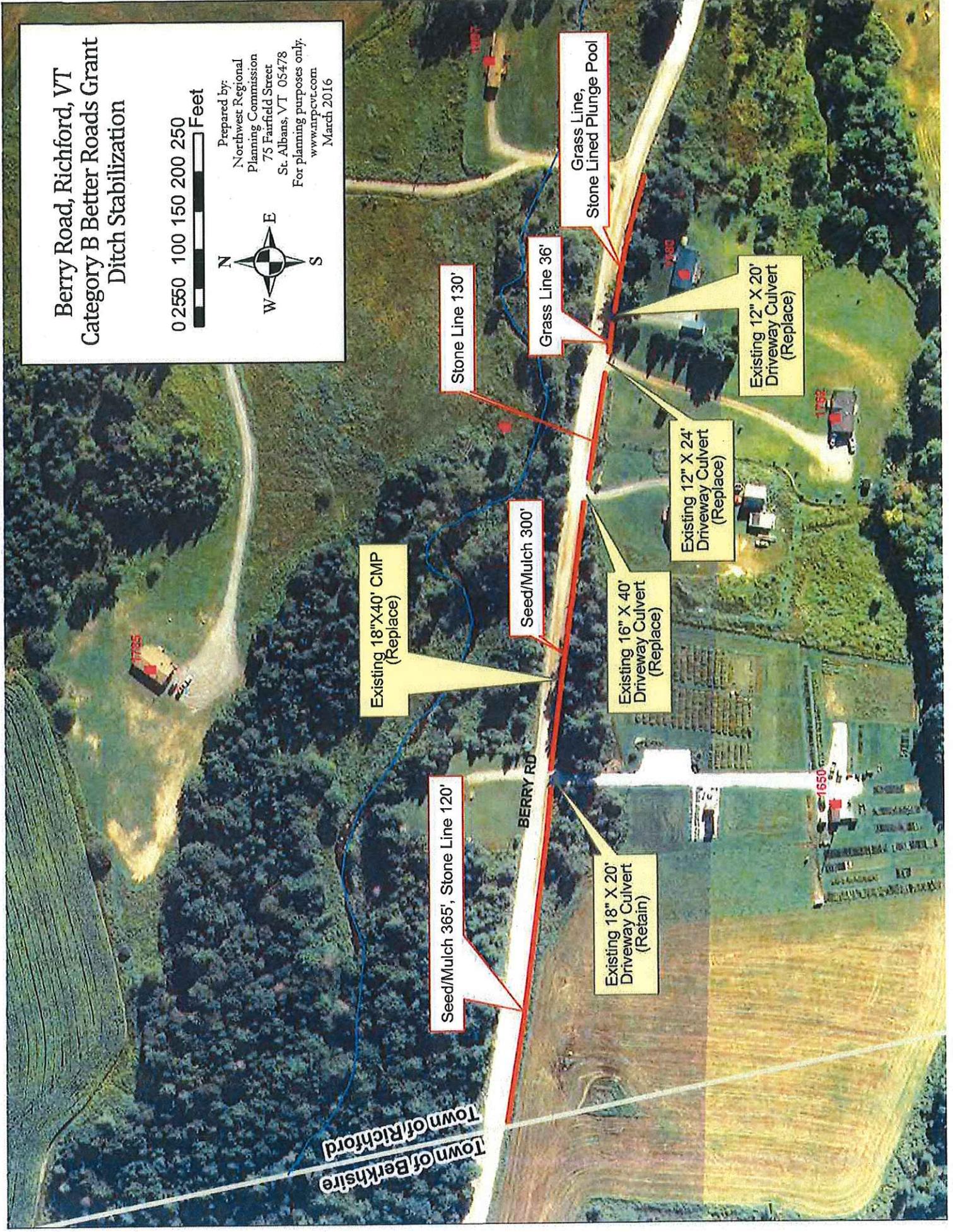
Grass Line,  
Stone Lined Plunge Pool

Existing 18" X 20'  
Driveway Culvert  
(Retain)

Existing 16" X 40'  
Driveway Culvert  
(Replace)

Existing 12" X 24'  
Driveway Culvert  
(Replace)

Existing 12" X 20'  
Driveway Culvert  
(Replace)



SMITH TECHNICAL SERVICES  
 66 DIAMOND ST.  
 ST. ALBANS, VT. 05478-1827

RICHMOND  
 BERRY ROAD  
 BR Proposed Project

NOTES:

8+65

8+25

5+85

4+85

3+65

TOWN LINE RICHMOND  
 BARKSHIRE

WATER

Drive "C"

EXISTING 12"x24" CMP  
 New 15"x30" HDPEP

STONE LINING

EXISTING 15"x40" CMP  
 New 15"x40" HDPEP

DRIVE "B"

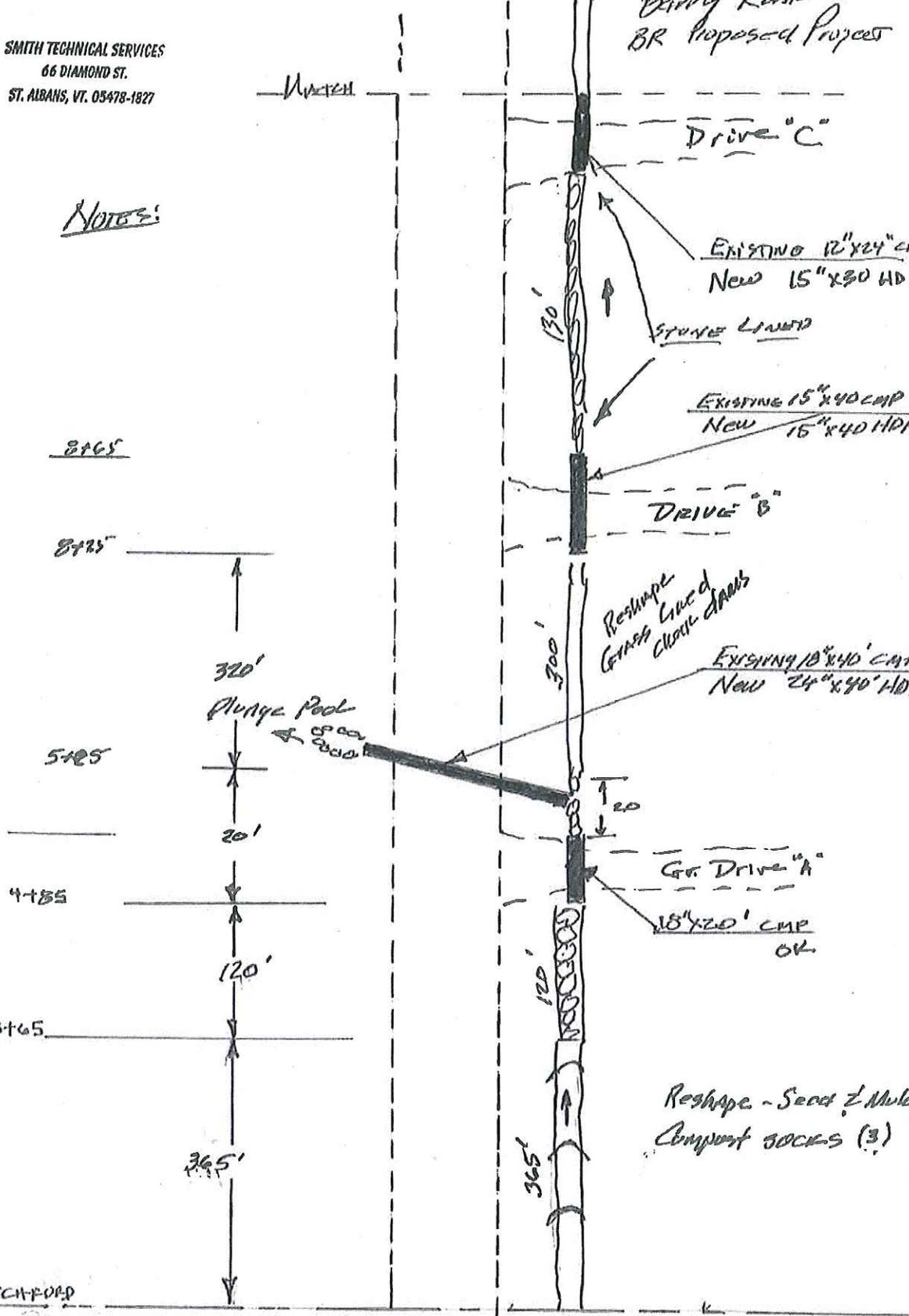
Reshape  
 GRASS GULLY  
 Close drains

EXISTING 10"x40" CMP  
 New 24"x40" HDPEP

Gr. Drive "A"

18"x20" CMP  
 OK

Reshape - Seed & Mulch  
 Compact SOCS (3)



NOTES

Culverts:  
 15" x 20  
 15" x 30  
 15" x 40  
 24" x 50

STONE Lining = 345 LF

Grass Lining =  
 365  
 300  
 36  
 ---  
 701 LF

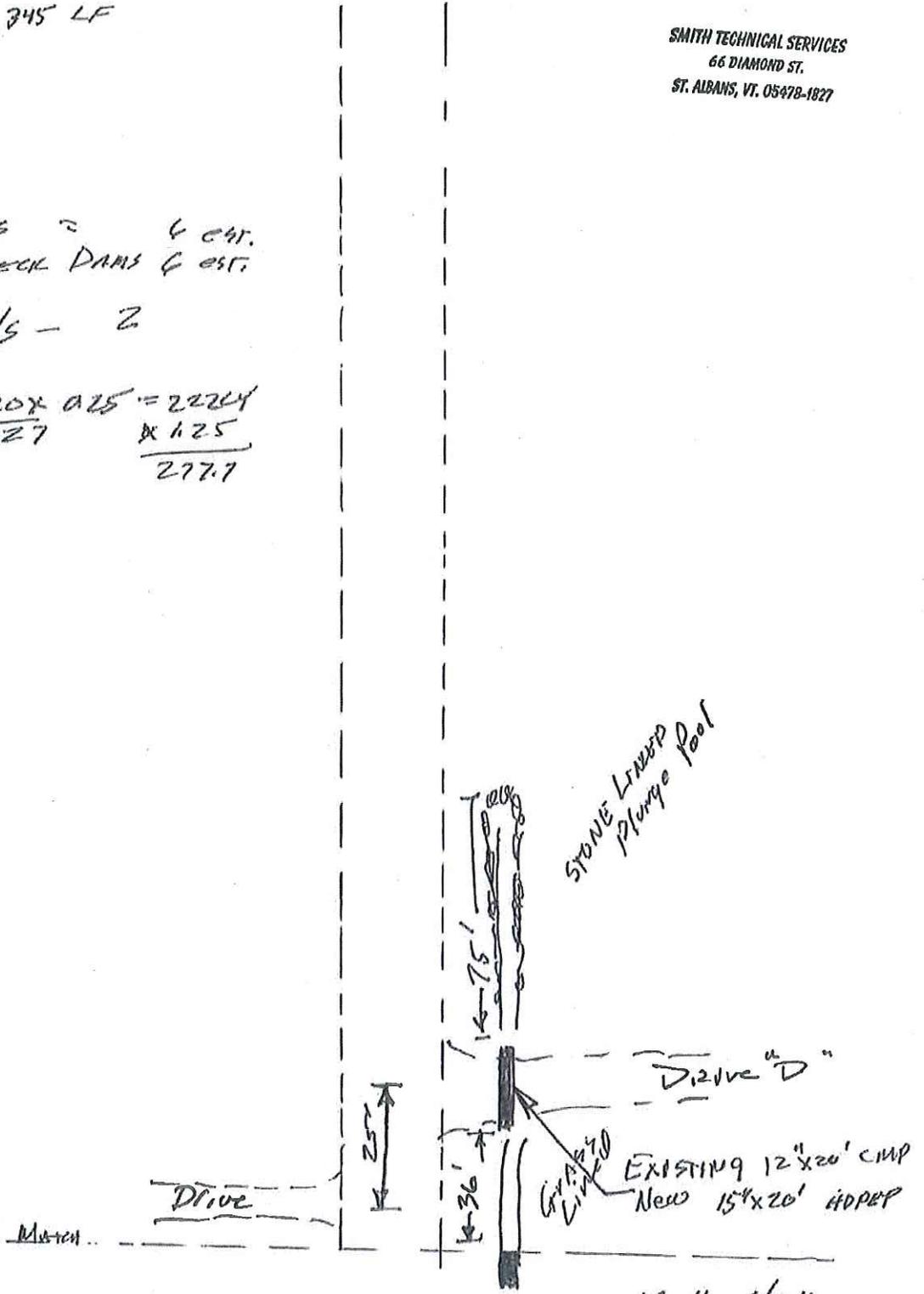
Compost Socks = 4 est.  
 Nylon Temp Check DAMS 4 est.

Plunge Pools - 2

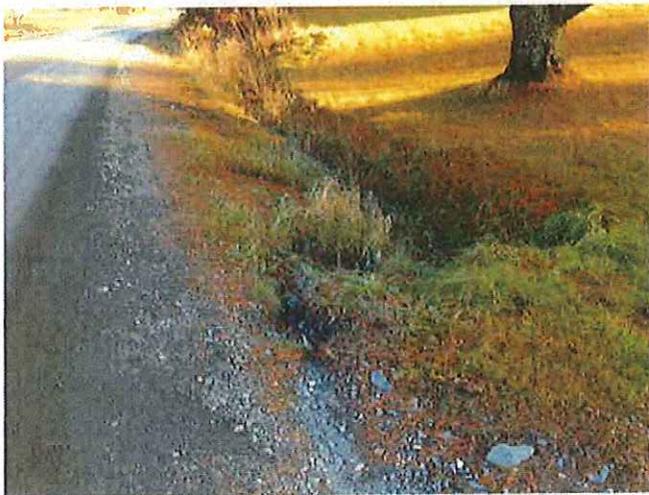
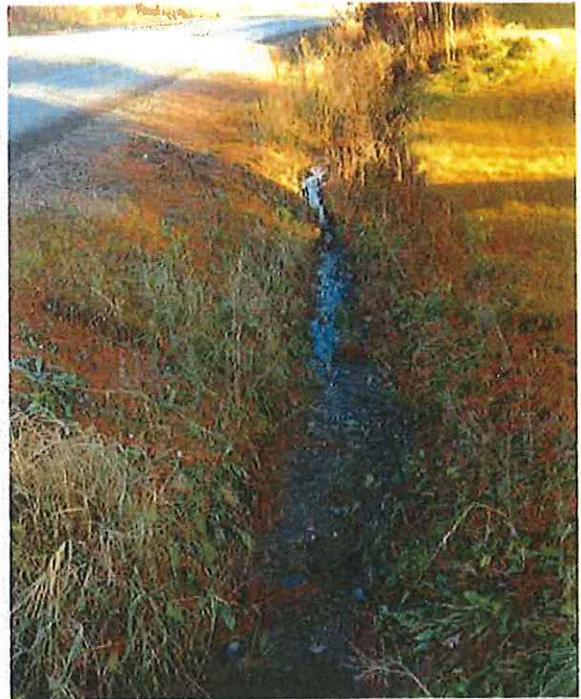
Gravel -  $1200 \times 20 \times 0.25 = 2224$   
 $\frac{27}{27} \quad \times 1.25$   
 $\frac{277.7}{277.7}$

RICHMOND  
 BARRY ROAD  
 BR Proposed Project

SMITH TECHNICAL SERVICES  
 66 DIAMOND ST.  
 ST. ALBANS, VT. 05478-1827







*Upper Left:* Evidence of road material filling in ditch on Berry Road.

*Lower Left:* Incision erosion from road shoulder into ditch on Berry Road.

*Upper Right:* Minor incision erosion beginning in ditch.