Better Roads
Clean Water You Can Afford

Received
APR 1 1 2016
VTrans
PDD-LTF

VTrans
VERMONT
AGENCY OF NATURAL RESOURCES

FY17 Vermont Better Roads Grant Application

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

Town/Organization: Ryegate Contact Person(s): Nelson Elder

Address: 73 Witherspoon (Street Address) East Ryegate (Town) 05042 (Zip)

Email: nelsonwelder@gmail.com Phone: (802) 584 - 3002

DUNS #: 94 987 3855 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 Ryegate

Project Name: Weatherbee Culvert

Road Name: North Bailey Hazen TH #: 7 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: Manchester Brook

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

The last 20' on outlet end of this 3.5' Culvert is compromised. The bank is letting go on both sides of outlet. The Culvert is separated and pulling away from road.

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):

Pull guardrails - Replace twenty feet of Culvert and restaplize bank. Adding 150 yrd of type III stone and add smaller stone as we make up the bank Then replacing guardrails.

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

Erosion will be eliminated by placing bigger stone on both sides of Culvert on bank and working our way up. Also by reseeding and mulching the top of project upon completion.

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:
Capped the top with erison stone. To slow down water off of road way.

Is there an emergency reason this project must be completed quickly? If yes, please explain:
Applied last year. Need to fix Culvert, before a $10,000 job. Turns into a $20,000 or $30,000 project.

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: Added to Hwy 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.):
- Patrick Ross, Agency of Natural Resources (802) 279-7143

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).
The only work road crew would be able to do, is haul gravel to project to compact around Culvert. Most the work is out of our scope or reach.

Describe how the grant funds will be spent and/or attach a project budget: The grant funds will be used on the dirt work and the renting of equipment needed. Our match will cover the cost of guardrail replacement.

How do you plan to meet the required 20% match on this grant?: We already budgeted for this project in the annual ~~bug~~ budget meeting.

Requested Grant Amount ($20,000 max Category B, $40,000 max Categories C & D): $9,600

Estimated Total Project Cost (including 20% local match): $12,000

Estimated Completion Date: 10/21/16

REQUIRED ATTACHMENTS:

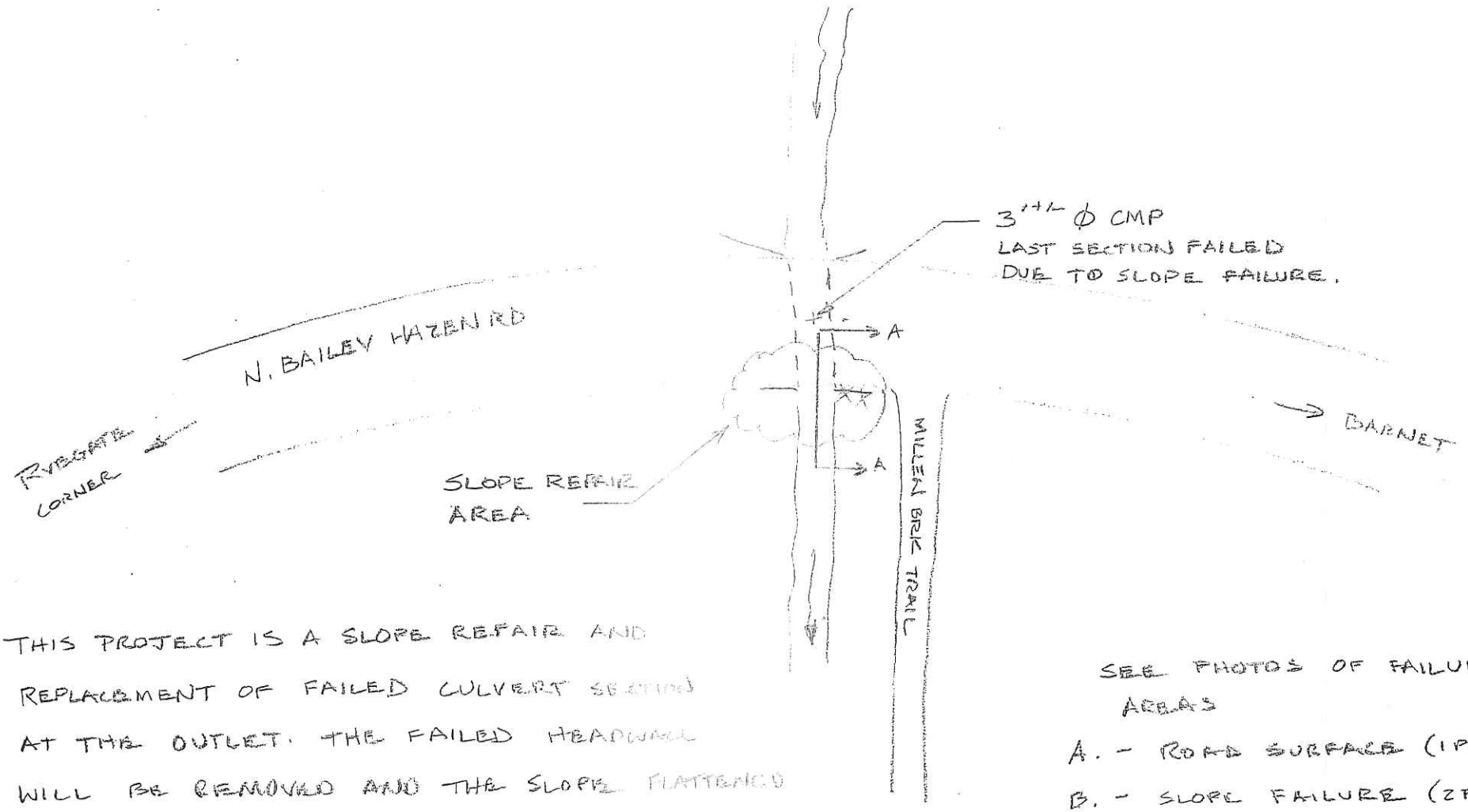
- ☑ Itemized Cost Estimate (labor, equipment, materials)
  (For assistance, call Better Backroads at 802-828-4585)
- ☐ Project Location Map
  (Please show location of affected water; 1:12,000 USGS map, if possible)
- ☑ Sketch of proposed erosion control measures, including:
  - ☑ Distances (ft.)
  - ☐ 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: Paul Reuern Title: Select Chair

FIELD SKETCH PLAN



1.) THIS PROJECT IS A SLOPE REPAIR AND REPLACEMENT OF FAILED CULVERT SECTION AT THE OUTLET. THE FAILED HEADWALL WILL BE REMOVED AND THE SLOPE FLATTENED AND STABILIZE WITH TYPE III STONE FILL. THE CULVERT END WILL BE EXTENDED TO MATCH SLOPE.

2.) THIS PROJECT QUALIFIES FOR A 'NEXT FLOOD' PERMIT TO STABILIZE THE ROAD.

PATRICK ROSS, P.E.

SEE PHOTOS OF FAILURE AREAS

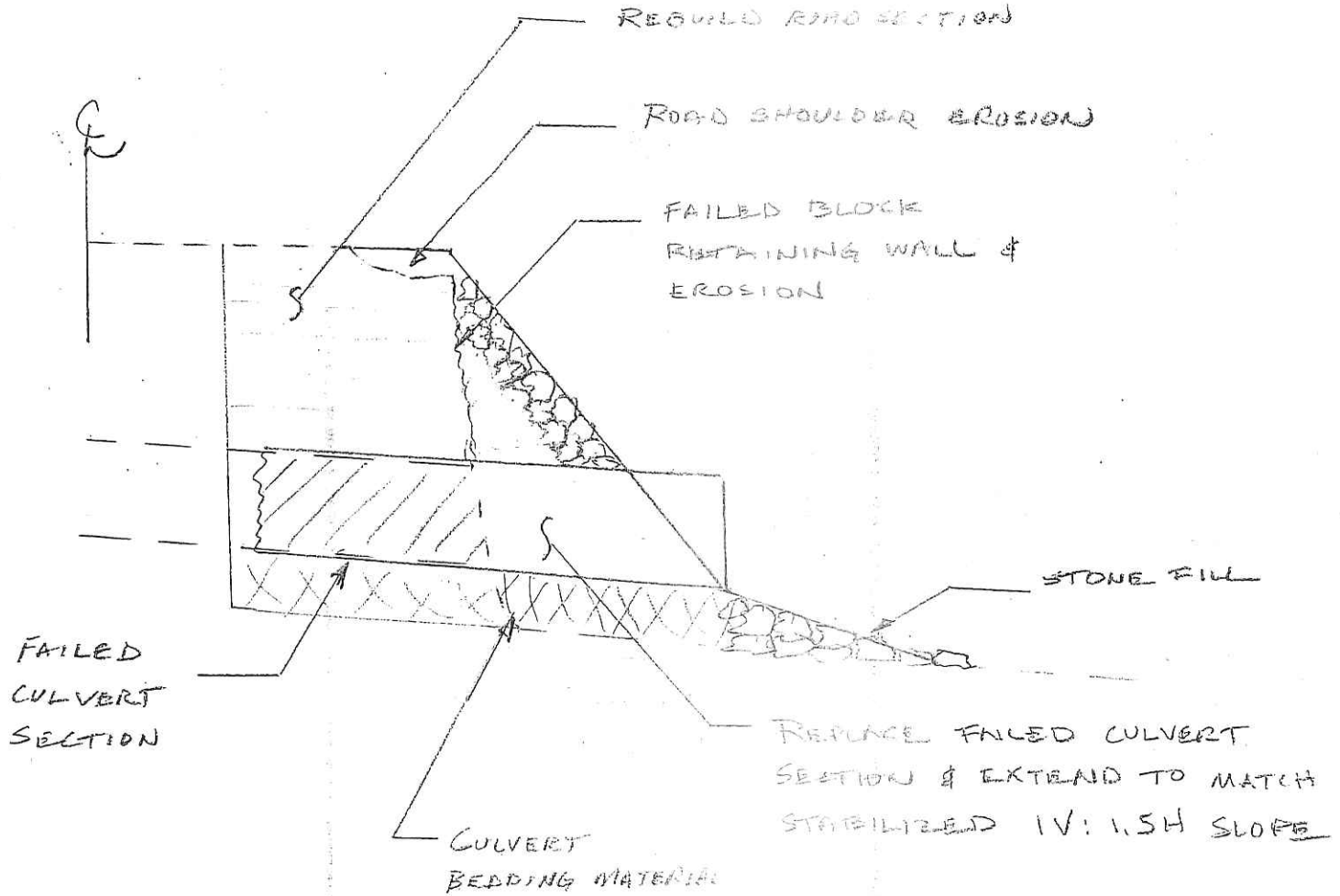
A. - ROAD SURFACE (1 PHOTO)

B. - SLOPE FAILURE (2 PHOTOS)

N.T.S.

RYEGATE
BAILEY HAZEN ROAD

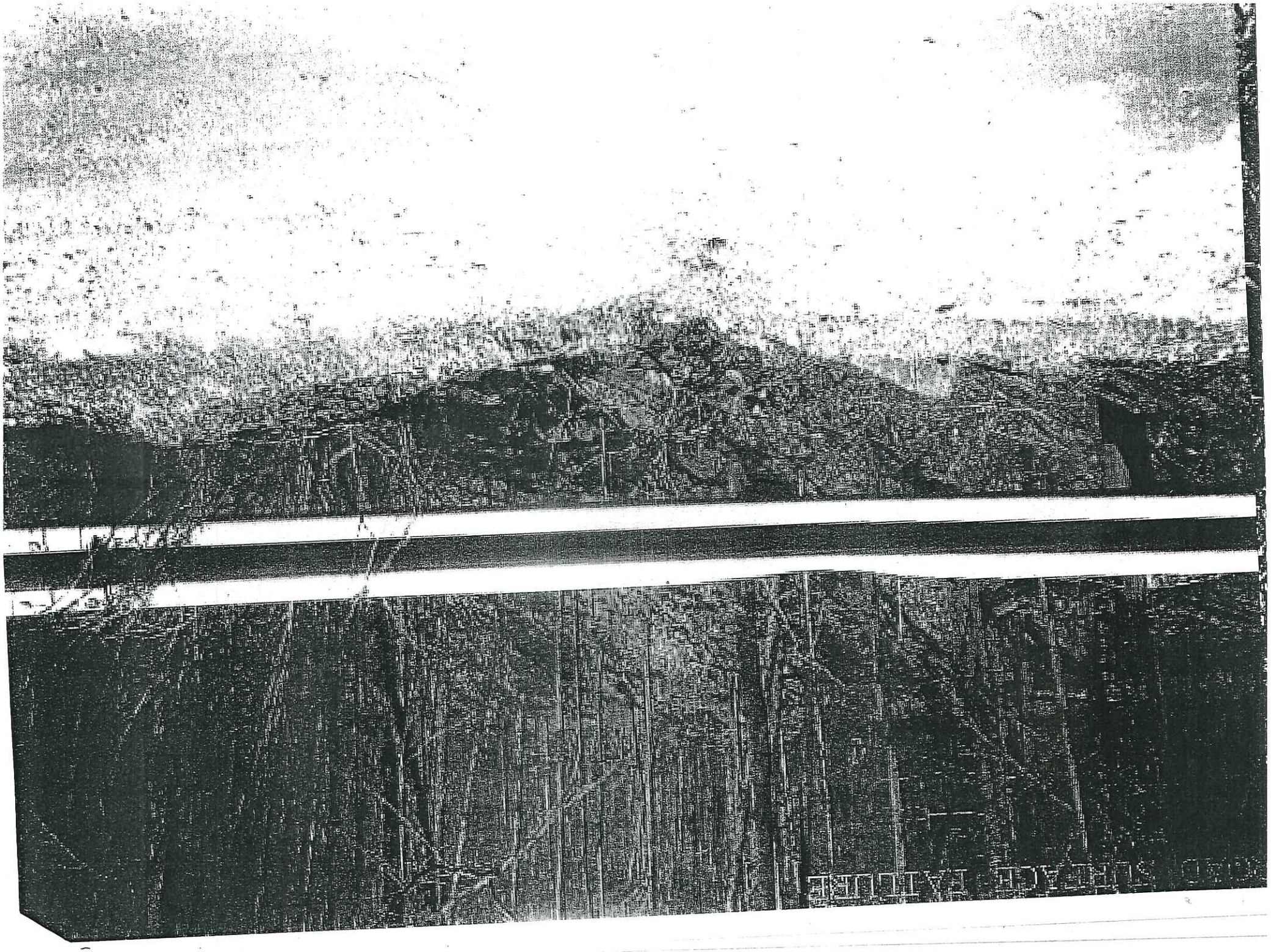
FIELD CROSS SECTION



N.T.S

RYE GATE

N. BAILEY HAZEN RD



SLOPE FAILURE

SLOPE FAILURE - CLOSE UP

Cost Estimate Worksheet

Town and Road Name: North Bailey Hazen Project Name: Weatherbee Culvert.

Labor	Rate	# Hours	Total (Rate x Hours)
Three Labors			
		Labor Total	$ 2,000

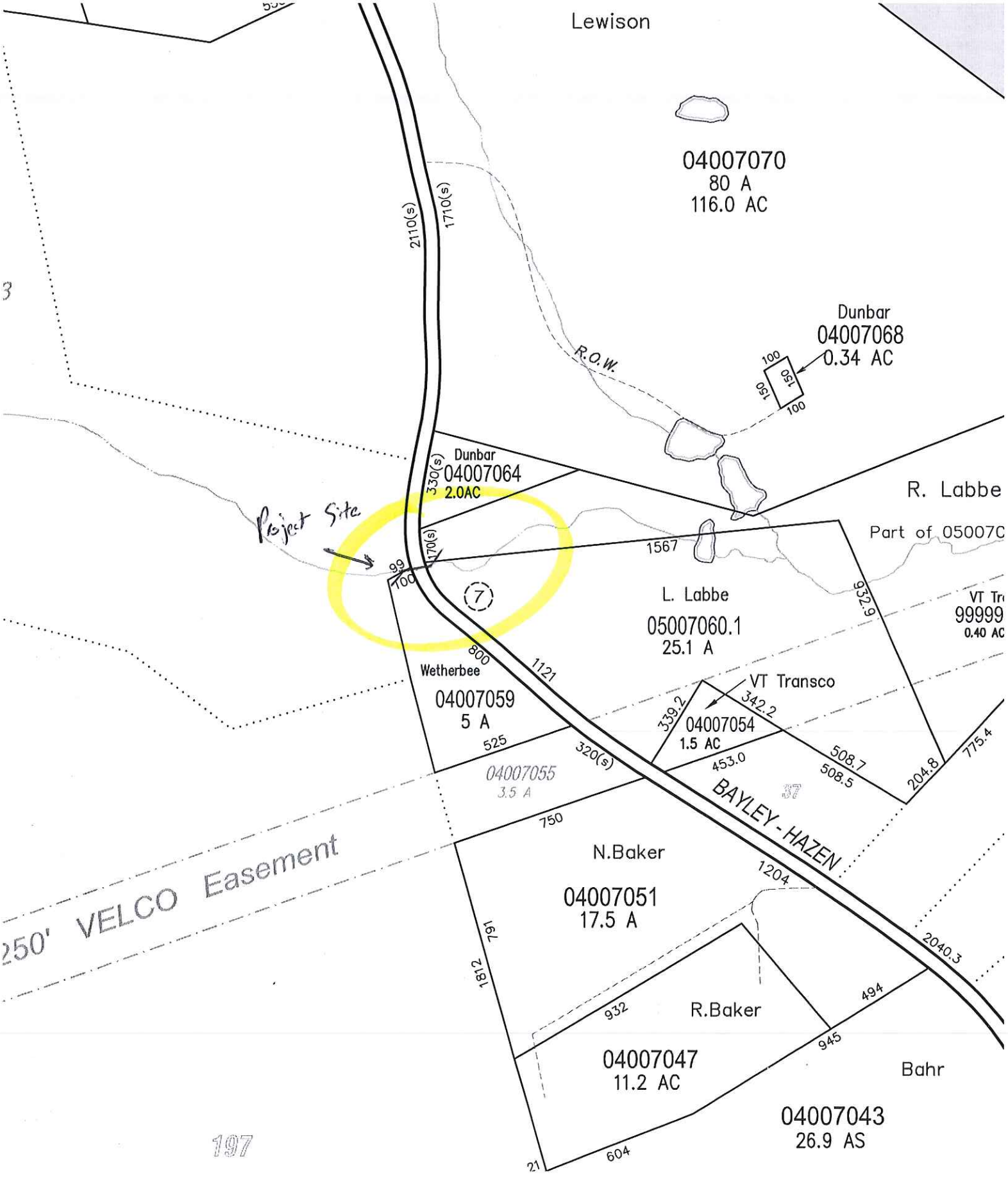
Equipment	Rate	# Hours	Total (Rate x Hours)
Excavator			
Plate Compactor			
Trucks Dump.			
		Equipment Total	$ 4,000

Materials	Rate	Amount	Total (Rate x Amount)
Crushed Gravel 3/4	10.75 yrd.	35 yrd.	$376.25
Type III to II stone	10.50 yrd.	200 yrd.	$2,100.00
Erison Stone	10.85 yrd.	28 yrd.	$303.80
3/4 stay net.	11.75 yrd.	28 yrd.	$329.00
20' of 3.5w Culvert plus Collar.	41.80 sft.		$1,000
Guardrails			$1,892
		Materials Total	$ 6,000

Miscellaneous	Rate	Amount	Total (Rate x Hours)
		Miscellaneous Total	

Grand Total $ 12,000

Match $ 2,400


Lewison
04007070
80 A
116.0 AC
2110(s)
1710(s)
R.O.W.
Dunbar
04007068
0.34 AC
100
150
150
100
Dunbar
04007064
2.0AC
330(s)
R. Labbe
Part of 05007C
Project Site
1567
1170(s)
99
700
7
L. Labbe
05007060.1
25.1 A
932.9
VT Tr
99999
0.40 AC
800
1121
Wetherbee
04007059
5 A
VT Transco
339.2
342.2
04007054
1.5 AC
453.0
508.7
508.5
204.8
775.4
525
320(s)
04007055
3.5 A
37
BAYLEY - HAZEN
750
N.Baker
1204
04007051
17.5 A
791
1812
2040.3
932
R.Baker
494
945
04007047
11.2 AC
Bahr
04007043
26.9 AS
21
604
250' VELCO Easement
197