



Vermont Better Roads Grant Program



Cover Sheet

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

Town/Organization: Huntington

Primary Contact Person: Barbara Elliott, Town Administrator

Address: 4930 Main Road, Huntington VT 05462

Primary Contact Person Email: townhunt@gmavt.net Phone: (802) 434-4779

SAM unique ID #: 5WGE7 Fiscal Year End Month (MM): 06

Town Clerk / Admin email: Heidi Racht, huntingtonclerk@gmavt.net

Road Foreman Name: Clinton 'Yogi' Alger, huntington.vt.roads@gmail.com



Vermont Better Roads Grant Program



CATEGORY B/C/D

Please complete one application per project you are applying for.

Please check the Category you are applying for:

- B. Correction of a Road Related Erosion Problem and/or Stormwater Mitigation
- C. Correction of a Stream Bank, Lake Shore or Slope Related Problem
- D. Structure/culvert 36" diameter or greater

Municipality: Town of Huntington

Road Name: **Handy Road** TH #: **14** Structure # (if applicable): # **25**

Road Type: Unpaved Road Class: 3

Description of the erosion/water quality problem

This large culvert on Handy Road serves as a crossing over Fargo Brook, which feeds directly into the Huntington River. It was the most critical finding from a hydraulic capacity standpoint according to the Town's 2021 McFarland Johnson bridge capital development plan. "The culvert exhibits signs of initial failure, with numerous locations of interior deformation along the culvert length. This results in a reduced hydraulic opening, creating an increase chance of debris accumulation within the CMP and developing a dam effect which could seriously affect Handy Road." The slope of the roadway segment (108,311.00) at the culvert is 4.67%, which is located just below the road's steepest segment (108,312.00) at a slope of 11.64%.

The initial REI assessment of Handy Road was 'does not meet' with a priority ranking of 'very high'. The Town Road Crew has completed all work on Handy Road to bring all segments into compliance with the MRGP standards, with the exception of the culvert replacement. Completing this project will complete the job of protecting this area of Fargo Brook from further erosion and sedimentation.

Has the town completed an MRGP compliant road erosion inventory? **Yes**

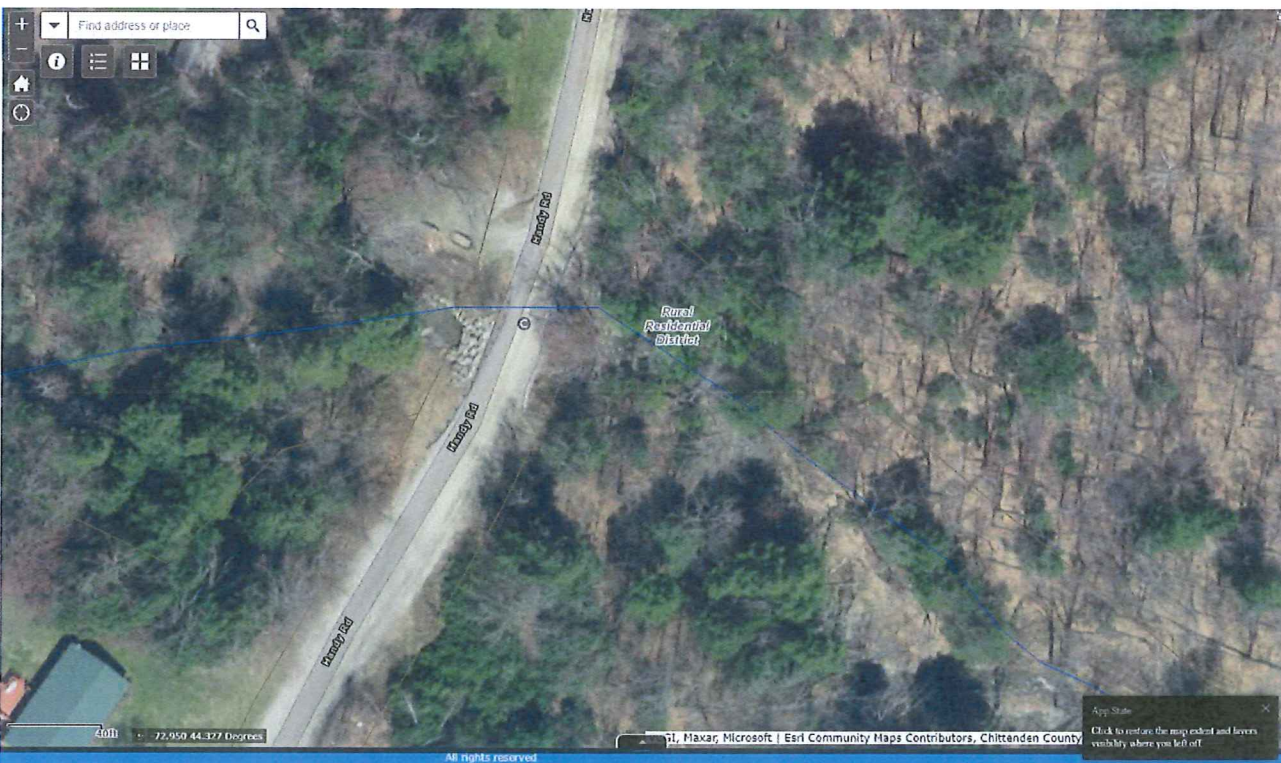
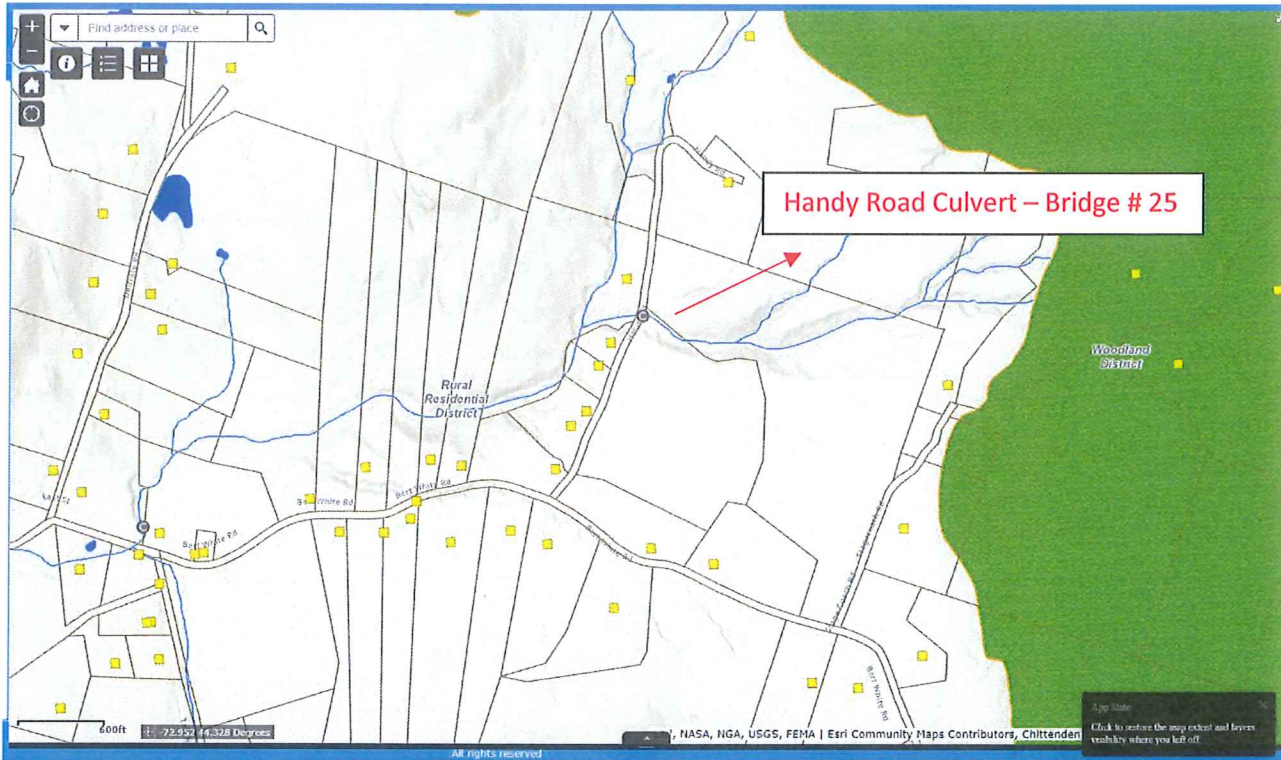
Project Length (linear feet along roadway): n/a

Number of structures/culverts replaced/repaired: Grant is to replace 1 culvert

Average slope of roadway: The slope on Handy Road ranges from 0.35% to 11.64%

Provide a VERY detailed map of project location showing start and end points: Included

Provide a sketch of project location showing distances and project details: Included





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*In order to “Fully Meet” the standards the road segment must have proper crown, removal of shoulder berms, proper ditching, proper conveyance and no erosion present at culvert inlets and outlets.

Environmental Concerns:

All projects require a review of potential impacts by our environmental team. To expedite the review process, please check the boxes below that describe existing structures/conditions to be replaced/maintained (if any) and the project description that applies (if any).

Existing Structures:	
<input checked="" type="checkbox"/> Steel/Plastic Culvert	<input type="checkbox"/> Concrete Box Culvert
<input type="checkbox"/> Stone Culvert – Take pictures	<input type="checkbox"/> Concrete Bridge
<input type="checkbox"/> Ditch	<input type="checkbox"/> Rolled Beam/Plate Girder Bridge
<input type="checkbox"/> Foundation remains, mill ruins, stone walls, other – Take pictures	<input type="checkbox"/> Stone abutments or piers – Take pictures
<input type="checkbox"/> Buildings within 300 feet of work - Take pictures	
Project Description:	
<input type="checkbox"/> New ditches will be established	<input type="checkbox"/> All work will be completed from the existing road or shoulder
<input checked="" type="checkbox"/> Reestablishing existing ditches only	<input checked="" type="checkbox"/> There will be excavation within 300 feet of a river or stream – Take pictures
<input checked="" type="checkbox"/> The structure is being replaced on existing location/alignment	<input type="checkbox"/> Road reclaiming, reconstruction, or widening
<input type="checkbox"/> Excavation within a floodplain – Take pictures	<input checked="" type="checkbox"/> Temporary off-road access is required
<input checked="" type="checkbox"/> Tree cutting/clearing – Take pictures	<input type="checkbox"/> The roadway will be realigned

Please describe the project and how it will create a positive water quality benefit (ex. Reshape 500’ of ditch and line with 12 inch minus stone, to prevent sediment from entering the Lamoille River at the bottom of the hill):
 The project will be to replace the existing damaged and undersized 6’ culvert with a 12’ steel culvert in order to reestablish better water flow and eliminate erosion.

Please list any professionals or partners that assisted with planning this project (ANR River Management Engineer, Army Corps of Engineers, VTrans staff, Basin Planner, RPC staff, etc.):

- McFarland-Johnson, Inc. (Engineering Consultant)
- Chittenden County Regional Planning Commission
- Jaron Borg, ANR River Management Engineer
- Tim Parent, Parent Construction

Is the project located in the town “Right of Way? (select one) Yes





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Please be aware, Municipalities are required to have an Agreement for Entry & Liability Release for any impacted properties (prior to the start of construction.)

Budget:

Please attach a project budget and confirm below that is attached:

Project budget IS attached

Are you applying to other grant programs to help fund this project? If so, what programs? Please note that Better Roads requires a 20% local match and Better Roads funding may not be used as match for other state or federally funded programs.

Requested Grant Amount:	\$ 60,000.00	Requested Grant Amount Max: \$20,000 Category B \$40,000 Category C \$60,000 Category D
+		
Local Match:	\$ 55,508.10	
=		
Total Project Cost:	\$ 115,508.10	See page 6 for more information on calculating match

Estimated Completion Date: August 30, 2024

REQUIRED ATTACHMENTS:

Please use the documentation checklist below to ensure that all of the relevant items regarding your application have been included. It is preferred that your application is a single PDF file.

- Grant application cover sheet
- Grant application form, including chart with RSID and MRGP compliance before and after project completion
- 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).
- Detailed Project Location Map
- Sketch of proposed project and 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 and limits of work
- Photos must be color and clear to see.
 - Please make sure there are enough photos to get a good idea of the project area
- 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:

Name: Barbara Jm Elliott

Title: Town Administrator

Date: 12/26/2023

Cost Estimate Worksheet: Handy Road Culvert #25					
Labor	Rate	# Hours	Total (Rate x Hours)		
JD	\$ 36.58	80	\$ 2,926.40		
RL	\$ 32.22	80	\$ 2,577.60		
RT	\$ 31.13	80	\$ 2,490.40		
TBD	\$ 27.00	80	\$ 2,160.00		
TBD	\$ 27.00	40	\$ 1,080.00		
Excavator Operator	\$ 45.00	40	\$ 1,800.00		
			\$ 13,034.40	Labor Total	
Equipment	Rate	# Hours	Total (Rate x Hours)		
Truck 1	\$ 78.59	80	\$ 6,287.20		
Truck 2	\$ 78.59	80	\$ 6,287.20		
Truck 3	\$ 52.96	80	\$ 4,236.80		
Truck 4	\$ 26.24	10	\$ 262.40		
grader	\$ 100.61	5	\$ 503.05		
Excavator	\$ 82.48	70	\$ 5,773.60		
chain saw	\$ 2.07	5	\$ 10.35		
chipper	\$ 32.26	5	\$ 161.30		
Loader	\$ 30.36	30	\$ 910.80		
			\$ 24,432.70	Equipment Total	
Materials	Rate	Amount	Total (Rate x Amount)		
culvert	\$ 30,000.00	1	\$ 30,000.00		
gravel	\$ 300.00	50	\$ 15,000.00		
4-6	\$ 11.85	100	\$ 1,185.00		
6-12	\$ 13.65	240	\$ 3,276.00		
large rock	\$ 280.00	10	\$ 2,800.00		
concrete			\$ 10,000.00		
guardrails	\$ 9,500.00	1	\$ 9,500.00		
			\$ 71,761.00	Materials Total	
Miscellaneous	Rate	Amount	Total (Rate x Hours)		
excavator	\$ 5,280.00	1	\$ 5,280.00		
hauling	\$ 100.00	10	\$ 1,000.00		
			\$ 6,280.00	Miscellaneous Total	
			\$ 115,508.10	Grand Total	
			\$ 60,000.00	Grant Request	
			\$ 55,508.10	Local Mjatch	

TOWN OF HUNTINGTON, VERMONT CULVERT INSPECTION FORM

ROADWAY	Handy Road (TH 14)		FEATURE CROSSED	Fargo Brook	
STRUCTURE NO.	25	STRUCTURE TYPE	Culvert		
NO. SPANS	1	TOTAL CLEAR SPAN		TOTAL LENGTH	
ABUTMENT TYPE	N/A		DECK TYPE	POSTING	
# BARRELS	1	NO. LANES	TOTAL WIDTH	WIDTH (RAIL-TO-RAIL)	
HEADWALL TYPE	Rock	BARREL DIA	COVER	WIDTH (CURB-TO-CURB)	
DETOUR LENGTH	MILES	SKEW	ADT, % TRUCK		
APPROACH ROADWAY WIDTH					
DATE BUILT	APPROACH ALIGNMENT				
FLOOD HISTORY					
INSPECTION DATE	10/7/2020	BRIDGE INSPECTOR(S)	DMK & CLG		

Note: Numbers below in () are Note References, see Notes at bottom of page. 'N/A' = Not Applicable

ABUTMENTS	COND.		SUPERSTRUCTURE	COND.	CULVERTS	COND.
	No. 1	No. 2				
Stem	-	-	Paint	-	Barrel	4
Wingwalls	-	-	Bridge Deck (Timber Planks)	-	Headwall (US / DS)	7 / 4
Backwalls	-	-	Bridge Deck (Concrete)	-	Wingwall	-
Pedestals	-	-	Bridge Drainage	-	Cutoff Wall	-
Bridge Seat	-	-	Expansion Devices	-	Footings	-
Parapet & Capstones	-	-	Bridge Railing	Current?	Settlement	4
Pointing	-	-	Bridge Geometry	-	Invert Damage	4
Footing	-	-	Collision Damage	-	Sediment/Debris Build-up	6
Settlement	-	-				

WATERWAY		COND.
Alignment	Fair	5
Flow	Low, undersized hydraulic opening	4
Scour	Minor downstream (DS)	6
Riprap	None	-
Bank Slough	Undercutting upstream and downstream	5
APPROACHES		COND.
DESCRIPTION		
Approach Alignment	Fair, sag curve.	6
Guardrail Terminals	Collision damage	Current? N / 5
Beam Guardrail	Collision damage	Current? N / 5
Transition Guardrail	None	Current? N / -
Signs & Posting	None noted	-
Erosion	Minor erosion on both upstream and downstream due to roadway runoff.	6
Pavement Condition	N/A	-
STRUCTURAL CONDITION RATING =		4

NOTES:

- 1 Recommend replacement. Major culvert damage.
- 2 Increase hydraulic opening on future structure.
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10



McFarland Johnson

PREPARED BY: CLG

REVIEWED: DMK

BRIDGE INSPECTOR
BRIDGE DESIGN
SUPERVISOR



Photo 1 (25)
General Topside View (looking east)



Photo 2 (25)
Inlet Elevation
Significant Culvert Damage/Debris Build-Up



Photo 3 (25)
Outlet Elevation
Severe Culvert Failure (1/2)



Photo 4 (25)
Outlet Elevation
Severe Culvert Failure (2/2)

Structure Replacements/Rehabilitations

The following structures are recommended for replacement/rehabilitation.

Handy Road over Fargo Brook – Culvert 25

Culvert 25 was the most critical finding from a hydraulic capacity standpoint. The culvert is approximately a six-foot diameter buried Corrugated Metal Pipe (CMP), approximately ten feet below Handy Road. The culvert exhibits signs of initial failure, with numerous locations of interior deformation along the culvert length. This results in a reduced hydraulic opening, creating an increased chance of debris accumulation within the CMP and developing a dam effect which could seriously affect Handy Road.



*Figure 3: Culvert 25 - View of Crushed CMP Outlet
(Handy Hill Road 0.26 Miles North of The Intersection with Bert White Road)*