



**Winooski Basin Clean Water Service Provider:
FY24 Round 4 Call for Proposals**

The Central Vermont Regional Planning Commission, in its role as the Clean Water Service Provider for the Winooski Basin, is accepting applications for funding for non-regulatory, phosphorous reduction projects that improve water quality. Fiscal Year 2024 - Round 4 proposals are due by 4:00 PM on 9 May 2024. For more information, including submission details, see the [Winooski Clean Water Service Provider webpage](#).

0. Project Eligibility	
Please Review the following reference materials before completing your proposal: <ul style="list-style-type: none"> • FY23 Clean Water Initiative Program Funding Policy • Act 76, Clean Water Service Provider Rule and Guidance & explanatory materials 	
Is the portion of the project for which you seek funding both non-regulatory and voluntary? (i.e. not a required or compelled element of a regulatory permit or a legal settlement)? (answer must be Yes to proceed)	
Does the project type meet the applicable definitions and minimum standards in the FY23 Clean Water Initiative Funding Policy ? (answer must be Yes to proceed)	

1. Applicant Information

Organization/Municipality Name:

Primary Contact:

Title:

Mailing Address:

Phone Number:

E-mail Address:

Has the proposing organization / municipality been pre-qualified to receive subcontracts / subgrants from the Central Vermont Regional Planning Commission serving in its capacity as the Winooski Basin Clean Water Service Provider?*

* If you responded no to this question, please include Qualification Materials along with your funding proposal. See the [Winooski Clean Water Service Provider webpage](#) for more details.

2. Project Information

Project Title:

Watershed Projects Database ID*:

* Projects without a Watershed Projects Database ID will be evaluated. However, prior to receiving funding, a project must be entered into the Watershed Projects Database. See pages 11-13 of the [FY23 Clean Water Initiative Funding Policy](#).

Select the most representative project type (according to [Appendix B Project Types Table](#) of the 2023 CWIP Funding Policy) from the dropdown list below.*

* If there is more than one project type associated with the proposal, enter additional project types in the Project Description section below.

Project Phase for which you are seeking funding:

Project GPS coordinates (e.g. 44.26278, -72.58054):

Project Sub-basin:

3. Project Description

*Describe the proposed project. Include the following: project history; the phosphorus reduction practices that will be developed, designed or implemented with the requested funds; **details** of the project development activities, conceptual or final design plans and cost proposals (if available); and **references** to prior plans and studies that support the funding request. Propose a project schedule based on the milestones of the proposed project type. Assume a 7 May 2024 start date. (1000 words maximum)*

4. Staff Capacity & Past Experience

A list of key staff and a (brief) description of their role in the project. If any of the staff listed here were not included in your organization's pre-qualification materials, please attach a one-page resume describing their qualifications to the project proposal.

Name	Project Role

Provide three examples of relevant past work. Include the Watershed Projects Database ID (if applicable), key staff and their role(s) in the project, a brief description of the project (phase, type, partners, etc.) and contact information for project references. Projects listed here should demonstrate the experience of the specific staff anticipated to work under this proposal.

Example Project 1:

Watershed Projects Database ID (if applicable):

Project staff & their project role(s):

Project description (250 words max):

Reference contact information:

Name:

Affiliation:

Phone:

Email:

Example Project 2:

Watershed Projects Database ID (if applicable):

Project staff & their project role(s):

Project description (250 words max):

Reference contact information:

Name:

Affiliation:

Phone:

Email:

Example Project 3:

Watershed Projects Database ID (if applicable):

Project staff & their project role(s):

Project description (250 words max):

Reference contact information:

Name:

Affiliation:

Phone:

Email:

5. Estimated annual total phosphorus load reduction (kg/yr)

Please review the Department of Environmental Conservation's [Standard Operating Procedures \(SOPs\) for Tracking and Accounting of Phosphorous](#) prior to completing this section.

For Developed Lands projects, estimate the annual phosphorous load reduction using the Department of Environmental Conservation's [Stormwater Treatment Practice Calculator](#). Export the results from the calculator and include that information in the proposal package. For Natural Resource Restoration projects, estimate the annual phosphorous load reduction using the Department of Environmental Conservation's [Interim Phosphorous Calculator Tool \(v1.0\)](#). Save the results from the calculator and include them in the proposal package.

Enter the estimated annual total phosphorous load reduction (kg / yr):

If the proposed project consists of project identification / assessment or development-phase work, provide details regarding the types of projects you intend to investigate and the anticipated phosphorus reduction benefits you expect the project(s) might achieve.

6. Project Budget

Develop a detailed budget with a cost breakdown of all project and administrative expenses. The budget should be itemized by Task with anticipated costs for personnel, equipment, materials, subcontracted services and other costs as appropriate. Be sure to request sufficient funding to complete the required milestones and deliverables (including project reporting) for the type of project being proposed. See the [FY23 Clean Water Initiative Program Funding Policy](#) for more information on the milestones required for the project type you are proposing.

Notes:

Mileage: Use the FY24 federal rate (\$0.67 / mile)

Indirect: If you have a negotiated indirect rate, please use that. Otherwise, you may charge up to 10% on all APPLICANT costs and 10% on the first \$50,000 of SUBCONTRACTORS costs.

Funding request

Amount of funding requested:

State matching funds:

Non-State matching funds:

Total project budget:

Future costs

If this proposal seeks funds for Preliminary (30%) or Final (100%) Design-phase work, please estimate anticipated future costs for subsequent project phases. Do not include this amount in the "Funding request" section above.

Anticipated future funding:

7. Co-benefits

- a) **ENVIRONMENTAL JUSTICE:** points are awarded when a project is located in a Census Block Group where one or more Environmental Justice Focus Population demographic conditions exist. *This value is calculated by the Clean Water Service Provider based on the project location.*
- b) **ECOLOGICAL BENEFITS:** points are awarded when a project reduces sediment and / or non-phosphorous nutrient loads to stressed, altered, impaired or priority waterways to which it is hydrologically connected. *This value is calculated by the Clean Water Service Provider based on the project location.*
- c) **ECOSYSTEM SERVICES:** points are awarded when a project moderates natural phenomena through carbon sequestration and flood resilience. *This value is calculated by the Clean Water Service Provider based on the type of project being proposed.*
- d) **COMMUNITY BUILDING:** points are awarded when a project involves the community in data collection and decision-making, enhances the working landscape and provides recreational benefits. Please answer the following:

- ◇ Are there proposed efforts to meaningfully involve community members in planning, project development, decision-making and implementation?

If you answered Yes to the previous question, please describe the effort to involve community members:

- ◇ Does the project involve data collection by community members (e.g. citizen science initiative)?

If you answered Yes to the previous question, please describe the effort to involve community members in data collection:

- ◇ Is the project located on a parcel that is enrolled in the Use Value & Appraisal Program (aka the Current Use Program) (Contact the Clean Water Service Provider for assistance.)?
- ◇ Does the project maintain / improve an existing recreational space?

If you answered Yes to the previous question, please describe the maintenance or improvement of existing recreational space(s):

- ◇ Will the project result in new / expanded recreational opportunities?

If you answered Yes to the previous question, please describe the effort to create new or expand existing recreational opportunities:

e) **EDUCATION:** An Education Co-Benefit is realized when a project includes aspects of public outreach designed to educate community members about the importance of phosphorus reduction and watershed health

- ◇ Will the project include an educational component?

If you answered Yes to the previous question, please describe the educational component of the project below:

- ◇ Interpretive signage:

- ◇ Educational meetings / workshops:

8. Other Considerations

a) **DESIGN LIFE:** The design life of the proposed project is:

b) **LANDOWNER RELATIONS**

◇ PROPERTY OWNERSHIP: The project will be located on:

◇ LANDOWNER SUPPORT: Provide a list of landowner support letters below. Please submit any letters or email from the landowner indicating their support for the project and awareness of their required commitment. Note date of letter/email and sender below.

◇ OTHER: Include other information regarding landowner relations here.

c) **OPERATIONS & MAINTENANCE**

◇ COST ESTIMATE: Provide a quantitative estimate of operation & maintenance costs on an annual basis where available. If not available, please provide a qualitative estimate. The anticipated annual operations & maintenance expenses for this project are:

◇ O & M AGREEMENT: There is a signed operations & maintenance agreement for this project:

If you answered Yes to the previous question, please include a copy of the signed O & M Agreement in the proposal package.

◇ OTHER: Include any other information regarding the operations & maintenance agreement for this project.

d) **PERMITTING:** This project will require a permit:

If you answered Yes to the previous question, please provide a list of the required permits, any issues anticipated in obtaining the permits and the status of the permit. If you have permit(s) for the project in hand, please include a copy of them in the proposal package.

e) **BARRIERS:** Describe any potential barriers to completing this project and how you plan to manage those challenges:

f) **HISTORIC SITE REVIEW:** Consult the [Vermont Historic Sites spreadsheet](#) and accompanying guidance in the State Historic Preservation Review section of the [FY23 Clean Water Initiative Program Funding Policy](#) to determine whether the proposed project will require Preliminary and Final Project Review by the Vermont Division of Historic Preservation. Include a copy of the completed Vermont Historic Preservation Project Review Form in the proposal package.

◇ The proposed project will require State Historic Preservation Review:

9. Proposal Submission

Assemble the following materials in the order listed into a single PDF and submit to Brian Voigt (voigt@cvregion.com) with the Subject line: "Winooski Basin Clean Water Service Provider Project Proposal – FY24, Round 4".

1. If your organization or municipality has not yet been pre-qualified as an eligible Basin 8 Clean Water Service Provider Clean Water Partner, please complete and submit a [pre-qualification form](#) along with your funding proposal.
2. Project proposal form (i.e. this document).
3. Include the following information in the order listed (please):
 - a) [Natural Resources Screening Form](#) (see the FY23 Clean Water Initiative Program Funding Policy – Appendix A. Required for preliminary design, final design, or implementation phase projects.)
 - b) Project Locator Map – applicants may use the [Vermont Agency of Natural Resources Atlas](#) to generate the Project Locator Map (Contact the Clean Water Service Provider for assistance.)
 - c) Project Timeline – Propose a project schedule based on the milestones of the proposed project type. Assume a 2 July 2024 start date.
 - d) Staff capacity – list key staff and their role(s) in the project. Attach one-page resumes for any staff listed in Section 4 of the Application Form who were not included in your pre-qualification materials.
 - e) Completed [DEC Interim Phosphorus Reduction Calculator Tool v1.0](#), or, for Developed Land Projects, report from [DEC Stormwater Treatment Practice Calculator](#). (Contact the Clean Water Service Provider for assistance.)
 - f) Detailed project budget with a cost breakdown of all project and administrative expenses. The project should be itemized by Task with anticipated costs for personnel, equipment, materials, subcontracted services and other costs as appropriate. Be sure to request sufficient funding to complete the required milestones and deliverables (including project reporting) for the type of project being proposed.
 - g) Letter(s) of support from landowner(s) indicating their support for and awareness of the commitment required to advance / implement the project
 - h) Signed Operations & Maintenance Agreement (if applicable)
 - i) Permits – Attach approved project permits (if applicable).
 - j) Historic Site Review - Use the [spreadsheet](#) and accompanying guidance in the State Historic Preservation Review section of the [FY23 Clean Water Initiative Program](#) Funding Policy to determine whether your clean water project will require Preliminary and Final Project Review by the Vermont Division of Historic Preservation. Attach a copy of the completed Vermont Historic Preservation Project Review Form.

Operations and Maintenance Considerations - provided by Fitzgerald Environmental Associations:

Stream crossings will be inspected following major storm events to check on the following potential issues: bank and/or headwall erosion, adjacent road ditch stability, and deposition of large wood and/or sediment upstream of or in the crossing inlet.

Routine (not storm related) inspection of stream crossings should be performed on an annual basis to check for obstructions, ice-flow damage, and general erosion/deposition patterns around the crossing.

Permitting Considerations - provided by Fitzgerald Environmental Associations:

Will require a VTDEC Stream Alteration Permit.

Will require coverage under the US Army Corp of Engineers Vermont General Permit.

Will require coordination with VDHP to confirm no adverse impact to historical resources. An Archaeological Resource Assessment (ARA) is not anticipated to be required given the historical human disturbance at this crossing location.

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below:	

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see [CWIP Funding Policy](#) for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	
Watershed Project Database Project Name	

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts³

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. ⁴

- 1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. ⁵ Please note that “project site” may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
- 2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
 - a. Proponents should send the identified permitting staff the following:
 - i. The watersheds project database identification number (WPD-ID) (if available),
 - ii. Project location (GPS coordinates)
 - iii. Summary of proposed scope of work, and
 - iv. Any other relevant information they request that will be utilized in their review.
 - b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
 - c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

³ Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

⁴ In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

⁵ Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The [ANR Permit Navigator](#) and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

- 3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
 - a. Which permits or permit amendment are needed or might be needed?⁶
 - b. What type might be needed? (e.g., a general or individual permit⁷)?
 - c. What concerns were voiced by permitting staff?
 - d. How will the proposed scope of work address these concerns?⁸

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont’s Land Use and Development Control Law) Permits been issued in the project site’s parcel location?⁹	Yes	No
If yes , please provide the permit number and list any water resource issues or natural resource issues found ¹⁰ :		
PermitNumber:		
ResourceIssues: _____		
If yes , use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation.		
Regulatory Point of Contact Name/Position:		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes	No

⁶ Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

⁷ Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

⁸ Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

⁹ An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The [ANR Atlas Clean Water Initiative Program Grant Screening tool](#) can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named “Clean Water Initiative Program Grant Screening.”

¹⁰Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? ¹¹			
<p>If yes, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region.</p> <p>Regulatory Point of Contact Name/Position:</p>			
III. Rivers, River Corridors, and Flood Hazard Areas			
<p>1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area¹²? (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.</p>		Yes	No
<p>If yes, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region.</p> <p>Regulatory Point of Contact Name/Position:</p>			
<p>2. Is any portion of the project site within a perennial river or stream channel?</p> <p>¹³</p>		Yes	No
<p>If yes, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region.</p> <p>Regulatory Point of Contact Name/Position:</p>			
IV. Wetland			

¹¹ The [ANR Atlas Clean Water Initiative Program Grant Screening tool](#) can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

¹² FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: <https://msc.fema.gov/portal/home>. ANR Floodplain Managers are available to provide technical assistance if needed.

¹³ Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The [ANR Atlas Clean Water Initiative Program Grant Screening tool](#) can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

<p>1. Does the Wetland Screening Tool¹⁴ provide a result of wetlands likely, very likely, or present at the project site?</p>	<p style="text-align: center;">Yes No</p>
<p>2. Does your project site involve land that is in or near an area that has <u>any</u> of the following characteristics:</p> <ul style="list-style-type: none"> o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.) 	<p style="text-align: center;">Yes</p> <p style="text-align: center;">No</p> <p style="text-align: center;">Not Sure</p>
<p>If you answered yes or not sure to <u>either</u> of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered yes or not sure to <u>either</u> of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an “allowed use” under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit.</p> <p>Regulatory Point of Contact Name/Position:</p>	
<p>1. Is your project a Wetland Restoration project type?</p>	<p style="text-align: center;">Yes No</p>
<p>If you answered yes, under the Vermont Wetland Rules you will need an “allowed use” determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form.</p> <p>Regulatory Point of Contact Name/Position:</p>	
<p>V. Fish and Wildlife</p>	
<p>State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit.</p> <p>1. Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns? Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting</p>	<p style="text-align: center;">Yes No</p>

¹⁴ To view the Wetland Screening Tool introduction video, see <https://youtu.be/6lv5en0AB1o>

2. Is the project site within 1 mile of a mapped¹⁵ Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes	No
<p>If yes to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting.</p> <p>Regulatory Point of Contact Name/Position:</p>		
VI. Stormwater		
1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes	No
<p>If yes, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region.</p> <p>Regulatory Point of Contact Name/Position:</p>		
VII. Solid Waste		
2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? ¹⁶	Yes	No
<p>If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.</p> <p>Regulatory Point of Contact Name/Position:</p>		
<p>Provide below or attach a narrative summary of Table 4 findings. Please include:</p> <ol style="list-style-type: none"> Which permits or permit amendment are needed or might be needed? What type might be needed? (e.g. a general or individual permit)? What concerns were voiced by permitting staff? How will the proposed scope of work address these concerns? 		
Is the project, as proposed, reasonably considered permit-able by all applicable	Yes	No

¹⁵ Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

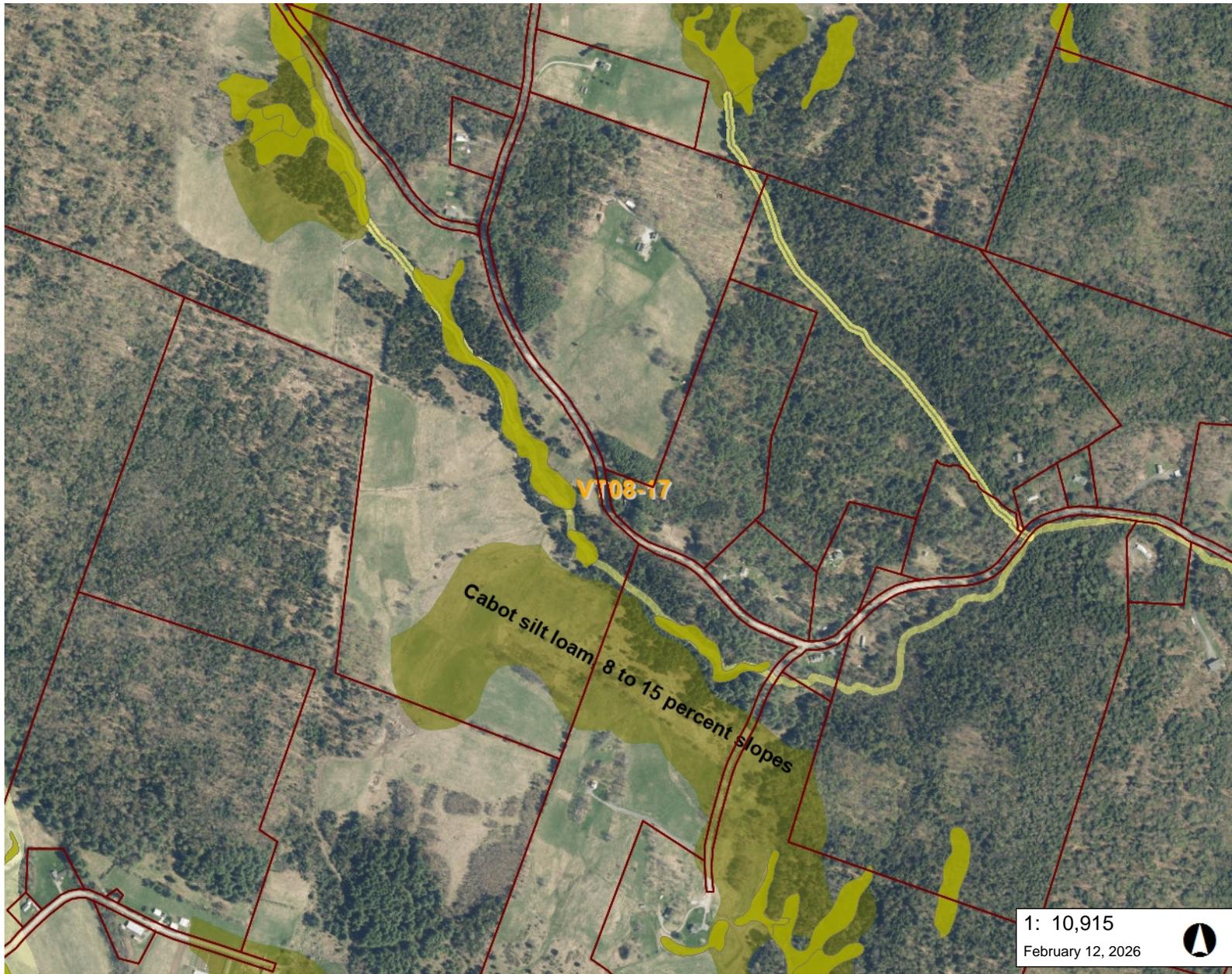
¹⁶ If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a [licensed solid waste hauler](#) and bring the material to a certified facility.

<p>determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.</p>	<p>No¹⁸ - There is no additional requirements related to agricultural review for these projects.</p>
<p>2. Is the proposed project an agricultural project?</p> <p>Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.</p>	<p>Yes - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization.</p> <p>No- The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFMM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below.</p> <p>Step 1- Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFMM at AGR.WaterQuality@Vermont.gov .</p> <p>Step 2- Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.</p>
<p>Agricultural Project Review Status & Summary:</p>	
<p>Check as Applicable</p>	<p>Status</p>
	<p>Submitted/ Pending</p>
	<p>Approved</p>
	<p>Denied</p>

¹⁸ Note CWIP’s Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the [Appendix B. Project Types Table](#) are not subject to review by VAAFMM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status “submitted/pending” will be “approved” prior to a project approval for funding.



LEGEND

- Wetland - VSWI**
 - Class 1 Wetland
 - Class 2 Wetland
 - Wetland Buffer
- Wetlands Advisory Layer
- River Main Stem Waterbodies
- WBID Watersheds
- River Corridors (Aug 27, 2019)
 - .5 - 2 sqmi.
 - .25-.5 sqmi.
- Soils - Hydric
- Parcels (standardized)
- ACT250 Permits
- Town Boundary

1: 10,915
February 12, 2026

NOTES

Map created using ANR's Natural Resources Atlas



WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 910 Ft. 1cm = 109 Meters
© Vermont Agency of Natural Resources 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.

Functioning Floodplains Initiative Phosphorus Credit Summary – Provided by DEC Basin Planner:

Home Explore Data Project Planning Watershed Reporting User Manual
Logged in as *krirtschie* Logout

Selected Item Details

Stream Connectivity
FFI ID: 155_M07S2.02
SGAT ID: 155_M07S2.02

Add to Project Screening

Connectivity Details ▼

Priority Projects ▼

← Project Screening ← Calculate Inputs \$

Water Quality Benefit Floodplain Resiliency Benefit Habitat Benefit

Estimated Floodplain and Stream Connectivity Benefits and Phosphorus Credits

SubUnit(s) IDs: 155_M07S2.02

Town: BERLIN

Rivers Projects Included:

Streams Projects Included: Remove Small Breached Dam (UProj_9300380), Replace Culvert (Wbkf<50%), steep channel (> 2%) (5101_CROSSING), Replace Culvert (Wbkf<50%), steep channel (> 2%) (UProj_9300381), Replace Culvert (Wbkf<50%), steep channel (> 2%) (UProj_9300382), Replace Culvert (Wbkf<50%), steep channel (> 2%) (UProj_9300383)

Stream Names: -

Project Area (acres): 0

Stream Stability and Storage Credit Summary

Annual Credit (kg/yr)

Floodplain Connectivity (Lateral - Vertical)	
Stream Stability	0.0
Storage	0.0
Stream Connectivity (Longitudinal - Temporal)	
Stream Stability	16.0
TOTAL	16.0

McCarty Road Culvert Replacement, Berlin – Preliminary Design

Project Timeline

Task	Deliverable(s)	Delivery Date	
0	Project Initiated	Project Kick-off Meeting	27 Feb 2026
1	Conceptual Site Plan	DEC programmatic staff comments on design	31 Mar 2026
2	Stakeholder meetings	Meeting minutes	27 Feb 2026
3	DEC Programmatic Staff Engagement	DEC programmatic staff comments on design	30 Jun 2026
4	Other permit-required assessments or plans completed	Permit assessment documentation	30 Jun 2026
5	Preliminary (30%) design complete	Preliminary design report, Final Performance Report, Updated cost efficiency.	31 Jul 2026
6	Preliminary VDHP project review	Signed VDHP Project Review Form	31 Jul 2026
7	Project Closeout	Media announcement; ANR Online Clean Water Project – New Project Form	14 Aug 2026

Project Budget

Expense	Funding Request
Applicant	
Project Management (Voigt)	\$1,080.00
Mileage Charges	\$9.66
Subcontractors	
Design Engineer	\$46,500.00
Sub-Total	\$47,589.66
Indirect	\$669.60
Total	\$48,259.26

Brian Voigt, Project Manager:

FY25 Rates Salary + Benefits (per hour): \$54 x 20 hours = \$1,080

Mileage Charges: 13.8 (miles) X \$0.70 = \$9.66

FY25 Indirect Rate (salary and benefits only): 62.0% x \$334.8 = \$669.60

Re: McCarty Road Culvert Project - Design Phase

From Lincoln Frasca <frasca@cvregion.com>
Date Wed 12/3/2025 3:55 PM
To Richard Dielensnyder <Richard.Dielensnyder@symetra.com>
Cc Brian Voigt <Voigt@cvregion.com>

Hi Rich,

Thank you very much for your response! We will keep you posted as things progress.

Lincoln

From: Richard Dielensnyder <Richard.Dielensnyder@symetra.com>
Sent: Wednesday, December 3, 2025 1:29 PM
To: Lincoln Frasca <frasca@cvregion.com>
Subject: RE: McCarty Road Culvert Project - Design Phase

Lincoln,

I missed your prior e-mail (my administrator sent it to “promotions” for whatever reason).

I do support the project based on our discussion and consistent with the information in your prior e-mail. Please let me know when there is further progress.

Thank You

From: Lincoln Frasca <frasca@cvregion.com>
Sent: Tuesday, December 2, 2025 1:37 PM
To: Richard Dielensnyder <Richard.Dielensnyder@symetra.com>
Subject: Re: McCarty Road Culvert Project - Design Phase

This message originated from outside Symetra. Be cautious of unfamiliar links and attachments.

Hi Rich,

I wanted to follow up on my email from last month regarding the McCarty Road Culvert Project moving forward. When you are able, please respond with your support for this project. Let me know if you have any additional questions at this time and I would be happy to connect again over the phone.

Thank you,
Lincoln
802-229-4164

From: Lincoln Frasca <frasca@cvregion.com>
Sent: Friday, November 21, 2025 2:13 PM
To: richard.dielensnyder@symetra.com <richard.dielensnyder@symetra.com>
Cc: Brian Voigt <Voigt@cvregion.com>
Subject: Re: McCarty Road Culvert Project - Design Phase

Hi Rich,

Thank you for speaking with me today regarding the McCarty Road Culvert replacement project. As you are aware, this project would involve replacing three culverts and removing one dam on your property to restore the stream back to a more natural state and prevent further sediment erosion. Following the project development stage, we are now preparing to bring this project to the Winooski Basin Water Quality Council who will vote on funding the design phase. In your response to this email, please indicate your support for moving forward with this project. I will be in touch once a decision has been made and do not hesitate to reach out in the meantime if any questions arise.

Thank you for helping to improve water quality in Vermont!

Lincoln Frasca (he/him)
Natural Resources Planner
Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
centralvtplanning.org
frasca@cvregion.com
802-229-4164

Berlin Select Board
January 29, 2026
Draft Meeting Minutes

Agenda Item: CVRPC Water Quality Restoration Project McCarty Road

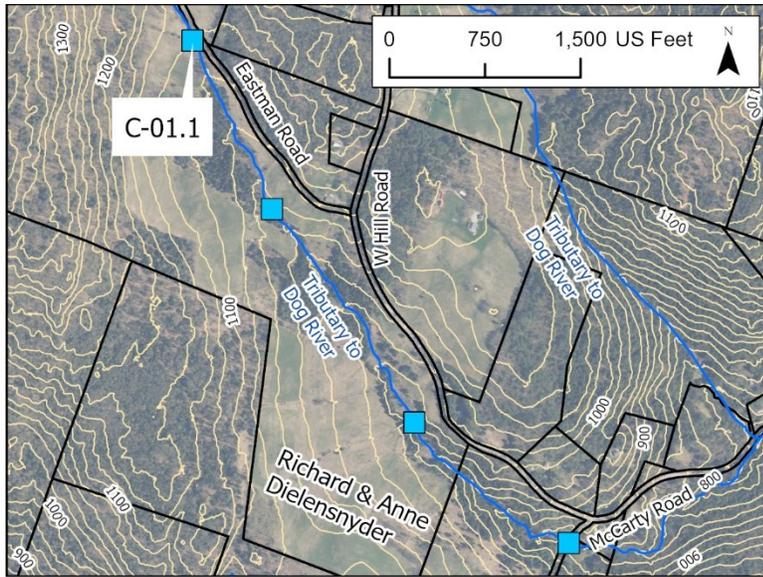
CVRPC Water Quality Restoration Project

Brian Voigt was present to discuss this project. This would be for the selectboard to support a 30 percent design. CVRPC will manage this award. Nelson shared that this culvert would need to be replaced and this would be great a great opportunity for the town. Nuissl moved to support the CVRPC Water Quality Restoration Project. Smith Seconded. Motion Carries.

For the complete minutes visit: [Selectboard Agenda & Minutes 2026 — Town of Berlin](#)

CVRPC Berlin Scoping Report – Farm Road Culvert

Project Number C-01.1 Parcel Owner(s): Richard and Ann Dielensnyder SPAN(s): 060-18-10452	Property Address: 896 West Hill Road Berlin, VT	Date of Field Visit: 5/22/25, 8/22/25
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Site Location, Setting & Access

Drainage Area: 0.20 mi²
SGA ID: 155_M07S2.02
FFI ID: 155_M07S2.02_PHG_C00
Lat: 44.2017949
Lon: -72.6672834
Nearby Land Use: Hayfield
Access: Easy from private farm roads.

Proposed Project: Replace the existing farm road culvert with a ford crossing.

Culvert Characteristics

Material: Smooth Plastic
Width % of Bankfull Width : 25%
Height: 12"
Width: 12"
Length: ~30'
Recommended Structure: Ford

Erosion: Low levels of erosion at the inlet and outlet.
Notes: Stream regularly overtops grass road which dissipates flows without significant erosion.

Stream Characteristics

Stream Order: 1
Geomorphic Compatibility: Partially Compatible
AOP Compatibility: Reduced AOP
Bankfull Width: 4 ft
Flow Type: Perennial



Culvert inlet.



Upstream of inlet.



Culvert outlet.



Downstream of outlet.

Summary of Benefits and Feasibility

Ecological Benefits

The installation of a stream ford will improve the geomorphic compatibility and aquatic organism passage by allowing the stream to flow freely over the road rather than being constrained to a narrow passage.

A ford will also reduce the water velocities exiting the culvert. Reduced stream velocities can lead to reduced erosion. Preventing erosion reduces the phosphorus load and improves water quality downstream.

Co-Benefits

Hazard Mitigation: Undersized culverts increase the risk of impoundment of water upstream which can overtop roadways in extreme weather events. A ford will reduce erosion during non-flood conditions which improves the stability of surrounding infrastructure and properties. During flood events, a ford will allow for higher flows to pass before water impounds and overtops the road.

Non-Regulatory Criteria

MRGP: Private farm roads are not regulated under MRGP.

RAP: Culverts are not a RAP.

Ballpark Cost Estimates

Planning/Engineering: \$7,000 – 8,000

Implementation: \$10,000 – 15,000

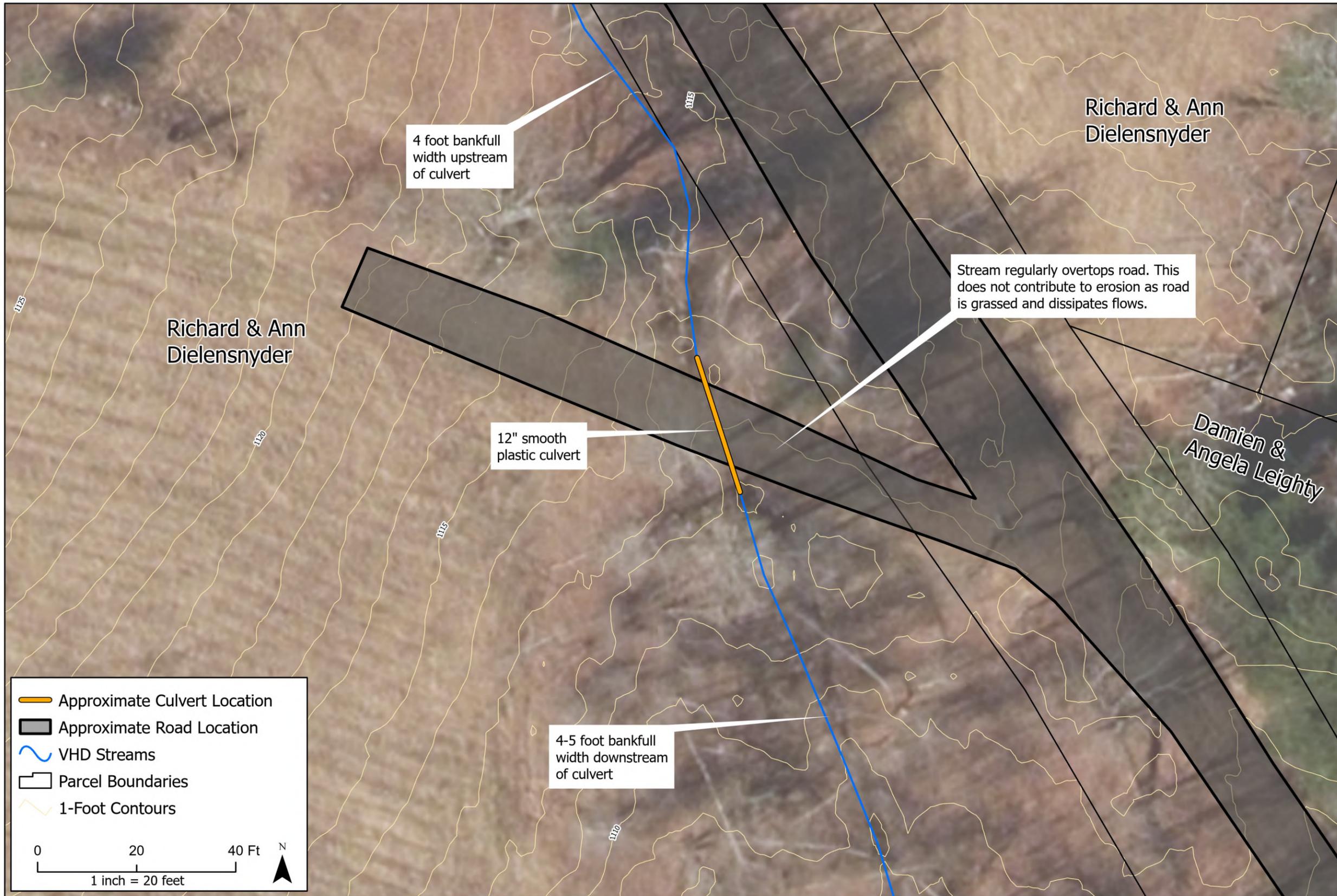
Estimated Phosphorus Reduction

P-credit: 0-20.9 kg/yr (see report)

Cost Efficiency: See report

Overall Feasibility

In order to receive the full P-credit, this project must be completed along with C-01.2, C-01.3, and C-01.4.



Approximate Culvert Location
 Approximate Road Location
 VHD Streams
 Parcel Boundaries
 1-Foot Contours

0 20 40 Ft
 1 inch = 20 feet

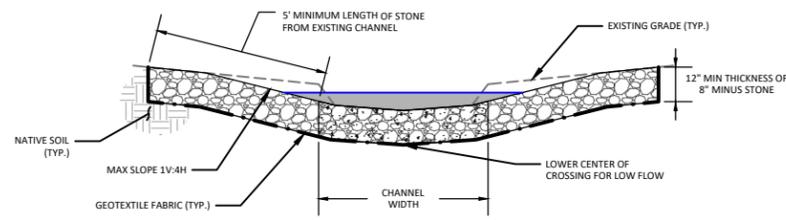
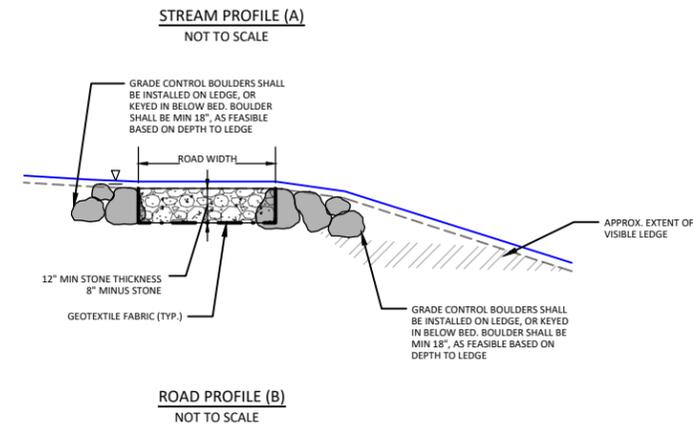
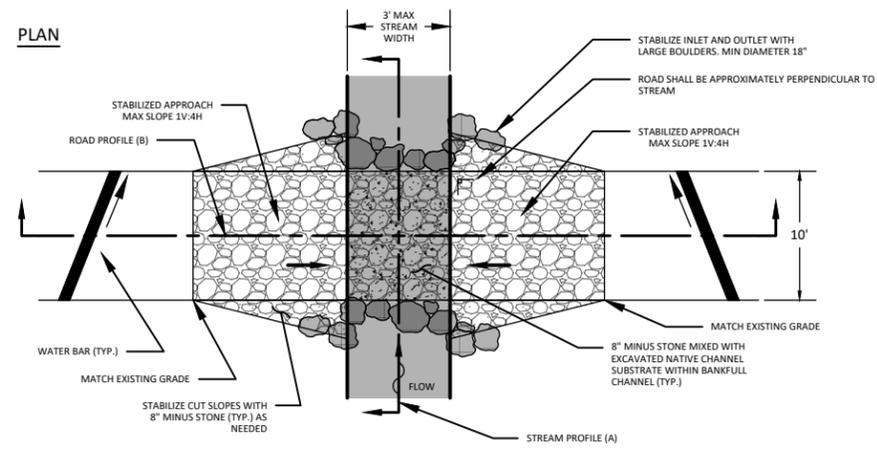
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Fitzgerald Environmental Associates, LLC
 164 Main Street, Suite 2
 Colchester, VT 05446
 Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

Notes:
 -Channel and crossing dimensions based on FEA field observations in May and August 2025

**CVRPC Berlin Scoping
 Farm Road Culvert (C-01.1)
 Berlin, VT**

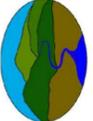
MAP BY JWC	CHECKED EPF
SCALE 1 inch = 20 feet	
DATE August 25, 2025	
SHEET NO. SHEET 1	



NOTES:

1. UPON COMPLETION ASSURE SURFACE FLOW. SUBSURFACE FLOW IS UNACCEPTABLE.
2. MIX EXCAVATED NATIVE CHANNEL SUBSTRATE WITH 8" MINUS STONE TO REBUILD STREAM BED WITHIN EXISTING CHANNEL TO FILL VOIDS AND ENSURE SURFACE FLOW.
3. CROSSING SURFACE ELEVATION TO BE APPROXIMATELY EQUAL TO EXISTING STREAM BED ELEVATION WITHIN BANKFULL CHANNEL.
4. CONSTRUCT WATER BARS AS NEEDED ON THE APPROACHES TO THE CROSSING TO DIVERT SURFACE RUNOFF AWAY FROM THE APPROACH TO A STABLE, VEGETATED AREA.
5. GEOTEXTILE FABRIC SHALL BE MIRAFI 180N OR APPROVED EQUIVALENT
6. CONTRACTOR SHALL TEMPORARILY BYPASS STREAM FLOW AROUND WORK AREA, AS NEEDED, TO PREVENT SUSPENDED SEDIMENT IN DOWNSTREAM CHANNEL.

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Notes:

CVRPC Berlin Scoping
Farm Road Culvert (C-01.1)
Berlin, VT
Not for Construction

JWC DRAWN	EPF CHECKED
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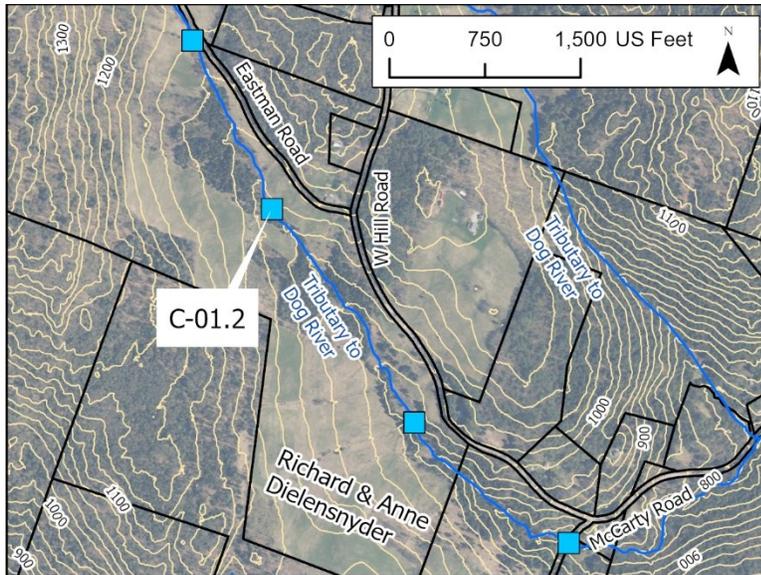
SCALE: Not to Scale

DATE: July 23, 2025

SHEET NO. **SHEET 2**

CVRPC Berlin Scoping Report – Beaver Pond Culvert

Project Number C-01.2 Parcel Owner(s): Richard & Ann Dielensnyder SPAN(s): 060-18-10452	Property Address: 896 West Hill Road Berlin, VT	Date of Field Visit: 5/22/25, 8/22/25
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Site Location, Setting & Access

Drainage Area: 0.36 mi²
SGA ID: 155_M07S2.02
FFI ID: 155_M07S2.02_PHG_C00
Lat: 44.1982717
Lon: -72.6651019
Nearby Land Use: Hayfield
Access: Easy from private farm roads.

Proposed Project: Replace the existing farm road culvert with a bridge.

Culvert Characteristics

Material: Smooth plastic
Width % of Bankfull Width: 20%
Height: 24"
Width: 24"
Length: ~50'
Recommended Structure: Bridge

Erosion: Low levels of erosion at the inlet and outlet.
Notes: Beavers have historically attempted to obstruct the structure.

Stream Characteristics

Stream Order: 1a
Geomorphic Compatibility: Partially Compatible
AOP Compatibility: Reduced AOP
Bankfull Width: 10 ft
Flow Type: Perennial



Culvert inlet.



Culvert outlet.



Breached dam at pond outlet.



View of beaver pond downstream of culvert.

Summary of Benefits and Feasibility

Ecological Benefits

The installation of a bankfull structure will improve geomorphic compatibility and aquatic organism passage (AOP) by allowing the stream to continue as it would under the road rather than being constrained to a narrow passage. In addition, removal of the stone dam and restoration of the channel through the former impoundment will further improve AOP in the stream reach.

Improving the stream flow with a bankfull structure will also reduce the water velocities exiting the culvert. Reduced stream velocities can lead to reduced erosion. Preventing erosion reduces the phosphorus load and improves water quality downstream.

Co-Benefits

Hazard Mitigation: Undersized culverts increase the risk of impoundment of water upstream which can overtop roadways in extreme weather events. A bankfull structure will reduce erosion during non-flood conditions which improves the stability of surrounding infrastructure and properties. During flood events, a bankfull structure will allow for higher flows to pass before water impounds and overtops the farm road.

Non-Regulatory Criteria

MRGP: Private farm roads are not regulated under MRGP.

RAP: Culverts are not regulated under RAPs.

Ballpark Cost Estimates*

Planning/Engineering: \$15,000 – 20,000

Implementation: \$40,000 – 60,000

*Includes culvert replacement and dam removal

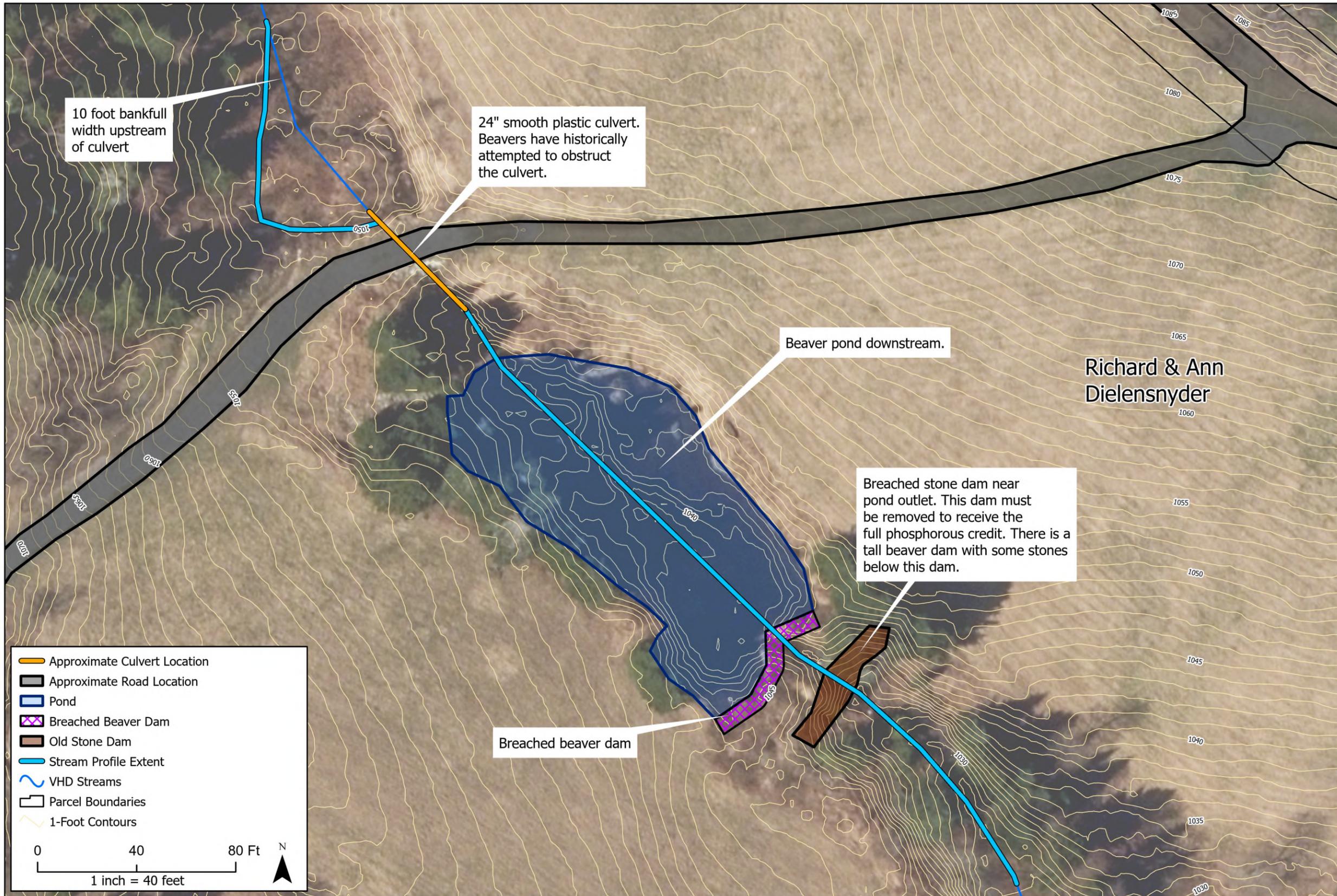
Estimated Phosphorus Reduction

P-credit: 0-20.9 kg/yr (see report)

Cost Efficiency: See report

Overall Feasibility

There is a partially failed stone dam below a breached beaver dam that will need to be removed to receive the full P credit. This dam appears to have been used historically to pond water for livestock use. The laid-up stone dam is approximately 5ft tall and founded on ledge spanning the channel. Additionally, to receive the full P-credit, this project must be completed along with C-01.1, C-01.3, and C-01.4.



10 foot bankfull width upstream of culvert

24" smooth plastic culvert. Beavers have historically attempted to obstruct the culvert.

Beaver pond downstream.

Breachd stone dam near pond outlet. This dam must be removed to receive the full phosphorous credit. There is a tall beaver dam with some stones below this dam.

Breachd beaver dam

Richard & Ann Dielensnyder

- Approximate Culvert Location
- Approximate Road Location
- Pond
- Breachd Beaver Dam
- Old Stone Dam
- Stream Profile Extent
- VHD Streams
- Parcel Boundaries
- 1-Foot Contours

0 40 80 Ft N

1 inch = 40 feet

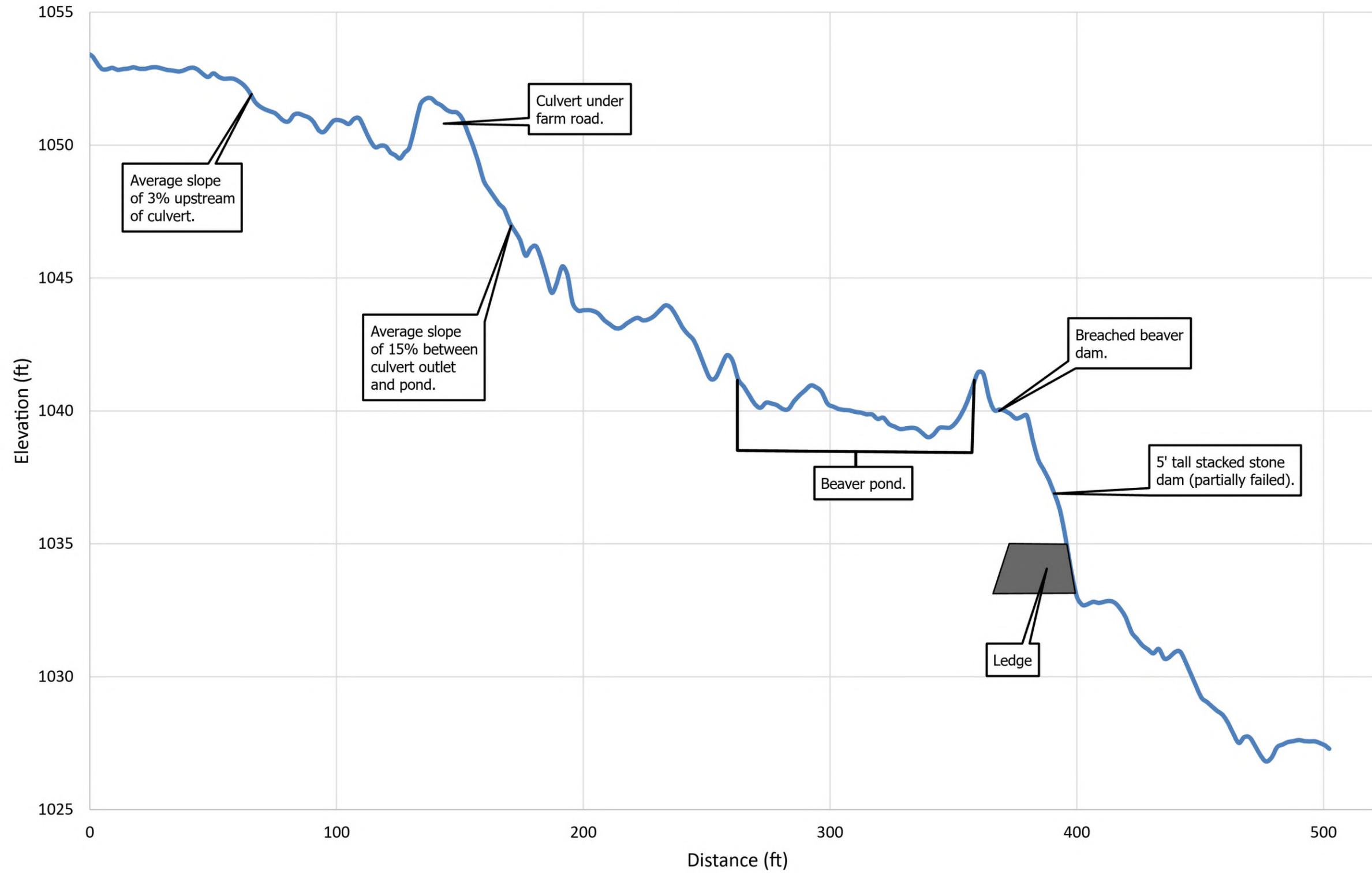
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Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

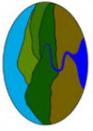
Notes:
-Channel and crossing dimensions based on FEA field observations in May and August 2025

CVRPC Berlin Scoping
Beaver Pond Culvert (C-01.2)
Berlin, VT

MAP BY JWC	CHECKED EPF
SCALE 1 inch = 40 feet	
DATE August 25, 2025	
SHEET 1	
SHEET NO.	

C-01.2 Longitudinal Profile





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Notes:
-Channel and crossing
dimensions based on
FEA field observations
in May and August 2025

**CVRPC Berlin Scoping
Beaver Pond Culvert (C-01.2)
Berlin, VT**

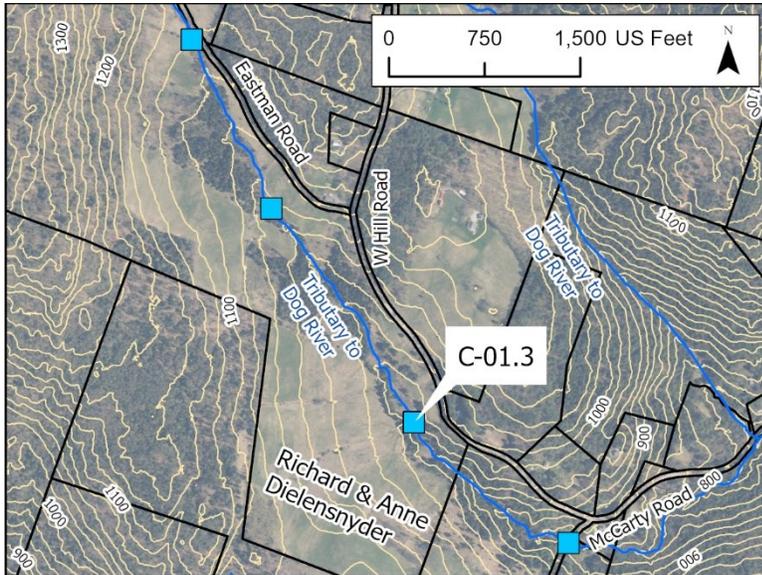
MAP BY JWC	CHECKED EPF
SCALE Not to scale	
DATE August 25, 2025	
SHEET 2	
SHEET NO.	

CVRPC Berlin Scoping Report – Stone Dam Culvert

Project Number C-01.3
Parcel Owner(s): Richard & Ann Dielensnyder
SPAN(s): 060-018-10452

Property Address:
 896 West Hill Road
 Berlin, VT

Date of Field Visit:
 5/22/25, 8/22/25



Site Location, Setting & Access

Drainage Area: 0.54 mi²
SGA ID: 155_M07S2.02
FFI ID: 155_M07S2.02_PHG_C00
Lat: 44.1936886
Lon: -72.6608107
Nearby Land Use: Forest and Hayfield
Access: Easy from private farm roads.

Proposed Project: Replace the existing farm road culvert with a bridge.

Culvert Characteristics

Material: Stone
Width % of Bankfull Width : 8%-10%
Height: 48"
Width: 12"
Length: ~30'
Recommended Structure: Bridge

Erosion: Significant erosion on the upstream side.

Notes: Structure functions as a dam with a small opening conveying water under road.

Stream Characteristics

Stream Order: 1
Geomorphic Compatibility: Fully Incompatible
AOP Compatibility: No AOP
Bankfull Width: 10-12 ft
Flow Type: Perennial



Culvert inlet.



Upstream of culvert.



Culvert outlet.



Downstream of culvert.

Summary of Benefits and Feasibility

Ecological Benefits

The installation of a bankfull structure will improve geomorphic compatibility and aquatic organism passage by allowing the stream to continue as it would under the road rather than being constrained to a narrow passage.

Improving the stream flow with a bankfull structure will also reduce the water velocities exiting the culvert. Reduced stream velocities can lead to reduced erosion. Preventing erosion reduces the phosphorus load and improves water quality downstream.

Co-Benefits

Hazard Mitigation: Undersized culverts increase the risk of impoundment of water upstream which can overtop roadways in extreme weather events. A bankfull structure will reduce erosion during non-flood conditions which improves the stability of surrounding infrastructure and properties. During flood events, a bankfull structure will allow for higher flows to pass before water impounds and overtops the road.

Non-Regulatory Criteria

MRGP: Private farm roads are not regulated under MRGP.

RAP: Culverts are not a RAP.

Ballpark Cost Estimates

Planning/Engineering: \$10,000 - 15,000

Implementation: \$30,000 – 50,000 (dependent on approach to sediment management and restoration in upstream channel)

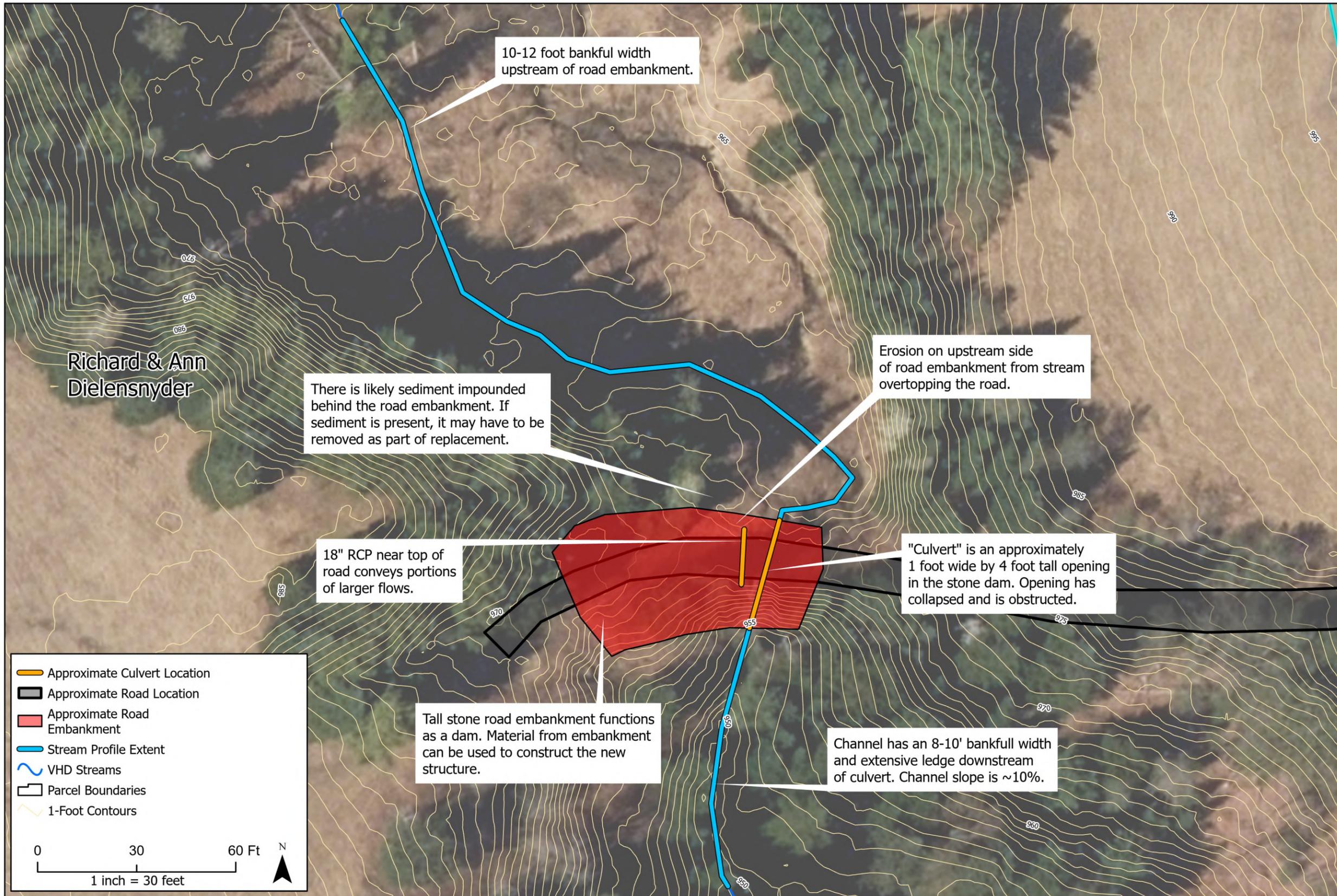
Estimated Phosphorus Reduction

P-credit: 0-20.9 kg/yr (see report)

Cost Efficiency: See report

Overall Feasibility

In order to receive the full P-credit, this project must be completed along with C-01.1, C-01.2, and C-01.4. There is sediment accumulated behind the structure that will have to be managed as part of the structure replacement process. This may include some floodplain reconnection upstream in the former impoundment.



10-12 foot bankfull width upstream of road embankment.

There is likely sediment impounded behind the road embankment. If sediment is present, it may have to be removed as part of replacement.

Erosion on upstream side of road embankment from stream overtopping the road.

18" RCP near top of road conveys portions of larger flows.

"Culvert" is an approximately 1 foot wide by 4 foot tall opening in the stone dam. Opening has collapsed and is obstructed.

Tall stone road embankment functions as a dam. Material from embankment can be used to construct the new structure.

Channel has an 8-10' bankfull width and extensive ledge downstream of culvert. Channel slope is ~10%.

Richard & Ann Dielensnyder

- Approximate Culvert Location
- Approximate Road Location
- Approximate Road Embankment
- Stream Profile Extent
- VHD Streams
- Parcel Boundaries
- 1-Foot Contours

0 30 60 Ft N

1 inch = 30 feet

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Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

Notes:
-Channel and crossing dimensions based on FEA field observations in May and August 2025

CVRPC Berlin Scoping Stone Dam Culvert (C-01.3)
Berlin, VT

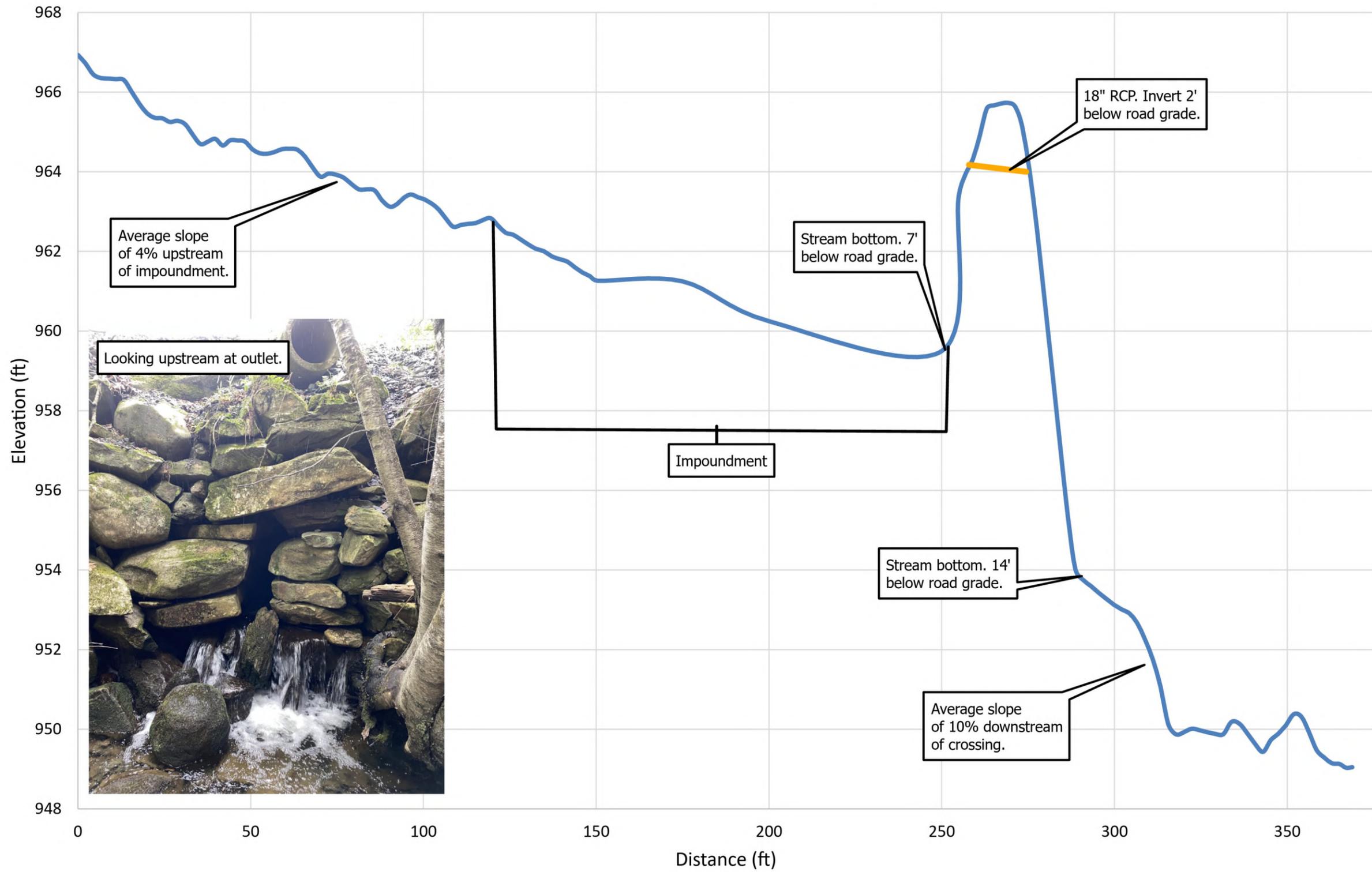
MAP BY: JWC EPF
CHECKED:

SCALE: 1 inch = 30 feet

DATE: August 25, 2025

SHEET 1
SHEET NO.

C-01.3 Longitudinal Profile



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Notes:
-Channel and crossing
dimensions based on
FEA field observations
in May and August 2025

CVRPC Berlin Scoping
Stone Dam Culvert (C-01.3)
Berlin, VT

MAP BY JWC	CHECKED EPF
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SCALE: Not to scale

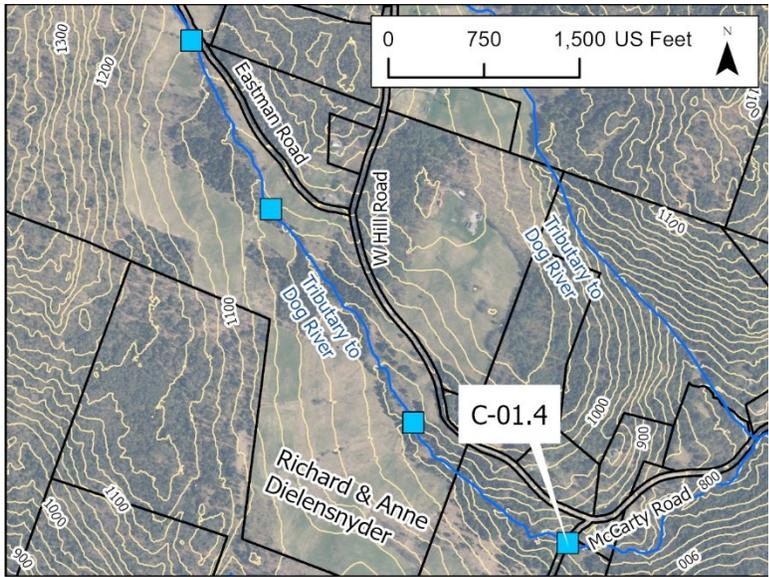
DATE: August 25, 2025

SHEET 2

SHEET NO.

CVRPC Berlin Scoping Report – McCarty Road Culvert

Project Number C-01.4 Parcel Owner(s): Town ROW SPAN(s): n/a	Property Address: McCarty Road Berlin, VT	Date of Field Visit: 4/16/25, 5/22/25
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Site Location, Setting & Access

Drainage Area: 0.71 mi²
SGA ID: 155_M07S2.02
FFI ID: 155_M07S2.02_PHG_C00
Lat: 44.1911012
Lon: -72.6562265
Nearby Land Use: Rural residential
Access: Easy from town road.

Proposed Project: Replacement of culvert under existing road and removal of old road culvert.

Culvert Characteristics

Material: Corrugated metal
Width % of Bankfull Width: 25%-33%
Height: 36"
Width: 36"
Length: ~70'
Recommended Structure: Concrete Box Culvert

Erosion: High at inlet and outlet.

Notes: The old road embankment and culvert are still present upstream of the existing road. The existing road culvert and overflow culvert are in poor condition.

Stream Characteristics

Stream Order: 1
Geomorphic Compatibility: Fully incompatible
AOP Compatibility: No AOP
Bankfull Width: 9-12 ft
Flow Type: Perennial



Fully obstructed culvert inlet.



Culvert outlet with severe erosion.



Inlet of old road culvert.



Outlet of old road culvert.

Summary of Benefits and Feasibility

Ecological Benefits

The installation of a bankfull structure will improve geomorphic compatibility and aquatic organism passage by allowing the stream to continue as it would under the road rather than being constrained to a narrow passage.

Improving the stream flow with a bankfull structure will also reduce the water velocities exiting the culvert. Reduced stream velocities can lead to reduced erosion. Preventing erosion reduces the phosphorus load and improves water quality downstream.

Co-Benefits

Hazard Mitigation: Undersized culverts increase the risk of impoundment of water upstream which can overtop roadways in extreme weather events. A bankfull structure will reduce erosion during non-flood conditions which improves the stability of surrounding infrastructure and properties. During flood events, a bankfull structure will allow for the largest floods to pass without overtopping McCarty Road.

Non-Regulatory Criteria

MRGP: Perennial streams are not regulated by MRGP.

Ballpark Cost Estimates

Planning/Engineering: \$20,000 - 25,000

Implementation: \$200,000 - 300,000 (dependent on replacement structure type)

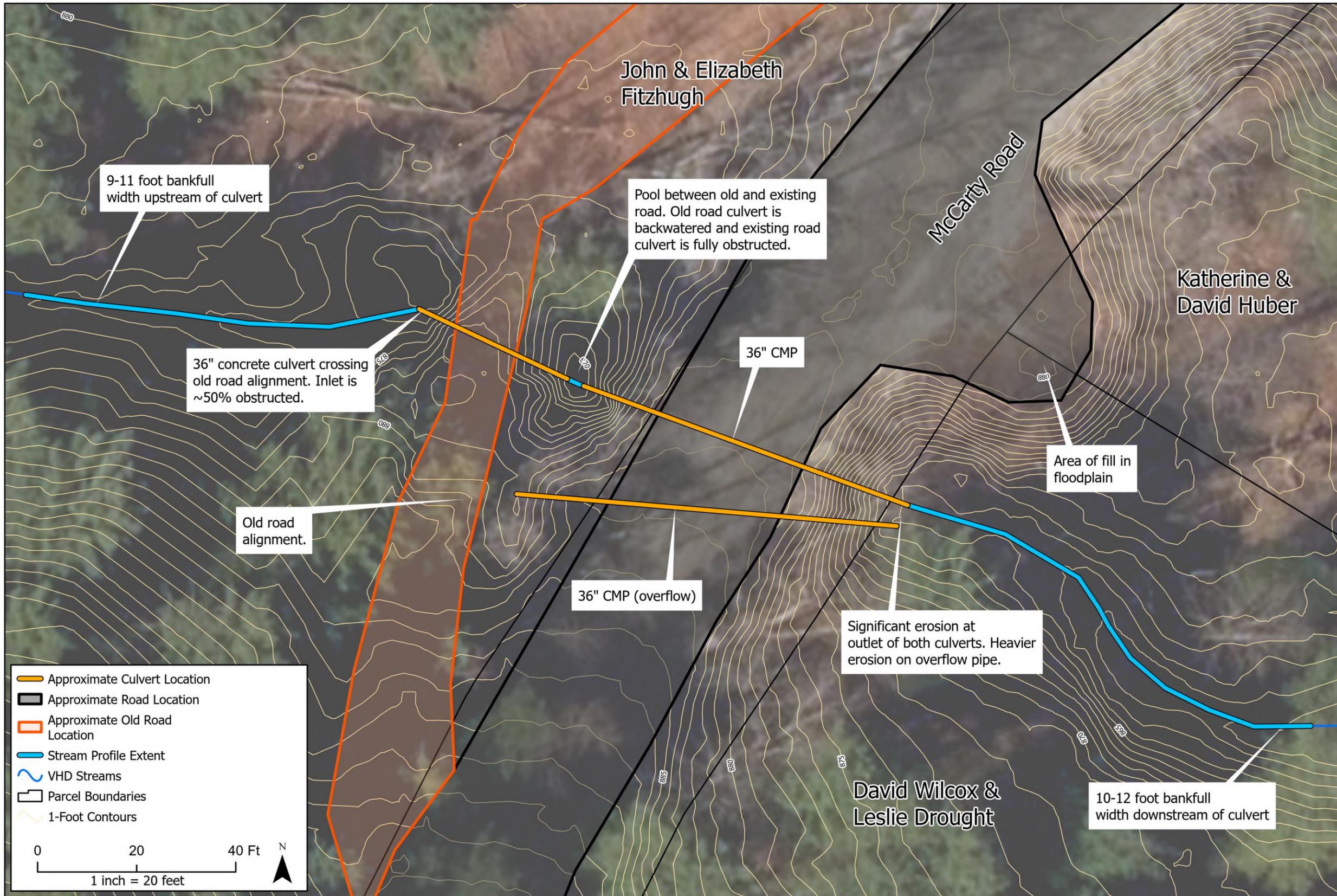
Estimated Phosphorus Reduction

P-credit: 0-20.9 kg/yr (see report)

Cost Efficiency: See report

Overall Feasibility

In order to receive the full P-credit, this project must be completed along with C-01.1, C-01.2, and C-01.3.



Legend

- Approximate Culvert Location
- Approximate Road Location
- Approximate Old Road Location
- Stream Profile Extent
- ~ VHD Streams
- Parcel Boundaries
- 1-Foot Contours

0 20 40 Ft N

1 inch = 20 feet

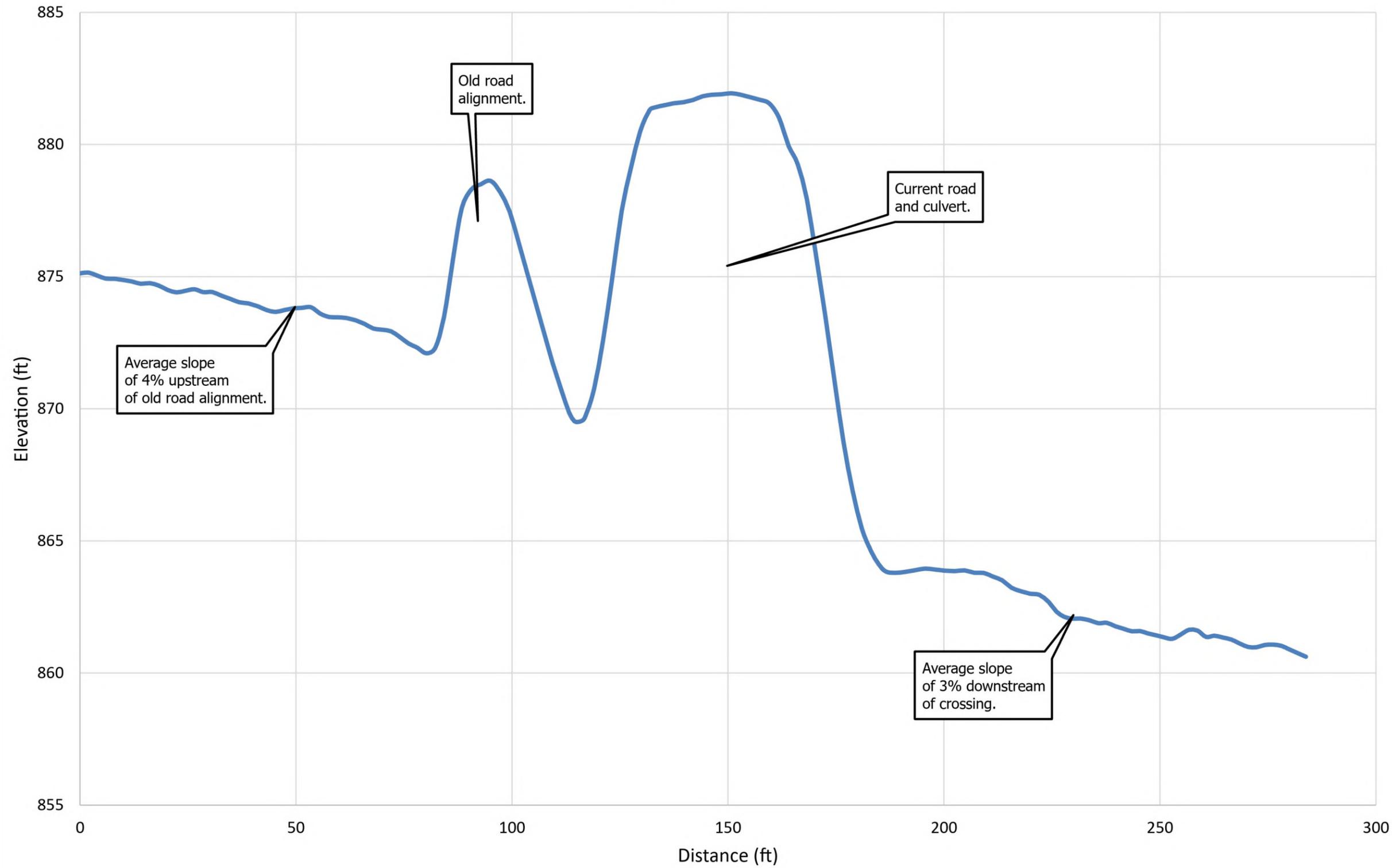
**CVRPC Berlin Scoping
McCarty Road Culvert (C-01.4)
Berlin, VT**

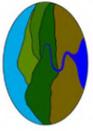
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 Colchester, VT 05446
 Telephone: 802.876.7778
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Notes:
 -Channel and crossing dimensions based on FEA field observations in May 2025

MAP BY JWC	CHECKED EPF
SCALE 1 inch = 20 feet	
DATE August 25, 2025	
SHEET NO. SHEET 1	

C-01.4 Longitudinal Profile



 <p style="font-size: small; margin: 0;">Fitzgerald Environmental Associates, LLC</p> <p style="font-size: x-small; margin: 0;">164 Main Street, Suite 2 Colchester, VT 05446 Telephone: 802.876.7778 www.fitzgeraldenvironmental.com</p>		
<p>Notes:</p> <ul style="list-style-type: none"> -Channel and crossing dimensions based on FEA field observations in May 2025 		
<p>CVRPC Berlin Scoping McCarty Road Culvert (C-01.4) Berlin, VT</p>		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">MAP BY JWC</td> <td style="width: 50%; text-align: center;">CHECKED EPF</td> </tr> </table>	MAP BY JWC	CHECKED EPF
MAP BY JWC	CHECKED EPF	
<p>SCALE: Not to scale</p>		
<p>DATE: August 25, 2025</p>		
<p style="font-size: large; font-weight: bold;">SHEET 2</p> <p style="font-size: x-small; margin: 0;">SHEET NO.</p>		