TRANSMITTAL MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: MATERIALS FOR MEETING ON JUNE 3
DA: MAY 27, 2026

==========

Greetings once again to all. The BWQC's next meeting will be held on June 3rd. Materials for the meeting are attached.

Introductions/Meeting protocols/Conflict of interest disclosures, if any

As reminder, this is a standing agenda item that provides BWQC members and others opportunity to note possible conflicts of interest that could arise later in the meeting.

Approval of Minutes

Minutes are included in the meeting packet. Please let us know if you spot any parts of the minutes that need to be corrected.

Budget Adjustments

As of this writing, it doesn't appear staff will have budget adjustments (pending and/or completed) to report at the meeting.

Seating of New BWQC Representative

This is a standing agenda item.

Nominating Committee creation question

The BWQC's bylaws specify that election of officers will take place at the Annual Meeting. The bylaws also say a Nominating Committee will be formed by the Chair at the meeting preceding the Annual Meeting (i.e., on June 3rd) unless the BWQC votes to forego creation of a Nominating Committee. It has done so in the past but is under no obligation to do so.

Application Review

Three project applications were submitted in response to the 11th Call for Applications. Two projects propose *Final Design* phase work (one in the Forestry category and the other in the Floodplain/ Stream Restoration category). The other project proposes *Implementation* phase work in the Floodplain/Stream Restoration category.

The total amount of funding requested is $472,641. Full (eventual) implementation costs are estimated to cost approximately $870,600. The total amount of annual phosphorus reduction represented in the applications is 33.5 kilograms (ranging from 6.3 to 13.7). The crude cost effectiveness of the projects ranges from approximately $10,334 per kilogram to $31,946 per kilogram. Extensive materials relating to the applications is enclosed in the meeting packet.

Staggering of Member Terms

A member of the BWQC has suggested that membership terms run and renew on a staggered basis. Time has been included on the agenda for discussion of this topic. DEC guidance requires two-year terms for all BWQC members and alternates. It would appear the Council has the authority to use its bylaws to establish specific procedures for how members are cycled. Staggering could prevent a "clean sweep" where all nine members could potentially leave at once (however unlikely that might be). Administratively, it could have both pros and cons.

Updates/Conclusion/Adjourn

The next meeting after the June 3 session is the BWQC's annual meeting. The planned date is August 5. It will be a hybrid session most likely in Enosburgh.

The next funding round will open on August 19, with a deadline of September 23. BWQC review of applications is expected on October 7.

Please let us know if you have ideas for future meeting topics. Thanks to all who participate.

AGENDA

Missisquoi Basin Water Quality Council (BWQC) MEETING
Wednesday, June 3, 2026
11:00 AM -1:00 PM

Zoom meeting
(Zoom details below)

1. Welcome and introductions
2. Meeting protocols
3. Conflict of interest declarations (standing item)
4. Review/adjust and approve agenda
5. Approval of minutes
6. Public comment not related to items on agenda
7. Seating of members/alternates
8. Report on budget adjustments
9. **Nominating Committee creation question**
10. **Application review**
11. **Staggering of member terms**
12. Updates/In brief
13. Future Meeting topics /Conclusion

Please Note: The schedule for the upcoming application round in MISSISQUOI Basin is as follows:

Round #	Open	Deadline
12	August 19, 2026	September 23, 2026

Join Zoom Meeting
https://us02web.zoom.us/j/81332571725?pwd=UktCekQ5R2ZSbVNtMXlUclpYNVI3UT09
Meeting ID: 813 3257 1725
Passcode: 103651
One tap mobile
+13052241968,,81332571725# US
+13092053325,,81332571725# US

Dial by your location
+1 309 205 3325 US
+1 646 558 8656 US (New York)

Staffing provided by Northwest Regional Planning Commission (NRPC), the Basin 6 Clean Water Service Provider. NRPC's physical / mailing address is 75 Fairfield Street, St. Albans, Vermont 05478.

In accordance with provisions of the Americans with Disabilities Act (ADA) of 1990, and Vermont's Open Meeting Law, the NRPC will ensure public meeting sites are accessible to all people or provide an opportunity to request accommodations. Requests for free interpretive or translation services, assistive devices, designation of a physical meeting location, electronic access to a meeting, or other requested accommodations, should be made to Amy Adams, NRPC Title VI Coordinator, at 802- 524-5958 or aadams@nrpcvt.com, no later than 2 business days prior to the meeting for which services are requested.

Welcome and introductions

Meeting protocols

Conflict of interest declarations (standing item)

Zoom Norms and Inclusive Language

- Introductions of all participants at each meeting
- As possible, BWQC members should have in their Zoom Name/Title the following: Name, Organization, “Voting” or “Alternate”, and pronouns (if desired)
- BWQC members are expected to have cameras turned on during entirety of meeting, as technically possible.
- BWQC members are expected to stay focused / avoid multi-tasking and follow the guidance of: if you wouldn’t do something in an in-person meeting don’ do it in a virtual meeting”
- BWQC members will use the “raise hand” function on Zoom to indicate a request to speak / come off mute – this is in an effort to make sure all are heard in turn.
- All members will stay muted until called upon; if needed, CWSP staff may mute participants to avoid background noise
- Any comments made in the chat will be read aloud at the appropriate time by the CWSP staff in full for the public record / record.

Inclusive Language

https://pronouns.org/what-and-why

Review/adjust and approve agenda

AGENDA

Missisquoi Basin Water Quality Council (BWQC) MEETING
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11:00 AM -1:00 PM

Zoom meeting
(Zoom details below)

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Meeting ID: 813 3257 1725
Passcode: 103651
One tap mobile
+13052241968,,81332571725# US
+13092053325,,81332571725# US

Dial by your location
+1 309 205 3325 US
+1 646 558 8656 US (New York)

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Approval of minutes

Missisquoi Basin Water Quality Council (BWQC)

Wednesday, April 1, 2026

11:00 AM to 1:00 PM

Regular Meeting

Meeting video posted at https://youtu.be/iplFo5COaNs

A VIDEO RECORDING OF THE MEETING IS AVAILABLE THROUGH THE NRPC YOUTUBE CHANNEL (Link above).

THE WRITTEN MINUTES ARE A SYNOPSIS OF THE DISCUSSION AT THE MEETING. MOTIONS ARE AS STATED. MINUTES WILL BE SUBJECT TO CORRECTION BY THE COUNCIL. CHANGES, IF ANY, WILL BE RECORDED IN THE MINUTES OF THE NEXT MEETING OF THE COUNCIL.

Council Members: Lauren Weston (Q), Heidi Britch-Valenta (Q), Lindsey Wight (Q), Beth Torpey (Q), Kent Henderson (Q), Sarah Downes (Q), Allaire Diamond (Q). Dan Seeley (Q).

Q= towards quorum [q= towards quorum when representative has recused, when applicable]

Staff: Dean Pierce

Others present: Bridget Butler (FNLC), Mel Auffredou (FCNRCD), Kerry Brosnan (FCNRCD), Josh Serpe (FNLC), Karen Bates (DEC), Peter Bernevento (FWC), Rob Evans (FWC), Av Walsh (FWC), Josh Serpe (FNLC), Sadie Preece (FCNRCD)

1. **Welcome and introductions**

Dean confirmed quorum was present. Lindsey opened the meeting at 11:03. A round of introductions was made.

2. **Meeting protocols**

Lindsey reviewed norms for meeting on Zoom.

3. **Conflict of interest declarations, if any**

No conflicts of interest were declared.

4. **Review/adjust and approve agenda**

No changes were made to the agenda. Sarah moved to approve the agenda, with Lauren seconding. Agenda was approved.

5. **Approval of minutes**

No changes were made. Sarah moved to approve the minutes. Lauren seconded. Minutes were approved.

6. **Public comment not related to items on agenda**

No public comments were made.

7. **Seating of new RPC Representative (if any) - Biennial Renewal**

No new representatives were seated.

Dean presented information about the membership renewal process for Basin Council members. He explained that members serve two-year terms per DEC guidance, with renewal process occurring every two years more than three months before fiscal year start. He added that all current members wish to renew except Dave Allerton, whose status is uncertain. Allaire noted Tucker Malone should be added as alternate for land conservation organization. The group also briefly discussed whether staggered terms should be considered.

8. **Report on budget adjustments (if any)**

No adjustments were made.

9. **Presentation on Lake Carmi Alum Treatment**

Pete Benevento, Rob Evans, and Av Walsh of Franklin Watershed Committee reported on the fall 2025 alum treatment for Lake Carmi. The presentation included:

- A summary of phosphorus loading challenges and internal loading dynamics;
- An overview of alum treatment as a phosphorus mitigation strategy (alum treatment was applied to 775 acres over 21 days in September-October 2025; some 412,254 gallons of alum and 206,106 gallons of sodium aluminate applied in three passes to seven treatment zones);
- Description of water quality outcomes, including reductions in algal blooms and improvements in clarity;
- Issues related to treatment design, dosage, timing, and permitting; and
- Discussion of monitoring to evaluate treatment effectiveness over time.

Pete and Rob expressed thanks to the Town, State Agencies, and others who made the project possible.

10. **Problem solving-focused updates for selected projects**

Montgomery flood resilience project. Kerry from Franklin County NRCD presented update on Montgomery flood resilience project development. Discussion included progress on preliminary design, engagement with affected landowners, and identification of constraints and opportunities at the site. Next steps include advancing design work, refining cost estimates, and continuing coordination with partners and regulators.

Swanton Hill floodplain reconnection project. Josh from Friends of Northern Lake Champlain reported on ongoing planning and site assessment efforts that are part of the project. His comments touched on how project development funding can be used for landowner outreach after organizational turnover, site visits with consultant to understand constraints, and regulator outreach. He noted that funding enabled project prioritization, phosphorus crediting revision, and advancement to final design application stage.

Sleeper Pond dam removal project. Lindsey presented an overview of the Sleeper Pond dam removal project. She explained project started in 2017 when the landowner wanted to dredge pond, but dam removal was identified as most affordable option. A series of beaver dam analogs and post-assisted log structures were installed to stabilize sediments. While some of these structures were already showing signs of wear within a few months, they are still functioning as intended for now. The project also revealed a previously hidden bedrock cascade, which was well received by a neighboring landowner. Some residents were initially frustrated by lower water levels, especially during a drought year, but overall landowner relationships have remained positive due to consistent communication, public meetings, and a willingness to engage. There were also some unexpected challenges, including the need to install a retaining wall when bedrock conditions differed from expectations. The project appears to have generated some positive community engagement as well, including interest in wildlife activity (such as herons and turtle relocations), with the contractor's care for turtles being especially appreciated. Local newspaper coverage may have also helped keep tensions from escalating.

11. Updates

DEC policy updates. Dean provided overview of proposed DEC policy revisions. A key update is a revision to the co-funding policy that would allow CWISP funds to retain full phosphorus reduction credit, rather than splitting credit with other funding sources. He noted that defining what counts as a "regulatory project" remains an ongoing challenge and continues to affect project eligibility. There are also still some open questions around O&M policies—particularly what types of activities (like herbicide use and invasive species management) can be funded—though the guidance is improving. Continuing, Dean added wetland easements are now eligible for project development funding. He also highlighted the rollout of a more formal screening tool and updates to the historic preservation review form.

Funding outlook. Dean reported that the Clean Water Board recommended a funding level of $50–60 million, and the House has already passed a budget aligned with that recommendation, with the proposal now under consideration in the Senate. He also noted the sunsetting of the property transfer fund restriction has been removed, which allows that funding stream to continue supporting clean water work.

Online invoice and progress report submission tools. Dean then walked through the transition from Word documents and Excel trackers to new web-based forms for invoices and progress reports. He noted that the system is still in a prototype phase and will likely be refined based on user feedback. He demonstrated the invoice form, which includes fields for project selection, reporting period, activity descriptions, and document uploads. He also showed a deliverables form that provides project-specific reminders about required submissions. Links to the forms will be posted on the website, included in task award materials, and shared via email. Dean emphasized that support is available, including one-on-one session.

12. Future Meeting topics/Conclusion

Dean previewed the next Basin Council meeting and upcoming timeline. The next funding round is expected to open in the coming weeks, with a May 20 deadline, and applications will be reviewed at the June 3 meeting. He also flagged a few administrative items, including potential nominating committee activity. Lauren requested more time at a future meeting to revisit the idea of staggering member terms, which had come up earlier in discussion. In response to questions about funding, Dean clarified that there are no strict caps per round, but funding decisions are guided by overall CWISP contract limits (roughly $9–10 million over four years) and a strong emphasis on cost effectiveness. Allaire indicated interest in following up offline to discuss project structuring and bidding considerations ahead of the June decision timeline.

Meeting adjourned shortly after 1:00.

Public comment not related to items on agenda

Seating of members/alternates

Report on budget adjustments

Nominating Committee question

MEMORANDUM

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL
FR: CWSP STAFF
RE: WAIVE NOMINATING COMMITTEE CREATION, OR NO?
DA: MAY 27, 2026
==========

For some of you this is a familiar topic.

The BWQC's bylaws specify that the regular election of officers will take place at the Annual Meeting, which is the first meeting following the start of the fiscal year on July 1. (This year, the annual meeting is set to take place on August 5.)

The bylaws also contain language regarding a Nominating Committee being formed by the Chair at the meeting preceding the Annual Meeting—the upcoming one—unless the BWQC votes to forego creation of a Nominating Committee.

If there is no Nominating committee, then all Nominations will be made from the floor.

The question that must be addressed on June 3 is: **Would the BWQC vote to forego creation of a Nominating Committee?** (It has done so in the past but is under no obligation to do so.)

Relevant excerpts from the BWQC's bylaws are provided below.

ARTICLE VI ELECTIONS

Section 601 Nominations

In support of elections, a Nominating Committee made up of three Council members may

be appointed by the Chair at the regular meeting preceding the annual meeting. The Nominating Committee will prepare a slate of nominations for officers. This slate of nominations will be presented at the annual meeting. Additional nominations will be taken from the floor at the annual meeting.

Prior to the appointment of a Nominating Committee in any given year, the Council may vote to forego the establishment of a Nominating Committee in that year.

Section 602 Election of Officers

The officers shall be elected by the Council members present and voting at the annual meeting.

Section 702 Chair

The Chair of the Council shall guide the planning and facilitation of BWQC meetings in coordination with the CWSP. The Chair may perform such other duties as customary to the office. The Chair shall cast a vote on all issues voted on at a Council meeting, unless the Chair wishes to abstain or has a conflict of interest. Whenever possible, the Chair will pursue decision making by consensus.

Section 703 Vice Chair

The Vice Chair shall act as Chair in the absence, recusal, or incapacity of the Chair.

Application Review

MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: ROUND 11 APPLICATIONS
DA: MAY 27, 2026
==========

Three project applications were submitted in response to the 11th Call for Applications issued in the Missisquoi Basin. The material being provided to you includes summary tables of phosphorus reduction estimates, cost effectiveness, and scheduling, along with the full copies of the applications.

One project proposes Implementation phase work in the Floodplain/Stream Restoration category. The other two propose Final Design phase work, one in the Forestry category and the other in the Floodplain/ Stream Restoration. **The total amount of funding requested for the upcoming phase of work is $472,641 while full (eventual) implementation costs are estimated to cost approximately $870,600.**

WPD ID	Project	Funding request (next project stage)	Estimated Total cost (all project stages) per applicant-Low
14750	**West Hill SWA**	**$ 13,450**	**$ 65,000**
14714	**Trout River Floodplain Restoration**	**$ 231,270**	**$ 431,270**
147--	**North Troy Stone Dam**	**$ 227,921**	**$ 374,404**
Totals		$ 472,641	$ 870,674

The amount of annual phosphorus reduction represented in the applications is 33.5 kilograms. The project with the greatest P reduction impact (North Troy Stone Dam) is projected to yield an estimated annual phosphorus reduction of 13.7 kg, followed closely by the Trout River Floodplain Restoration project at 13.5 kg. The West Hill SWA would yield an estimated annual phosphorus reduction of 6.3 kg. Meanwhile, the **crude cost effectiveness** of the projects **ranges from approximately $10,334 per kilogram** (West Hill SWA), which is well within the cost effectiveness threshold set in CWSP policy, **to $31,946 per kilogram**, which is slightly outside that threshold.

WPD ID	Project	Annual p reduction kg	Full cost per kg annual P reduction fully loaded based on high
14750	**West Hill SWA**	6.29	$ 10,334
14714	**Trout River Floodplain Restoration**	13.5	$ 31,946
147--	**North Troy Stone Dam**	13.7	$ 27,329
		33.49 (total)	$23,203 (average)

I encourage Council members to review the summary data and applications to prioritize the projects that best align with clean water goals.

CWSP staff may provide additional data regarding the applications at or before the meeting

Project Type			
TypeList	Floodplain/Stream Restoration – Final Engineering Design	Floodplain/Stream Restoration – Final Engineering Design	Dam Removal – Implementation
Step/Phase	Final Design	Final Design	Implementation
Basic Eligibility	Yes	Yes	Yes
Applicant Name	Lauren Weston	Lauren Weston	Allaire Diamond
Applicant Organization	Franklin County NRCD	Franklin County NRCD	Vermont Land Trust
Applicant Email	lauren@franklincountynrcd.org	lauren@franklincountynrcd.org	allaire@vlt.org
Applicant telephone	+1 (802) 582-3133	+1 (802) 582-3133	+1 (802) 879-6672
Project ID from WPD	14714	14750	~~12697~~
Description of Project	This project proposes to restore floodplain access along the Trout River in Montgomery Center, where homes are some of the most floodprone. This will include floodplain lowering of an estimated 2.1 - 6.1 acres of floodplain to reduce the velocity of high flows and increase flood resilience in Montgomery, VT. Disturbed areas will be replanted with native woody trees and shrubs.	This project will design roughly 60 course wood structures along forested streams in Montgomery VT. The targeted streams are a collection of 1st, 2nd, and 3rd order streams in the Trout River Outlet subbasin. This design will build upon previous preliminary work to further narrow in the scope and improve understanding of the fluvial systems at work.	VLT proposes removing an earthen dam impounding a small tributary to the Missisquoi River in North Troy. The dam was formerly associated with a railroad track which is no longer in use. Project objectives include removing a portion of the dam and restoring the stream and wetland system that originally existed in its place. The project will benefit water quality, flood storage and floodwater control. The project is assoc
Project Phase	Final Design	Final Design	Implementation
Annual P Reduction KG	13.5	6.29	13.7
Any one time P reduction KG	0	4.202	26.07
Total Cost of Proposed Phase	231270.00	13450.00	227921.26
Amount of Funding Requested (Proposed Phase)	$231,270.00	$13,450.00	$222,771.26
Non DEC Funding as part of Total Project Costs (a	$0.00	$0.00	$26,303.00
Total Project Costs (All Phases)	$431,270.00	$65,000.00	$374,404.00
KG/$ Current Phase			
KG/$ Overall			
Design Life	10	10	Perpetual
Estimated Annual O&M cost total	$5,000.00	$1,600.00	$1,000.00
Conformance with Tactical Basin Plan TBP	10	10	5
Number of Co-benefit Areas	3	2	2
DEC Screening Form Uploaded	Yes	Yes	Yes
Map of Project Area Uploaded	Yes	Yes	Yes
Project Budget Uploaded	Yes	Yes	Yes
Project Schedule Uploaded	Yes	Yes	Yes
Landowner Support uploaded	Yes	Yes	Yes
Phosphorus Calculator Tool uploaded	Yes	Yes	Yes
Using_As_Match	No	No	No
Cultural Resource Review	Yes	Yes	Yes
O&M Interest	Yes	Not sure	Yes
continued project	No	Yes	Yes
earlier P estimate		4.808	NA; Project Development Funding

Project Schedule Summary

The timelines vary significantly, reflecting the different phases of the projects, with West Hill Brook following an accelerated design schedule, the Stone J&M Dam targeting immediate implementation, and the Trout River restoration planning for a more complex multi-year design process.

Project Schedule Comparison

Milestone / Activity	**West Hill Brook Strategic Wood Additions (14750)**	**Stone J&M Dam Removal (ID TBD)**	**Trout River Floodplain Restoration (14714)**
Project Phase	Final Design	Implementation	Final Design
Consultant Selection & Bidding	(Not specified; Redstart identified)	June 2026: Bidding and selection of contractor	July–August 2026: Hire Engineering Consultant
Data Collection & Preliminary Analysis	July 2026: Documentation of incisions and floodplain engagement	July–August 2026: Finalize design elements and hold pre-construction meeting	August 2026–January 2027: Data collection, H&H model updates, and alternatives analysis
Design Development (30% to 60%)	(Builds on previous preliminary work)	(60% Designs already complete as of April 2026)	January–September 2027: Advance designs to 60% for interested landowners; perform Archaeological Assessments (ARA)
Permitting & Regulator Coordination	August 2026: Draft permit application materials and individual wetland permit	June 2026: Confirm Flood Hazard and River Corridor (FHARC) requirements	April–June 2027: Check-in with regulators at 60% Design stage
Implementation / Construction	(N/A for this phase)	September–October 2026: Dam removal construction and site restoration	(N/A for this phase)
Final Reports & Deliverables	August 2026: Final Design Report and signed VDHP review form	Fall 2026 / Spring 2027: Finish or update site plantings	May–September 2027 (Target): Advance to Final Design and Permitting
Project Completion / Closeout	September 2026: Final performance report and batch import file	December 2027: Official project end date (includes buffer year)	April 2028 (Estimated): Potential completion for more complex project segments

Notes

- **Trout River (14714):** The schedule is contingent on landowner approval. For properties where support is not yet confirmed, the applicant plans to complete 30% designs between January and June 2027 to help secure interest.
- **West Hill Brook (14750):** This is the most aggressive schedule, proposing to move from field work to a completed Final Design Report and project closeout within approximately three months (July–September 2026).
- **Stone J&M Dam (12697):** As an implementation project, the schedule emphasizes the construction season (September–October 2026). It also includes a long-term buffer, setting the final end date for December 2027 in case construction cannot be completed in the first year.

points for full calcs				o	o	o	o	o	o	o	o	o	o	o	o	o
Points for printed table				*	*	*	*	*	*	*		C			D	E	F
			DATA ENTRY /Prelim results														
applicant	Project	WPD ID	Project type	Annual p reduction kg	Funding request (next project stage)	Proposed cost (next project stage)	Estimated Total cost (all project stages) using *midpoint* of ranges where provided	Estimated Total cost minus other funding sources CWSP STAFF ADJUSTMENTS/ or BWQC action	cost per kg annual P reduction fully loaded	design life (yr)	Estimated annual maintenance costs	Estimated annual maintenance costs per KG	Est Annual Cost of Operations and maintenance $/kg (lower is better)	Conformance with the Basin plan (Imp. Table, elsewhere in TBP, or not)	Cobenefits (How many of six CoBenefit elements)
Lauren Weston	This project proposes to restore floodplain access along the Trout River in Montgomery Center, where homes are some of the most floodprone. This will include floodplain lowering of an estimated 2.1 - 6.1 acres of floodplain to reduce the velocity of high flows and increase flood resilience in Montgomery, VT. Disturbed areas will be replanted with native woody trees and shrubs.	14714	Final Design	13.5	231270.00	231270.00	$431,270.00	$419,525	$31,076	10	$5,000.00	370	$370	10	3
Lauren Weston	This project will design roughly 60 course wood structures along forested streams in Montgomery VT. The targeted streams are a collection of 1st, 2nd, and 3rd order streams in the Trout River Outlet subbasin. This design will build upon previous preliminary work to further narrow in the scope and improve understanding of the fluvial systems at work.	14750	Final Design	6.29	13450.00	13450.00	$65,000.00	$65,000	$10,334	5	$1,600.00	254	$254	10	3
Allaire Diamond	VLT proposes removing an earthen dam impounding a small tributary to the Missisquoi River in North Troy. The dam was formerly associated with a railroad track which is no longer in use. Project objectives include removing a portion of the dam and restoring the stream and wetland system that originally existed in its place. The project will benefit water quality, flood storage and floodwater control. The project is assoc	12697	Implementation	13.7	227921.26	227921.26	$374,404.00	$374,404	$27,329	10	$1,000.00	73	$73	5	2
		Total/Average		33.49	$472,641			$858,929							

~~12697~~ North Troy Stone Dam

Project Type	
Step/Phase	Implementation
Basic Eligibility	Yes
Applicant Name	Allaire Diamond
Applicant Organization	Vermont Land Trust
Applicant Email	allaire@vlt.org
Applicant telephone	+1 (802) 879-6672
Project ID from WPD	~~12697~~
Description of Project	VLT proposes removing an earthen dam impounding a small tributary to the Missisquoi River in North Troy. The dam was formerly associated with a railroad track which is no longer in use. Project objectives include removing a portion of the dam and restoring the stream and wetland system that originally existed in its place. The project will benefit water quality, flood storage and floodwater control. The project is assoc
Project Latitude	45.00178
Project Longitude	-72.38811
Project Phase	Implementation
Annual P Reduction KG	13.7
Any one time P reduction KG	26.07
Total Cost of Proposed Phase	227921.26
Amount of Funding Requested (Proposed Phase)	$222,771.26
Non DEC Funding as part of Total Project Costs (a	$26,303.00
Total Project Costs (All Phases)	$374,404.00
Design Life	Perpetual
Estimated Annual O&M cost total	$1,000.00
Conformance with Tactical Basin Plan TBP	5
Number of Co-benefit Areas	2
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	Yes
O&M Interest	Yes
continued project	Yes
earlier P estimate	NA; Project Development Funding

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: Minimize flood and fluvial erosion hazards Minimize anthropogenic nutrient and organic pollution Protect and restore aquatic and riparian habitats	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards		
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Dam Removal - Implementation	
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○	No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

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	pending - child of #12697
Watershed Project Database Project Name	Stone J&M Dam Removal Implementation-Troy

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

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 permit[7])?
   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."

[10] Note 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]	
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. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
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 area[12]**?** (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.	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Alexis Nevins	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Chris Brunelle	
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."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: 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.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either 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 either 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. **Regulatory Point of Contact Name/Position:** Shannon Morrison	
1. Is your project a Wetland Restoration project type?	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Shannon Morrison	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 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	Yes ○ No ◉

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

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ○ No ◉
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. **Regulatory Point of Contact Name/Position:**	
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 ◉
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. **Regulatory Point of Contact Name/Position:**	
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 ◉
If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:**	
Provide below or attach a narrative summary of Table 4 findings. Please include: a. Which permits or permit amendment are needed or might be needed? b. What type might be needed? (e.g. a general or individual permit)? c. What concerns were voiced by permitting staff? d. How will the proposed scope of work address these concerns? VLT and/or our engineering consultants have consulted with all regulators named in this form. Chris Brunelle has not taken jurisdiction of the stream so no Stream Alteration Permit is required. Shannon Morrison has approved work as an Allowed Use as all work will take place outside of wetlands and material will not be deposited in wetlands. We have not heard back from Alexis Nevins but do not foresee issues.	
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.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: Water Quality Restoration Formula Grant (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

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.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? 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.	○ **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. ◉ **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 (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **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.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[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 VAAFM.

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.

Updated 3/23/2021

Missisquoi CWSP - Stone J&M Dam Removal Implementation-Troy

Gray cells auto-calculate, do not edit. Enter in white cells only.

Personnel (Name, Title)	Tasks/Responsibilities	Hours	Hourly Rate	Total Salary Expense	Leverage amount	Amount requested
Allaire Diamond, Ecology & Restoration Program Director	Project and program management, oversight	32	$94.00	$3,008.00	$0.00	$3,008.00
Tyler Miller, Vice President for Land Activation	Project oversight	8	$113.00	$904.00	$0.00	$904.00
Dan Kilborn, Lands Program Director	Materials review and programmatic coordination	4	$94.00	$376.00	$0.00	$376.00
Katia Fecteau, Accountant	Invoicing and grant financial setup	4	$73.00	$292.00	$0.00	$292.00
Rasna Dhillon	Communications	4	$86.00	$344.00	$0.00	$344.00
Kyle Birrer, Restoration Fellow	Project management, oversight	80	$73.00	$5,840.00	$0.00	$5,840.00
Personnel Subtotal				**$10,764.00**	**$0.00**	**$10,764.00**

Fringe Benefits	Fringe Benefits Rate	Salary Expense	Total Fringe Benefits Expense	Leverage amount	Amount Requested
Includes FICA, retirement, health insurance and workers' comp	0%	$10,764.00	$0.00	$0.00	$0.00
Fringe Benefits Subtotal			**$0.00**	**$0.00**	**$0.00**

Anticipated Travel	Purpose	Miles	Mileage Rate	Total Travel Expense	Leverage amount	Amount Requested
VLT staff	Travel to site - 12 visits	1,584	$0.73	$1,148.40		$1,148.40
		0	$0.00	$0.00	$0.00	$0.00
Travel Subtotal				**$1,148.40**	**$0.00**	**$1,148.40**

Equipment Rental	Description/Use	# of Units	Unit Cost	Total Equipment Expense	Leverage amount	Amount Requested
		0	$0.00	$0.00	$0.00	$0.00
		0	$0.00	$0.00	$0.00	$0.00
Equipment Subtotal				**$0.00**	**$0.00**	**$0.00**

	Description/Use	# of Units	Unit Cost	Total Supplies Expense	Leverage amount	Amount Requested
Conservation seed mix	Site restoration	239	$3.00	$717.00	$0.00	$717.00
Wetland seed mix	Site restoration	2	$50.00	$100.00	$0.00	$100.00
Tree saplings	Site restoration	193	$25.00	$4,825.00	$0.00	$4,825.00
		0	$0.00	$0.00	$0.00	$0.00
Supplies Subtotal				**$5,642.00**	**$0.00**	**$5,642.00**

Contractual/Construction	Description/Use	# of Units	Unit Cost	Total Contract. Expense	Leverage amount	Amount Requested
FEA - Engineering and Design	Bid support and construction oversight	1	$19,500.00	$19,500.00	$0.00	$19,500.00
Consultant - construction contractor tbd	dam removal construction inc. 20% contingency	1	$176,430.00	$176,430.00	$0.00	$176,430.00
Volunteer labor for tree plantings		103	$50.00	$5,150.00	$5,150.00	$0.00
Contractual Subtotal		0		**$201,080.00**	**$5,150.00**	**$195,930.00**
Project subtotal				**$218,634.40**	**$5,150.00**	**$213,484.40**

Indirect Costs	Indirect Rate	Cost related to Indirect rate	Total Indirect cost	Leverage amount	Amount Requested
If rate is above 10%, provide documentation indicating the reason	15%	$61,912.40	$9,286.86	$0.00	$9,286.86
Indirect Subtotal			**$9,286.86**	**$0.00**	**$9,286.86**

Totals	**$227,921.26**	**$5,150.00**	**$222,771.26**
Percent Leveraged	**2%**		
Leverage+ Amount requested= Total project cost	**YES**		

Notes: Indirect calculation includes first $50,000 of contractual items

Functioning Floodplain Initiative

FEA used the FFI online tool (https://ffi.stone-env.net/) to calculate phosphorus removal credits the restoration project may qualify for.

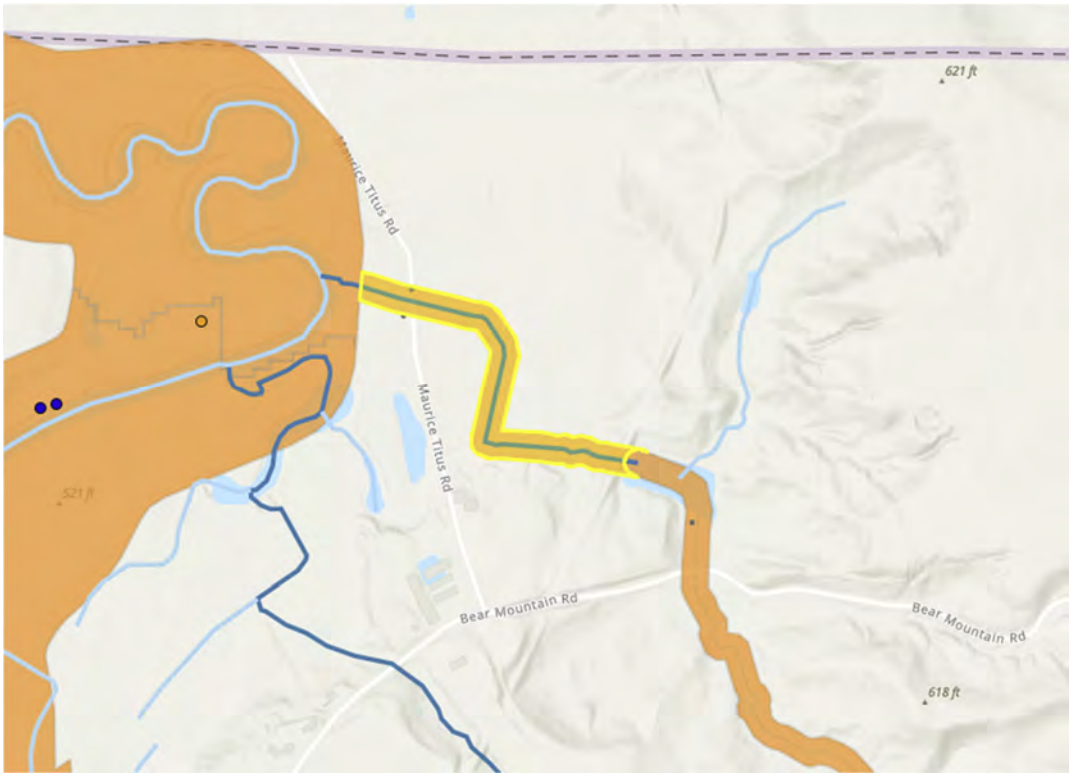


Figure 1: FFI Tool Stream and Corridor selection

Stream Stability and Storage for 90_R23S2.01_PLG_C00

Inputs should reflect the area impacted by project implementation. For example, users should enter additional area of unconstrained river corridor achieved by project implementation (not including existing area already unconstrained). Users can also alter the 'existing' value of incision ratio and storage connectivity category to more accurately reflect conditions at your specific project site. Please consider that existing areas of river corridor and existing area within the 50 ft riparian area are:

River Corridor Area (acres): 4.6 50 ft Riparian Area (acres) 4.6

Stream Stability Inputs

Select Project(s)

Remove Minor Constraint

Existing Incision Ratio	Proposed Incision Ratio
	1
Existing: 1.3	
Area with Vertical Change (acres)	**Unconstrained River Corridor Area (acres)**
2.65	
	Existing: 3.8

Protection Areas (acres)

None	Low	Moderate	Robust
Existing: 0.0	Existing: 0.0	Existing: 4.6	Existing: 0.0

Figure 2: Floodplain Connectivity and Storage inputs (1/2)

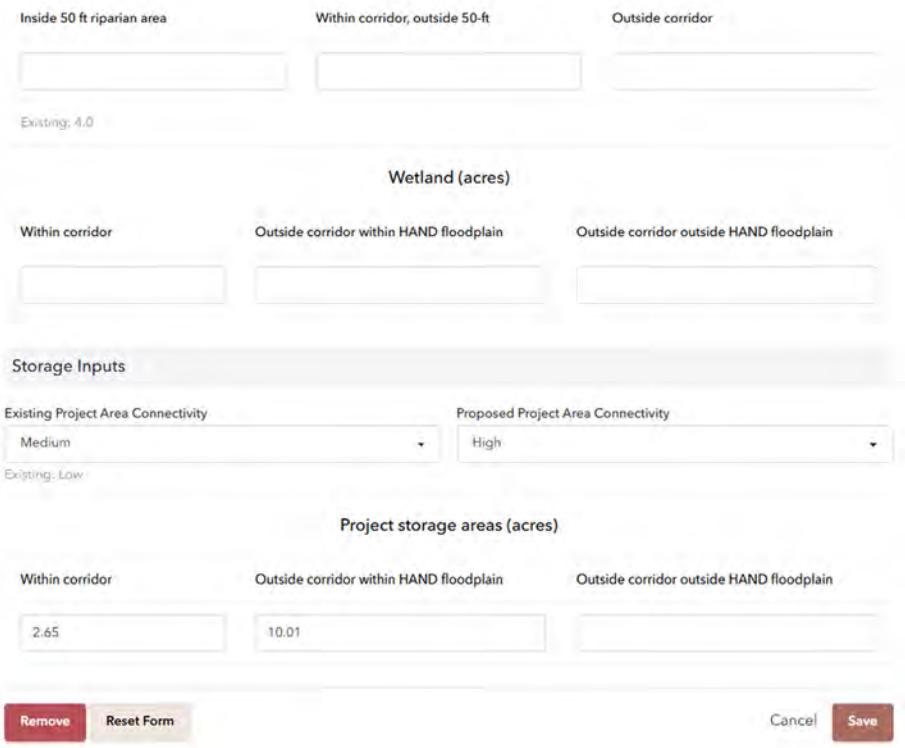


Figure 3: Floodplain Connectivity and Storage inputs (2/2)

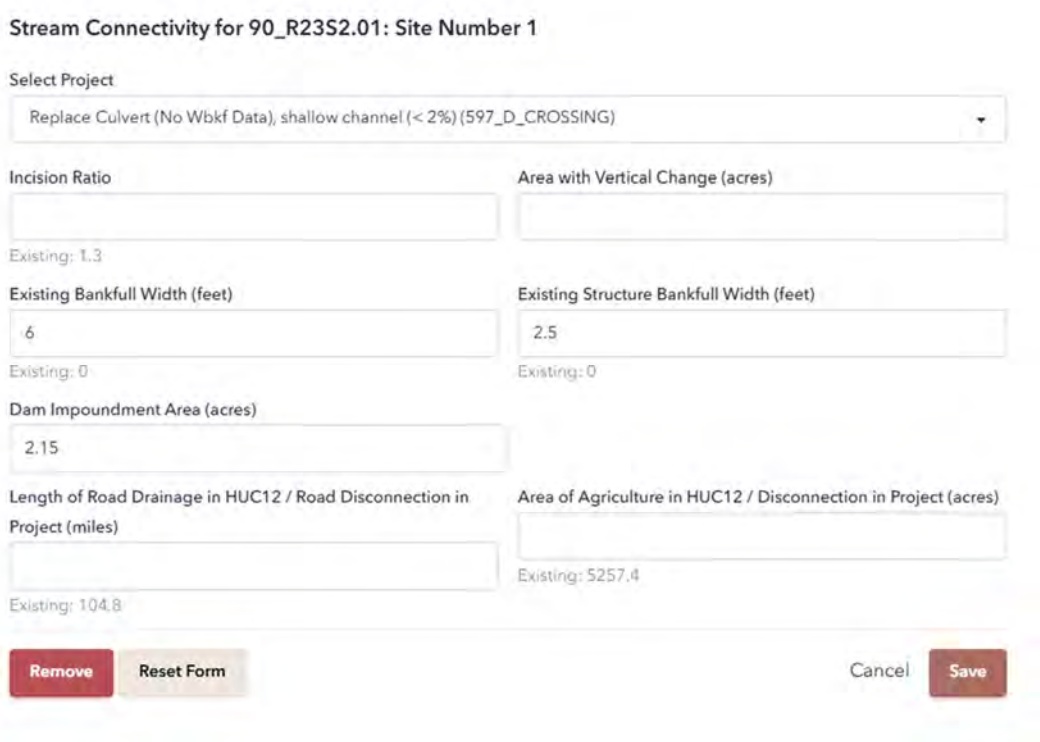


Figure 4: Stream Connectivity Inputs

Estimated Phosphorus Credit for Stream Stability and Storage

SubUnit(s) IDs: 90_R23S2.01_PLG_C00, 90_R23S2.01
Town: TROY
Rivers Projects Included: Remove Minor Constraint
Streams Projects Included: Replace Culvert (No Wbkf Data), shallow channel (< 2%) (597_D_CROSSING)
Stream Names: null
Project Area (acres): 2.65

Stream Stability and Storage Credit Summary

	Annual Credit (kg/yr)
Floodplain Connectivity (Lateral - Vertical)	
Stream Stability	3.0
Storage	8.7
Stream Connectivity (Longitudinal - Temporal)	
Stream Stability	2.0
TOTAL	13.7

Floodplain Connectivity (Lateral-Vertical) and Storage Crediting

Floodplain Connectivity (Lateral-Vertical)

River Corridor ID	Project Connectivity Credit Score	Existing Subunit Floodplain/Corridor Connectivity Score	Proposed Lateral Credit Score	Proposed Vertical Credit Score	Proposed Subunit Floodplain/Connectivity Score	Lateral P Reduction Credit (kg/yr)	Vertical P Reduction Credit (kg/yr)	Total P Reduction Credit (kg/yr)	Total P Reduction Credit (lb/yr)	Annual Storage P Reduction (kg/yr)	Year 1 Additional Storage P Reduction (kg)
90_R23S2.01_PLG_C00	7.6	58.05	0	0.14	65.64	0	2.95	2.95	6.5	8.69	26.07

Stream Connectivity (Longitudinal-Temporal)

Stream ID	Project Connectivity Credit Score	Existing Stream Segment Connectivity Score	Proposed Longitudinal Credit Score	Proposed Temporal Credit Score	Proposed Stream Segment Connectivity Score	Longitudinal P Reduction Credit (kg/yr)	Temporal P Reduction Credit (kg/yr)	Total Stream Connectivity P Credit (kg/yr)	Total Stream Connectivity P Credit (lb/yr)
90_R23S2.01	25.6	25.42	40	4	51.02	1.88	0.13	2.01	4.43

Figure 5: Floodplain Connectivity and Storage inputs (2/2)

164 Main Street · Suite 2 · Colchester · Vermont · 05446
Tel. 802.876.7778 · www.fitzgeraldenvironmental.com

From: Basque, Yvonne
To: Kyle Birrer
Cc: Allaire Diamond; Rodrigue Spinette; Socinski, Greg
Subject: RE: Historic Preservation Project Review - Stone dam removal North Troy
Date: Thursday, February 26, 2026 10:49:37 AM

Good morning,

Thank you for sending this along for review.
We are requesting an archaeological resources assessment (ARA) for this project area, primarily for Precontact archaeology, which should include access and fill areas. I also discussed the dam itself with our architectural historian, Greg Socinski. Despite the age of the dam, he does not believe it would be eligible for listing on the State or National Register, so we have no further concerns for the dam itself.

If you have any questions, please reach out any time.

Best,
Yvonne

Yvonne Benney Basque (she/her)
Historic Resources Specialist – Archaeologist
Vermont Department of Housing and Community Development
1 National Life Dr, Davis Bldg, 6th Floor | Montpelier, VT 05620-0501
(802) 505-1020
yvonne.basque@vermont.gov
https://accd.vermont.gov/historic-preservation

From: Kyle Birrer <Kyle@vlt.org>
Sent: Monday, February 2, 2026 2:35 PM
To: ACCD - Project Review <ACCD.ProjectReview@vermont.gov>
Cc: Allaire Diamond <Allaire@vlt.org>; Rodrigue Spinette <rodrigue@feavt.com>
Subject: Historic Preservation Project Review - Stone dam removal North Troy

Seeking your review of a dam removal project in North Troy that Vermont Land Trust and Fitzgerald Environmental Associates have been working on. See attached zip for the Project Review Cover Form and supplemental materials.

We are targeting end of summer/fall 2026 for implementation. I am following up this email with a second VHDP project review that is on a longer timeline, we would prefer if you could prioritize this review over it.

Let me know if you need more materials from me or have any questions.
Best,

Kyle Birrer (he/him)
Ecological Restoration Fellow
Vermont Land Trust

Archaeological Resources Assessment Report for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont

Submitted to:

Kyle Birrer
Ecological Restoration Fellow
Vermont Land Trust
226 Bridge Street
PO Box 850
Richmond, VT 05477

Submitted by:

Charles Knight, Ph.D.
Crown Consulting Archaeology, LLC
PO Box 358
50 Main Street
Winooski, VT 05404-0358

May 14, 2026

CCA Report
No. 2026-009

Archaeological Resources Assessment Report for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont

Project Description

The Vermont Land Trust (VLT) proposes the Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont (Figure 1). The VLT proposes to remove a dam impounding an unnamed stream on the conserved property known as Stone J & M in North Troy, Vermont (Figure 2). The dam is a manmade railroad embankment that appears to have been built in the early 20th century and discontinued prior to 1962 according to orthophotos and historic imagery. The dam has a damaged 30" diameter culvert running through it and has impounded significant volumes of water and sediment behind it. Once through the culvert, the stream enters a large floodplain wetland before flowing into the Missisquoi River.

The dam removal design consists of excavating a large section of the dam to create a 30-ft wide valley and a 6-ft wide stream channel at the bottom with 5:1 slope extending on both sides (Figures 3-5). A small 0.5-ft rise is maintained at the entrance to the new channel to prevent the sediments that have accumulated above the dam from mobilizing and migrating rapidly downstream after construction. The expectation is that the new channel will naturally reach a new equilibrium over time. The final state of equilibrium may be one where some inundation persists upstream of the dam but at a more modest scale compared to current conditions. Another possibility is that the grade at the dam will flatten out and inundation upstream will disappear in favor of a deeply saturated but thickly vegetated wetland. Something between these two outcomes is also quite likely and beavers will return to the area, exerting their own influence on the restored system.

Three proposed disposal areas are also planned (Figures 6-8). One challenge presented by the proposed project is that the volume of material excavated from the dam is significant, approximately 4,500 Cu Yd. To facilitate projects of this nature and contain costs, it is best to relocate materials onsite. We have identified three areas where disposal should be considered. The major disposal area, Disposal Area #1, is a small terrace northeast of the dam which appears to have been cleared in the recent past and whose tree cover is thinner than surrounding areas. The other two disposal areas, Disposal Areas #2 and #3, overlap with the dirt road that leads on and off the dam. The proposed disposal areas avoid all wetland and buffer areas and aim to cause the least impact possible to existing land uses on the parcel. The Vermont Division for Historic Preservation (VDHP) reviewed the proposed project and requested that an ARA be conducted within the limits of the proposed project, including the access road alignment and location of fill deposition, as part of the Section 106 permitting process.

The Archaeological Resources Assessment (ARA)

The goal of an ARA (or “review”) is to identify portions of a specific project’s Area of Potential Effects (APE) that have the potential for containing pre-Contact and/or

historic sites. An ARA is to be accomplished through a “background search” and a “field inspection” of the project area. For this study, reference materials were reviewed following established guidelines. Resources examined included the National Register of Historic Places (NRHP) files; the Historic Sites and Structures Survey; and the USGS master archaeological maps that accompany the Vermont Archaeological Inventory (VAI). Relevant town histories and nineteenth-century maps also were consulted. Based on the background research, general contexts were derived for pre-Contact and historic resources in the study area.

Pre-Contact Native American Archaeological Site Potential

There are no known pre-Contact Native American archaeological sites within or adjacent to the proposed project alignment. In fact, there are no know archaeological sites within 5 km of the proposed project area. This does not necessarily mean that there was no pre-Contact Native American habitation in the area, but rather that little to no development that would require regulatory archaeological investigations have occurred in the area. The project surrounds an unnamed tributary of the Missisquoi River, which is located 420 m to the west, and which was a major inland thoroughfare for millennia. As a result, it is very possible that the project area was visited by Native peoples at some time in the last 10,000 years.

Historic Archaeological Sites and Properties

Neither the historic 1859 Wallings map (Figure 9), nor the historic 1878 Beers map (Figure 10), map depict any historic period habitation within or immediately adjacent to the proposed project area. No properties within or adjacent to the proposed project area have been listed on either the State or National Register for Historic Places. Considering the lack of historic period development within or adjacent to the proposed project area, and that fact that the existing Stone J & M dam was originally built as a railroad crossing, rather than for power generation, no historic archaeological sites are expected to exist there.

Desk Review

As part of the desk review, the Vermont Division of Historic Preservation’s (VDHP) 2015 predictive model matrix for identifying pre-Contact Native American archaeological sites is employed for the project area. The Stone J & M Dam Removal Project area scores 36 on the Predictive Model (Figure 11). This is due to it being located within 90 m of an unnamed tributary of the Missisquoi River (12), within 90 m of a large wetland (12), on along a natural travel corridor (12). Soils in the project area are Nicholville very fine sandy loam, which consists of very deep, moderately well drained soils formed in wind or water deposited material having a high content of silt and very fine sand. They are on lake plains and low benches on uplands.

Site Visit

A field inspection of the project area was carried out on May 12, 2026, by Charles Knight, Principal Investigator of Crown Consulting Archaeology, LLC. Knight visited the entire project limits taking soil cores where possible. The dam consists of an

old railroad crossing, of which the rail bed and rail bed fill prism is still visible (Figure 12). Three disposal areas are proposed for the dam removal (Disposal Areas 1-3). Disposal Area 3, the southern-most, will be placed along the railroad bed just north of Bear Mountain Road (Figures 12, 13, and see Figures 6 & 8), while Disposal Area 2 will be located along the railroad bed, just north of the stream crossing (Figure 15, and see Figures 6 & 7). The existing railroad bed is approximately 8 m wide, or 13 m wide if you include the fill prism. Considering the original disturbances caused by the construction of the railroad bed, and the fact that disposal will be limited to the existing railroad bed's right-of-way, these first two disposal areas are not considered to impact archaeologically sensitive areas.

The third disposal area (Disposal Area 1) is located on a small terrace to the northeast of the dam (see Figures 3, 6 & 7). At the time of the field visit, this area had recently had its trees cut down, but not yet removed (Figure 16). As a result, the exact limits of this disposal area were clear. It was immediately apparent that the location of Disposal Area 1 had been disturbed, likely through some type of large-scaled soil extraction. The area sat in an unnatural bowl, compared to the adjacent uplands (Figures 16 & 17). The same bowl-shape (albeit much larger) was also visible in the area to the north, outside of the project limits. The eastern half of the Disposal Area 1 bowl was relatively level, but the rest was on slope. Soil cores at the top of the ridge between these two depressions exhibited an intact A-C Horizon soil sequence (Figures 18 & 20). Soil cores in the base of the Disposal Area 1 depression exhibited only C soils, indicating that the upper soils had been removed (Figures 19 & 20). A Lidar map of the microtopography of the project area demonstrates the unnatural form of Disposal Area 1, and the larger unnatural bowl-shaped depression to the north (Figure 20). It is very likely that these two areas represent borrow pits for sand extraction, which may have been used in the original railroad dam construction.

As for the actual dam removal, the staging of the equipment that will carry out the material removal will be maintained within the existing right-of-way of the railroad bed and therefore, no areas beyond the this previously disturbed corridor will be impacted.

Conclusions

The Vermont Land Trust (VLT) proposes the Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont. Crown Consulting Archaeology, LLC., conducted an Archaeological Resources Assessment of the proposed project area and no areas of archaeological sensitivity were identified. The three disposal areas will be contained within areas of previous, historic disturbance. Disposal Areas 2 and 3 will be contained within the existing railroad bed right-of-way, while Disposal Area 1 will be located within an unnatural depression just northeast of the railroad bed, that may represent the borrow pit for material used in the original railroad dam construction. In addition, the staging of the earthen dam removal itself will be kept within the right-of-way of the existing railroad bed and therefore, will not disturb intact landforms. As a result, the proposed project will not impact archaeologically sensitive landforms and no additional archaeological study is recommended as part of the Section 106 permitting process.

Thank you for working with us on this project. Please let me know if you have any questions or comments.

Charles Knight, Ph.D.
Principal Investigator

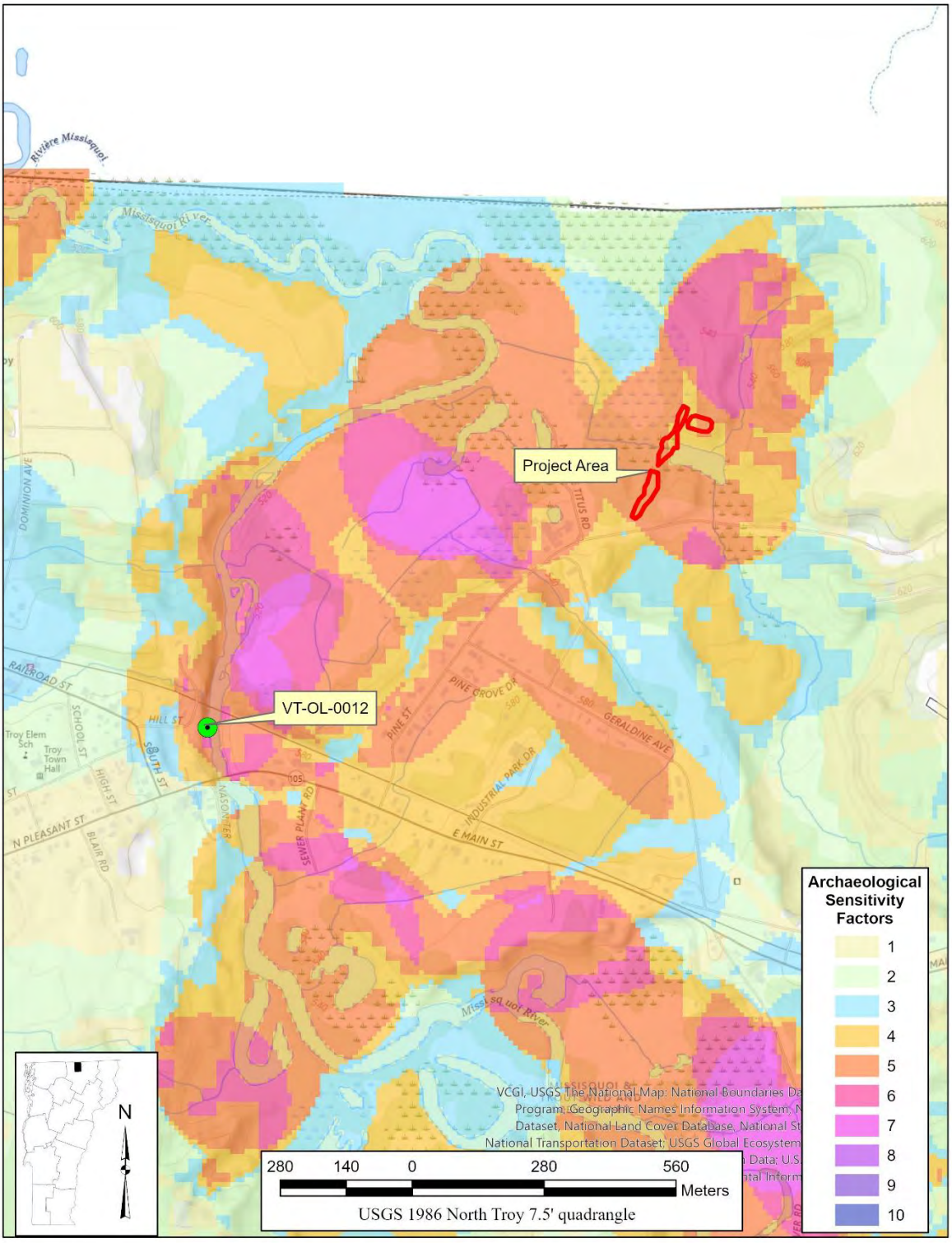


Figure 1. Map showing the limits of the proposed Stone J & M Dam Removal Project, in relationship to known archaeological sites and sensitivity factors, North Troy, Orleans County, Vermont.

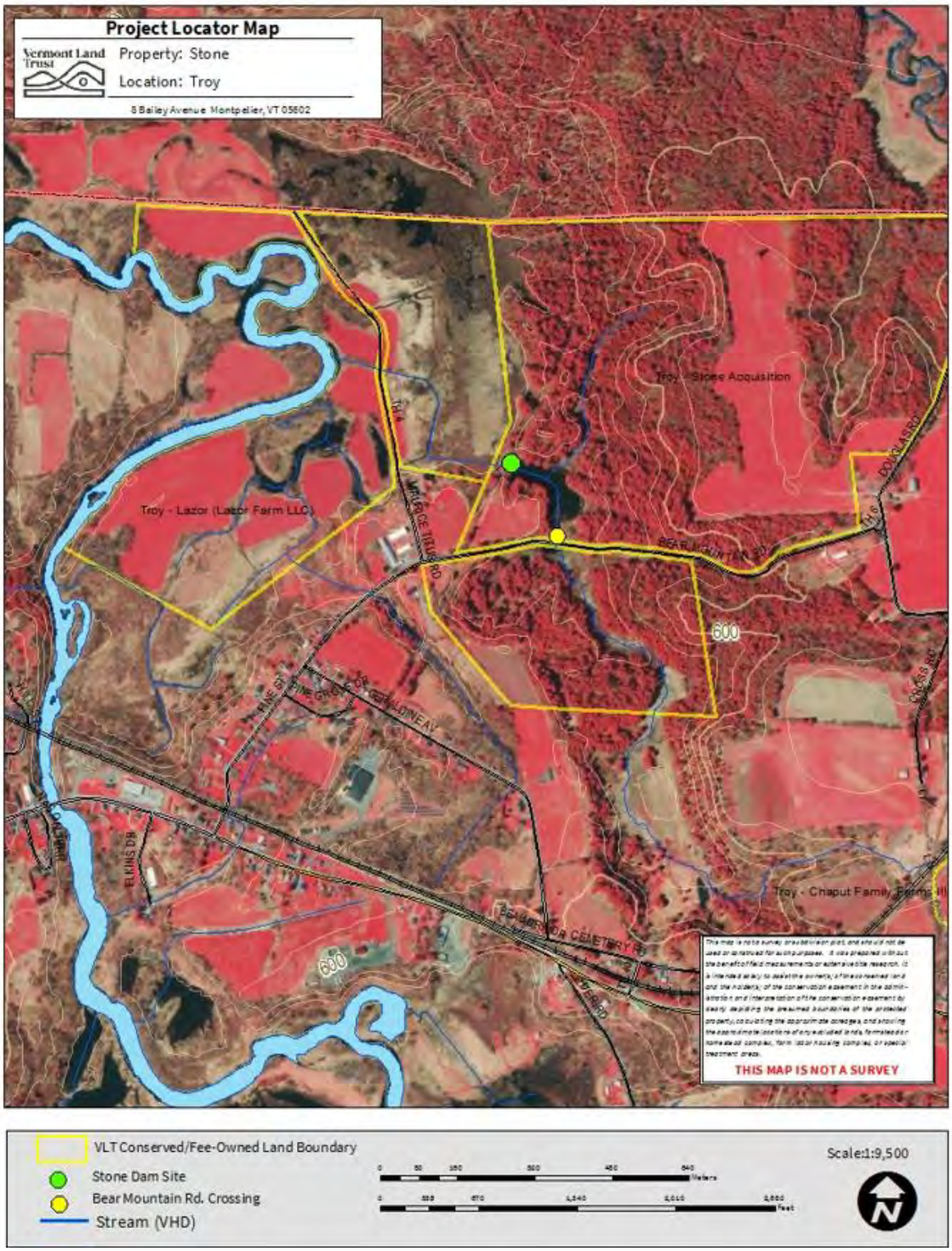


Figure 2. Project map showing the general location of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

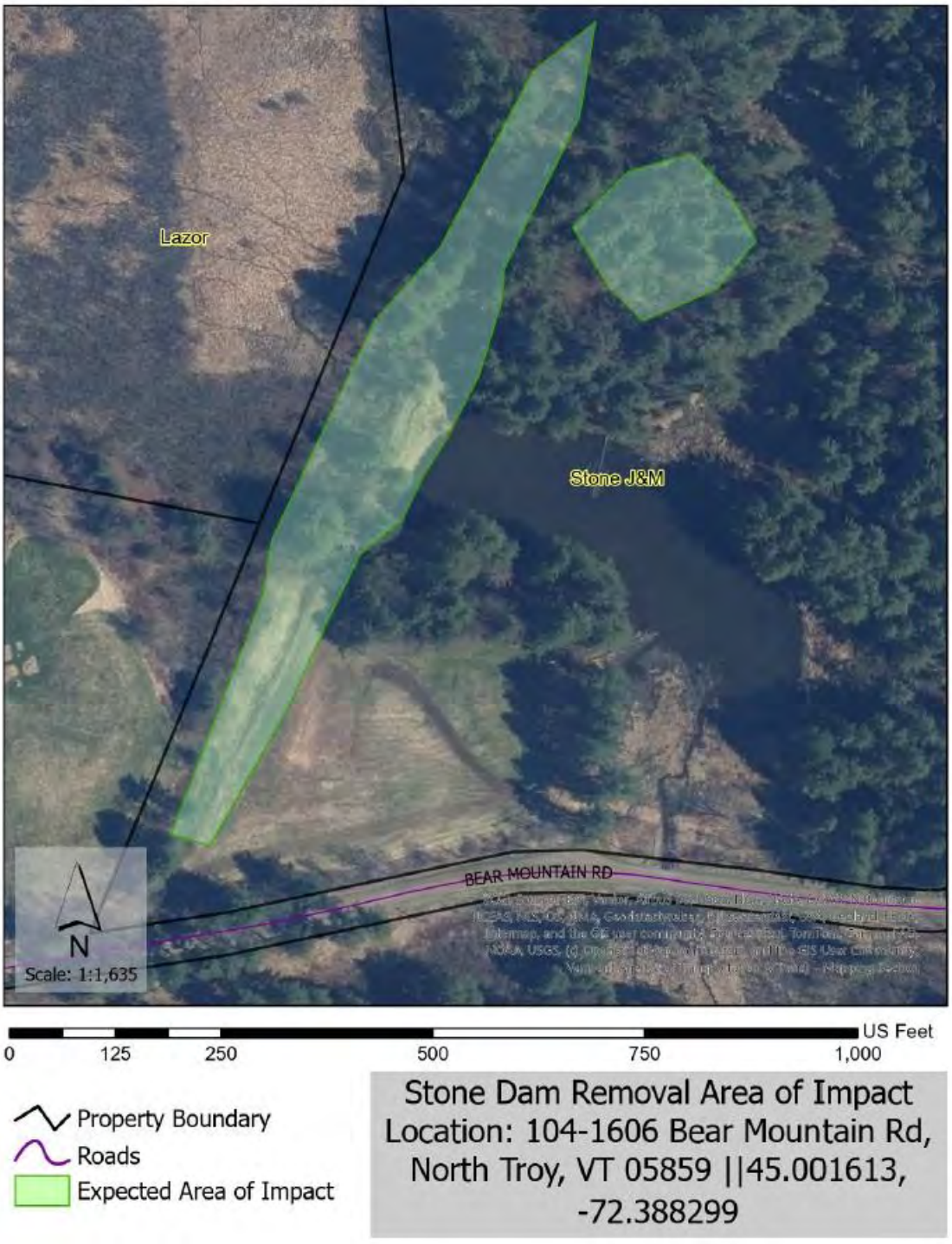


Figure 3. Project map showing the specific locations of the dam removal and soil disposal areas of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

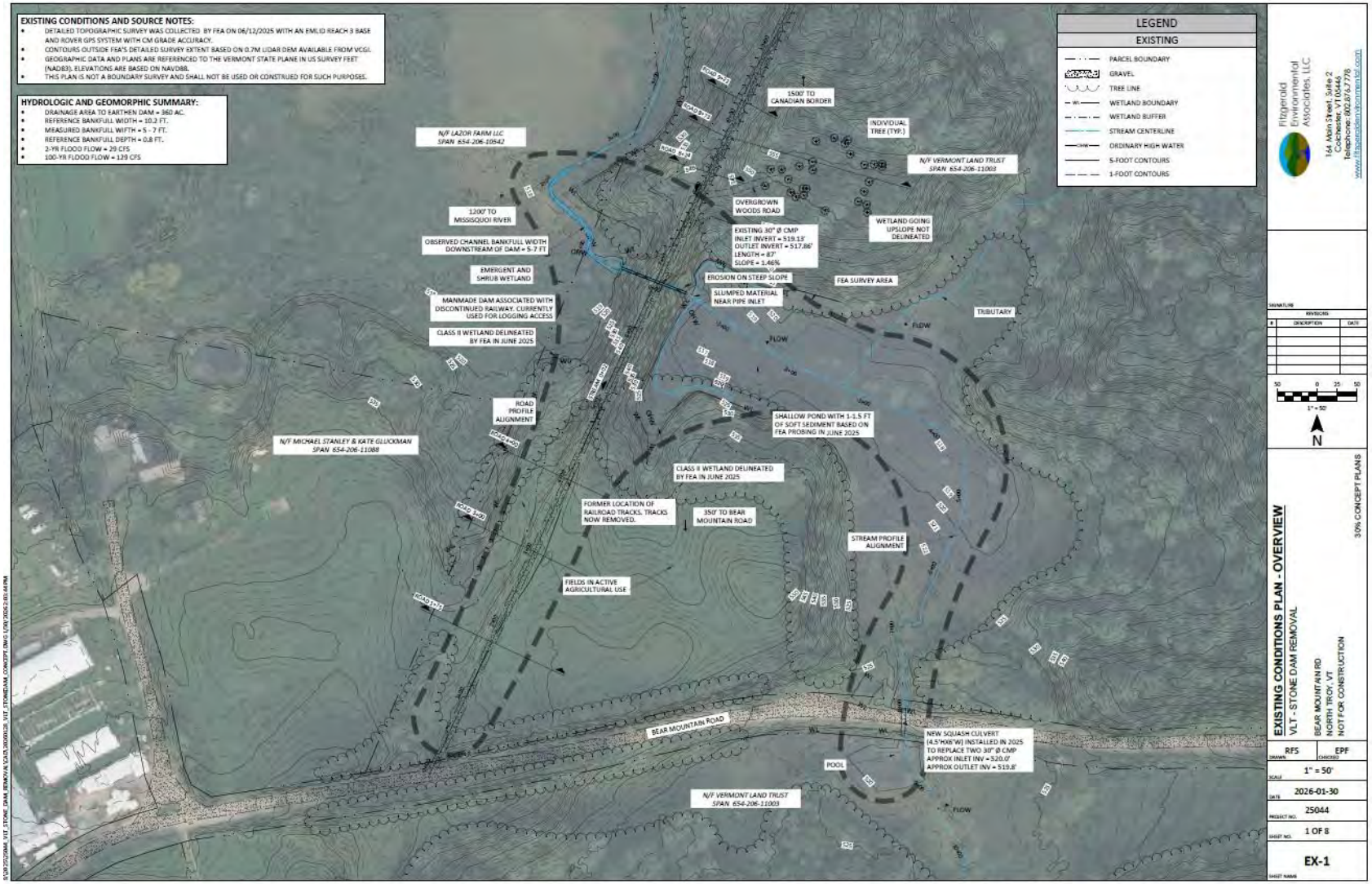


Figure 4. Project map showing an overview of the existing conditions of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

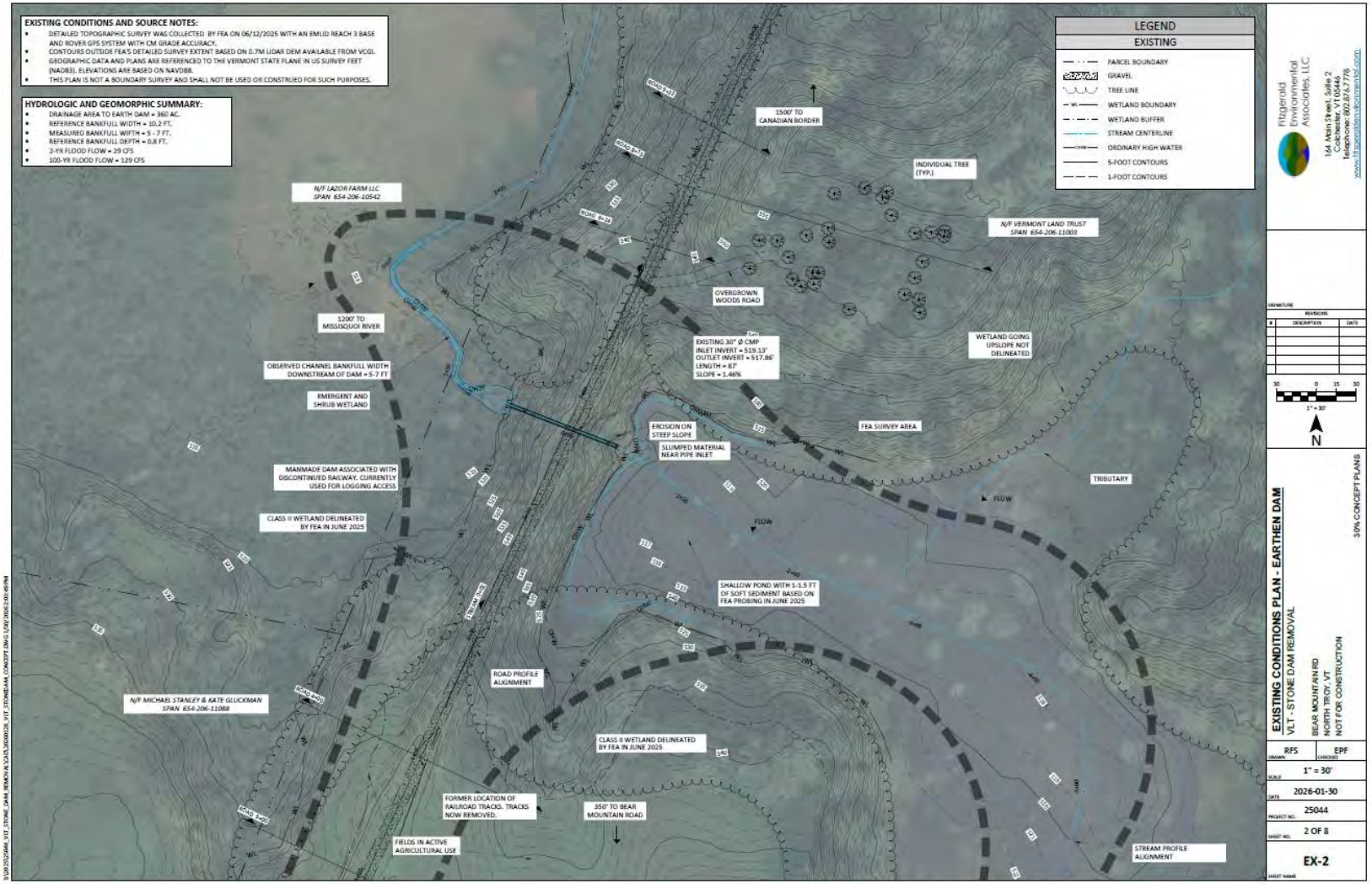


Figure 5. Project map showing a close up of the existing conditions of the earthen dam, for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

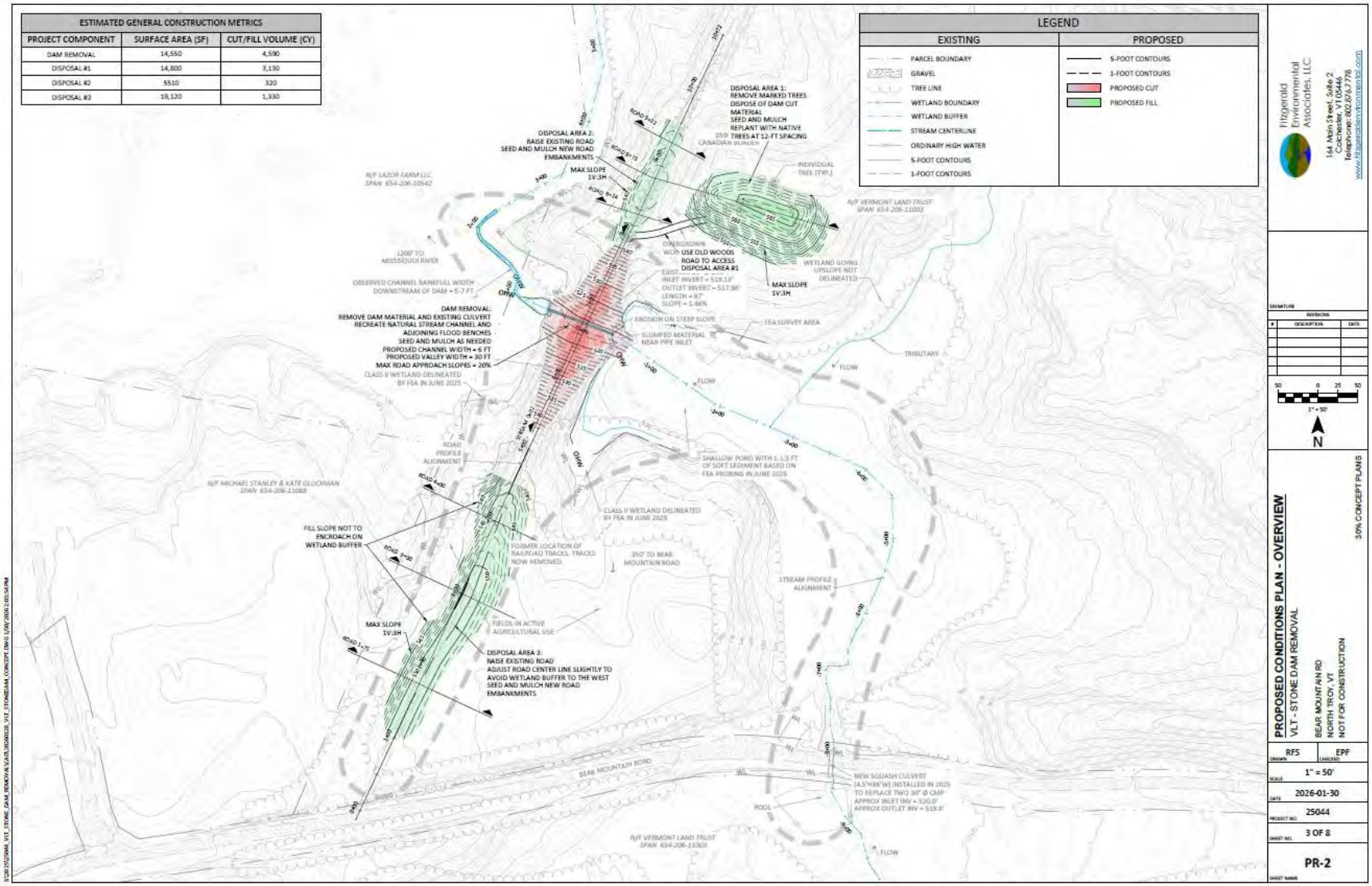


Figure 6. Project map showing the dam removal (red) and soil disposal (green) plan for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

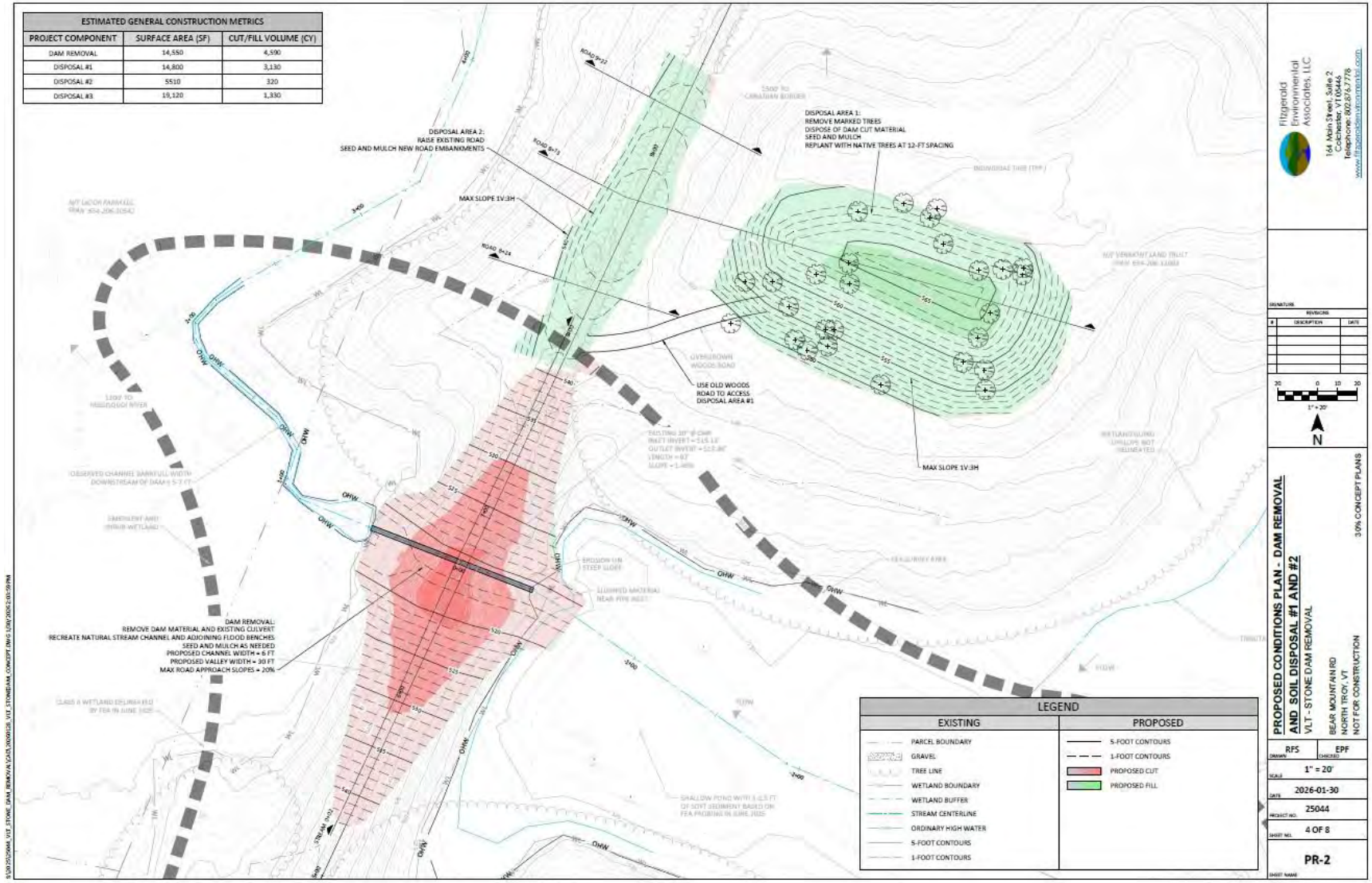


Figure 7. Project map showing a close-up of the dam removal and soil disposal plan at Disposal Areas 1 and 2 of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

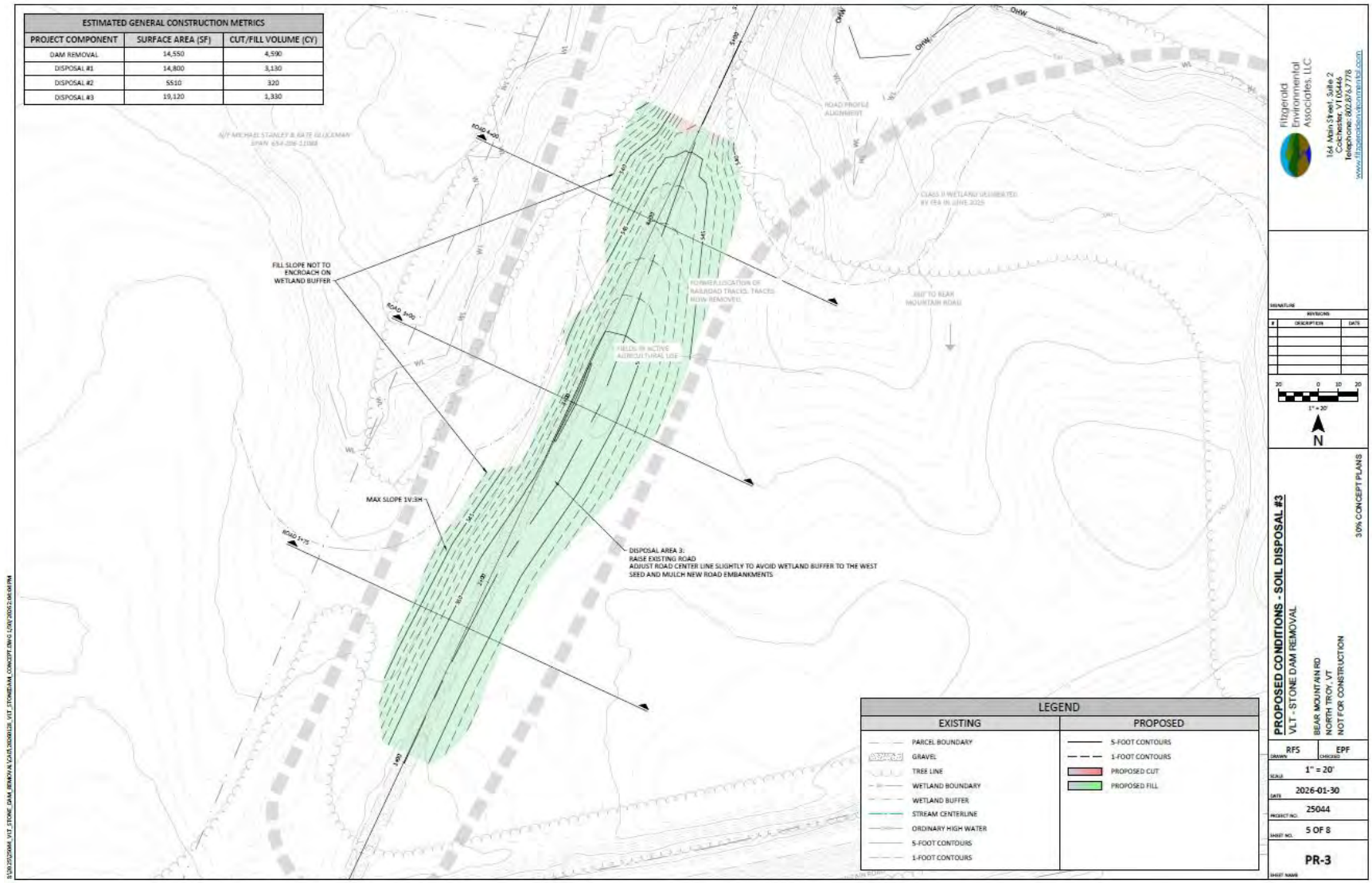


Figure 8. Project map showing Disposal Area 3 of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

Figure 9. Historic 1859 Wallings map showing the location of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

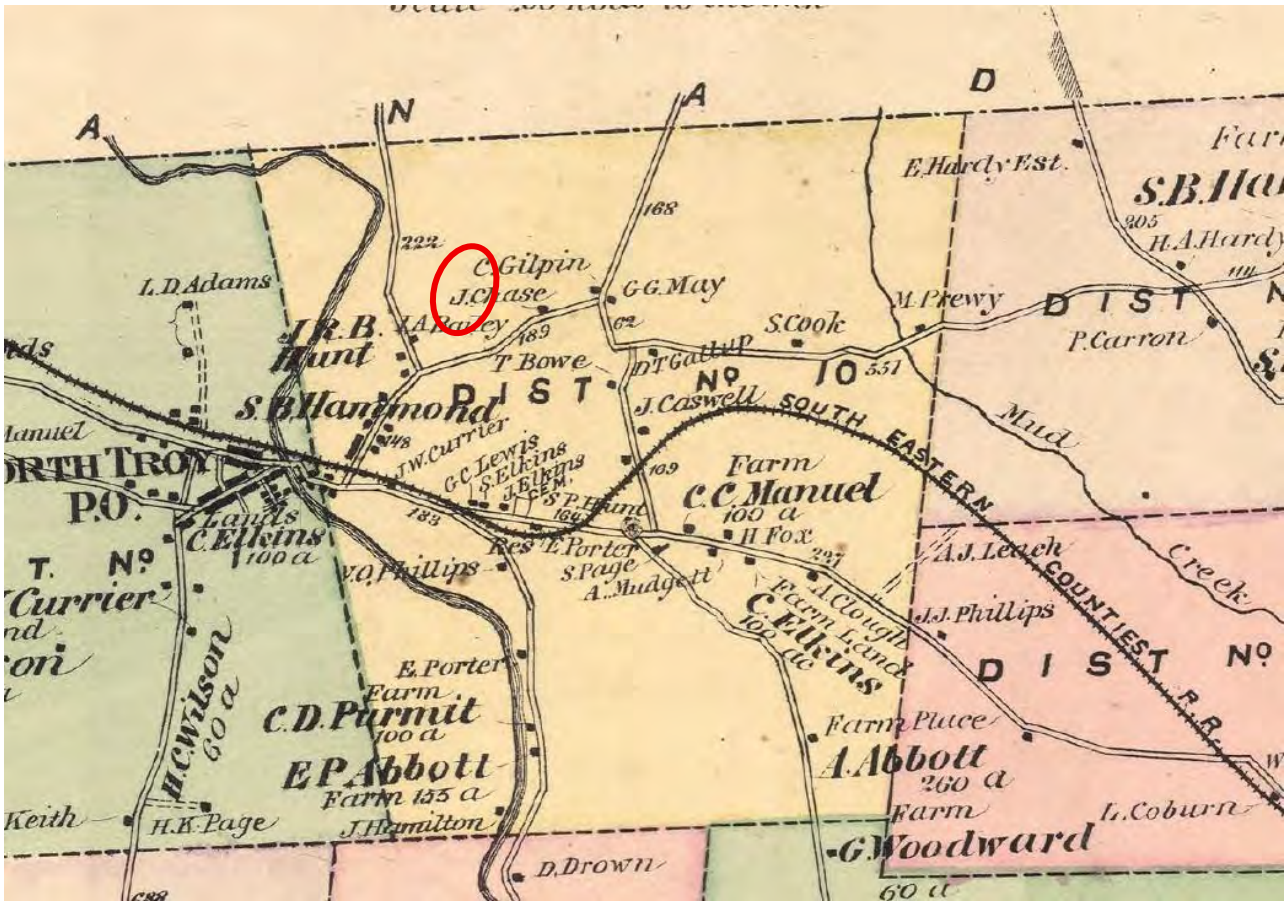


Figure 10. Historic 1878 Beer's atlas showing the location of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

VERMONT DIVISION FOR HISTORIC PRESERVATION

Environmental Predictive Model for Locating Pre-contact Archaeological Sites

Project Name Stone J & M Dam Removal County Orleans Town North Troy
DHP No. Map No. Staff Init. Date May 13, 2026

Additional Information

Environmental Variable	Proximity	Value	Assigned Score
A. RIVERS and STREAMS (EXISTING or RELICT):			
1) Distance to River or Permanent Stream (measured from top of bank)	0- 90 m 90- 180 m	12 6	12
2) Distance to Intermittent Stream	0- 90 m 90-180 m	8 4	
3) Confluence of River/River or River/Stream	0-90 m 90 –180 m	12 6	
4) Confluence of Intermittent Streams	0 – 90 m 90 – 180 m	8 4	
5) Falls or Rapids	0 – 90 m 90 – 180 m	8 4	
6) Head of Draw	0 – 90 m 90 – 180 m	8 4	
7) Major Floodplain/Alluvial Terrace		32	
8) Knoll or swamp island		32	
9) Stable Riverine Island		32	
B. LAKES and PONDS (EXISTING or RELICT):			
10) Distance to Pond or Lake	0- 90 m 90 -180 m	12 6	
11) Confluence of River or Stream	0-90 m 90 –180 m	12 6	
12) Lake Cove/Peninsula/Head of Bay		12	
C. WETLANDS:			
13) Distance to Wetland (wetland > one acre in size)	0- 90 m 90 -180 m	12 6	12
14) Knoll or swamp island		32	
D. VALLEY EDGE and GLACIAL LAND FORMS:			
15) High elevated landform such as Knoll Top/Ridge Crest/ Promontory		12	
16) Valley edge features such as Kame/Outwash Terrace**		12	

17) Marine/Lake Delta Complex**		12	
18) Champlain Sea or Glacial Lake Shore Line**		32	
E. OTHER ENVIRONMENTAL FACTORS:			
19) Caves /Rockshelters		32	
20) ☑ Natural Travel Corridor ☐ Sole or important access to another drainage ☐ Drainage divide		12	12
21) Existing or Relict Spring	0 – 90 m 90 – 180 m	8 4	
22) Potential or Apparent Prehistoric Quarry for stone procurement	0 – 180 m	32	
23)) Special Environmental or Natural Area, such as Milton acquifer, mountain top, etc. (these may be historic or prehistoric sacred or traditional site locations and prehistoric site types as well)		32	
F. OTHER HIGH SENSITIVITY FACTORS:			
24) High Likelihood of Burials		32	
25) High Recorded Site Density		32	
26) High likelihood of containing significant site based on recorded or archival data or oral tradition		32	
G. NEGATIVE FACTORS:			
27) Excessive Slope (>15%) or Steep Erosional Slope (>20)		- 32	
28) Previously disturbed land as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)		- 32	
** refer to 1970 Surficial Geological Map of Vermont			
		Total Score:	36
Other Comments :			
0- 31 = Archeologically Non- Sensitive **32+ = Archeologically Sensitive**			

April 8, 2015

Figure 11. Completed VDHP predictive model matrix of the APE for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 12. Photos looking north (a) and northwest (b) across the existing railroad bed in the location of Disposal Area 3, for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 13. Photos looking south along the railroad bed at its intersection with Bear Mountain Rd and the southern portion of Disposal Area 3 (a), and north along the railroad bed in the location of Disposal Area 3 (b), for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 14. Photos looking north along the east side (a), and north along the west side (b) of the railroad bed dam portion of the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

Figure 15. Photo looking south at the existing railroad bed and the southern section of Disposal Area 2, for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 16. Photos looking east (a) and northeast (b) across Disposal Area 1, for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 17. Photos looking northeast (a) and west (b) across Disposal Area 1, for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 18. Photos looking west at the soil core location on the narrow ridge between Disposal Area 1, to the left, and another depression to the right (a) and intact soil stratigraphy in core (b), for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

a

b

Figure 19. Photos looking south at the location of the soil core in the base of Disposal Area 1 (a) and the soil core showing C Horizon soils (b), for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.

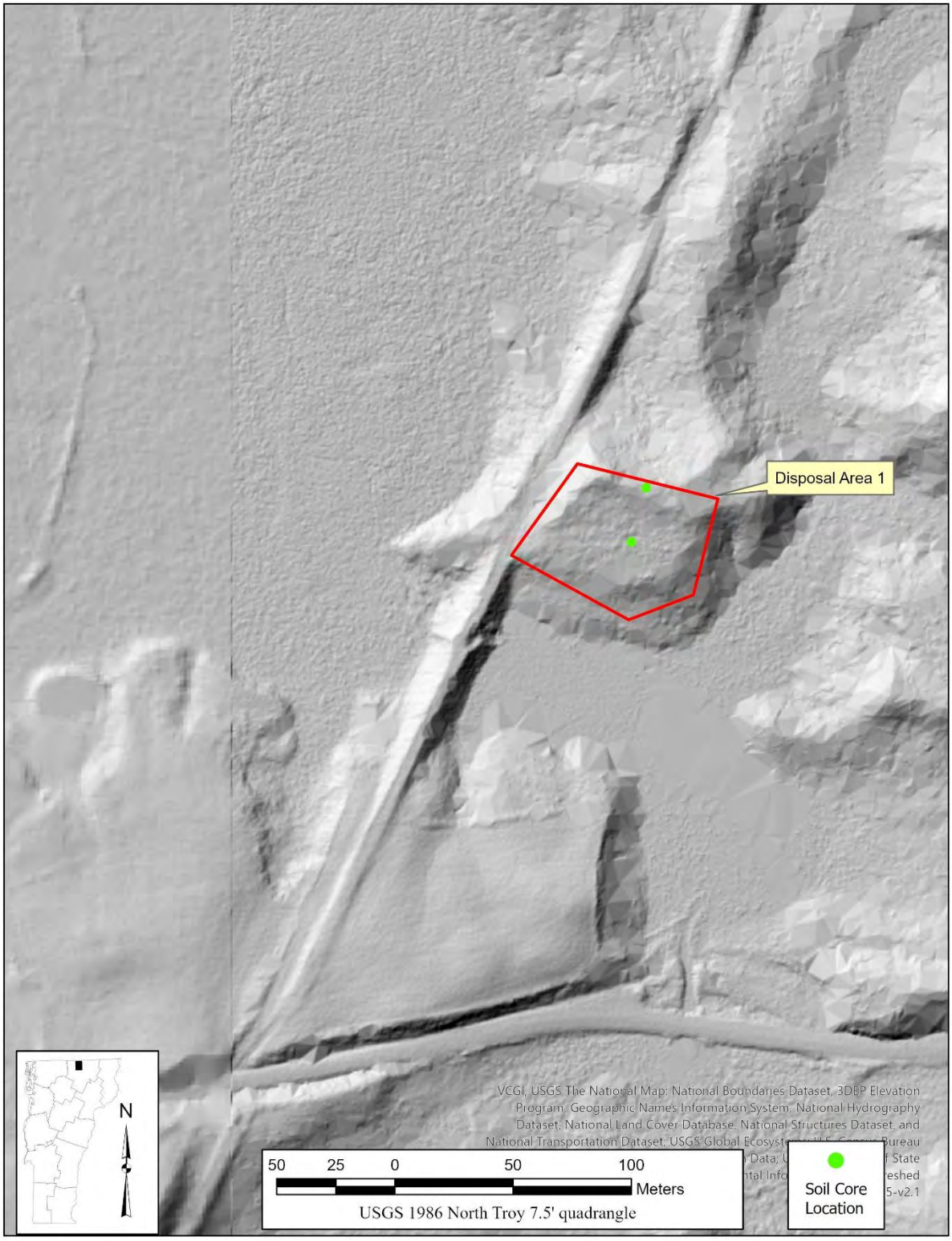
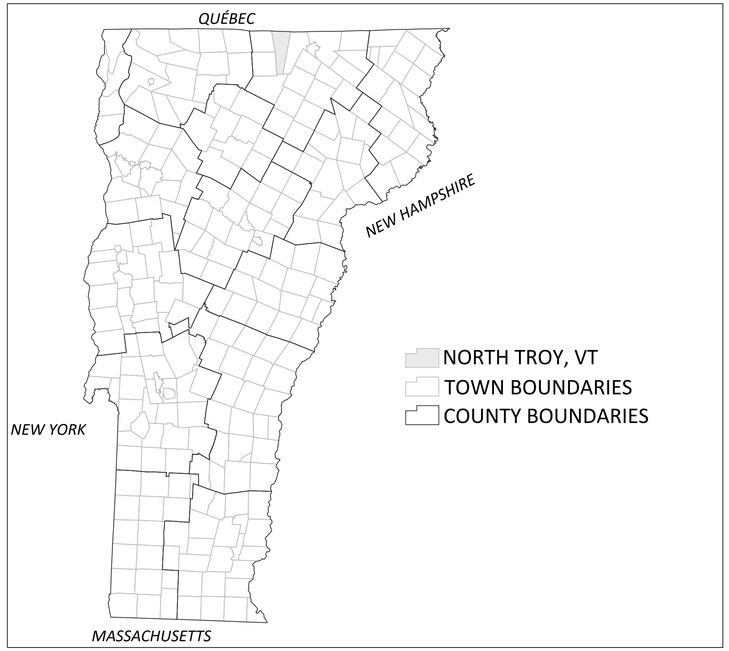


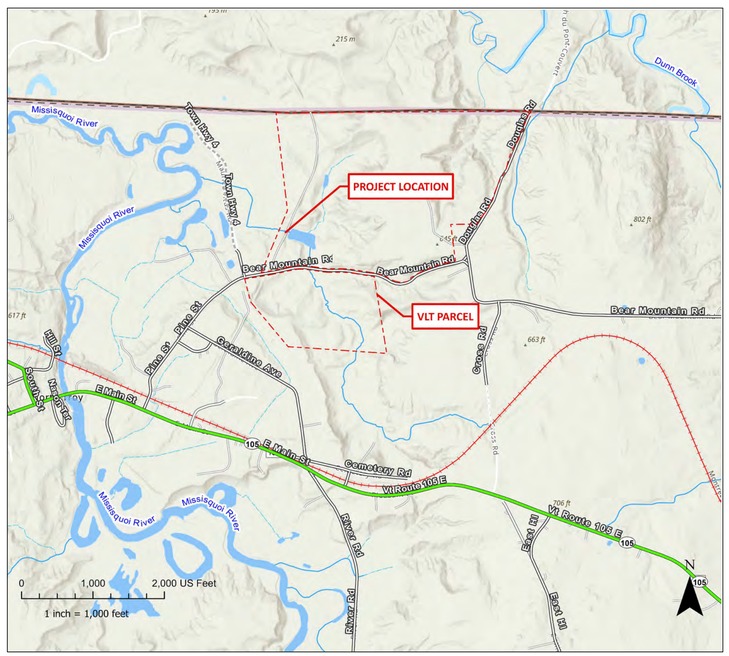
Figure 20. Lidar topographic image highlighting Disposal Area #1 and its unnatural topography, for the proposed Stone J & M Dam Removal Project, North Troy, Orleans County, Vermont.



STONE DAM REMOVAL
BEAR MOUNTAIN RD,
NORTH TROY, VERMONT

60% DESIGN PLANS
4/14/2026

THIS PROJECT CONSITS OF THE REMOVAL OF AN EARTHEN DAM IMPOUNDING A SMALL TRIBUTARY TO THE MISSISQUOI RIVER IN NORTH TROY, VT. THE SUBJECT DAM WAS FORMERLY ASSOCIATED WITH A RAILROAD TRACK WHICH IS NO LONGER IN USE. THE OBJECTIVES OF THIS PROJECT ARE TO REMOVE A PORTION OF THE DAM AND RESTORE THE STREAM AND WETLAND SYSTEM THAT ORIGINALLY EXISTED IN ITS PLACE WITH BENEFITS IN TERMS OF WATER QUALITY, PLANT AND WILDLIFE HABITAT, AND FLOODWATER CONTROL.



DRAWING INDEX		
NO.	NAME	TITLE
1	EX-1	EXISTING CONDITIONS PLAN - OVERVIEW
2	EX-2	EXISTING CONDITIONS PLAN - EARTHEN DAM
3	PR-1	PROPOSED CONDITIONS PLAN - OVERVIEW
4	PR-2	PROPOSED CONDITIONS PLAN - DAM REMOVAL AND SOIL DISPOSAL
5	PR-3	PROPOSED CONDITIONS PLAN - SOIL DISPOSAL
6	PRO-1	DAM REMOVAL AND STREAM RESTORATION - PROFILE AND CROSS SECTIONS
7	PRO-2	LOGGING ROAD - PROFILE AND CROSS SECTIONS
8	DT-1	CONSTRUCTION DETAILS
9	DT-2	CONSTRUCTION DETAILS

EXISTING CONDITIONS AND SOURCE NOTES

1. GEOGRAPHIC DATA AND PLANS ARE REFERENCED TO THE VERMONT STATE PLANE IN US SURVEY FEET (NAD83). ELEVATIONS ARE BASED ON NAVD88.
2. PARCEL BOUNDARY DATA SHOWN ON THE PLANS ARE FROM VCGI.
3. CONTOURS WERE DEVELOPED FROM VCGI 0.7M DIGITAL ELEVATION MODEL.
4. SUPPLEMENTAL DATA COLLECTED BY FEA TO VERIFY AVAILABLE DATA.

PREPARED BY:

Fitzgerald Environmental Associates, LLC

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

PREPARED FOR:

Vermont Land Trust
UNITING LAND AND LIVES

226 Bridge Street, PO Box 850
Richmond, VT 05477
Phone: 802.434.3079
www.vlt.org

S:\2025\25044_VLT_STONE_DAM_REMOVAL\CAD\20260327_VLT_STONEDAM_60%.DWG 4/14/2026 2:33:29 PM

EXISTING CONDITIONS AND SOURCE NOTES:

- DETAILED TOPOGRAPHIC SURVEY WAS COLLECTED BY FEA ON 06/12/2025 WITH AN EMLID REACH 3 BASE AND ROVER GPS SYSTEM WITH CM GRADE ACCURACY.
- CONTOURS OUTSIDE FEA'S DETAILED SURVEY EXTENT BASED ON 0.7M LIDAR DEM AVAILABLE FROM VCGI.
- GEOGRAPHIC DATA AND PLANS ARE REFERENCED TO THE VERMONT STATE PLANE IN US SURVEY FEET (NAD83). ELEVATIONS ARE BASED ON NAVD88.
- THIS PLAN IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED OR CONSTRUED AS SUCH.
- TREE INVENTORY (TREES >3" DBH) COMPLETED BY FEA IN 2025 IN AREAS OF PROJECT AND PROPOSED DISTURBANCE

HYDROLOGIC AND GEOMORPHIC SUMMARY:

- DRAINAGE AREA TO EARTHEN DAM = 360 AC.
- REFERENCE BANKFULL WIDTH = 10.2 FT.
- MEASURED BANKFULL WIFTH = 5 - 7 FT.
- REFERENCE BANKFULL DEPTH = 0.8 FT.
- 2-YR FLOOD FLOW = 29 CFS
- 100-YR FLOOD FLOW = 129 CFS

N/F LAZOR FARM LLC
SPAN 654-206-10542

1500' TO CANADIAN BORDER

INDIVIDUAL TREE (TYP.)

N/F VERMONT LAND TRUST
SPAN 654-206-11003

1200' TO MISSISQUOI RIVER

OVERGROWN WOODS ROAD

WETLAND GOING UPSLOPE NOT DELINEATED

OBSERVED CHANNEL BANKFULL WIDTH DOWNSTREAM OF DAM ≈ 5-7 FT

EXISTING 30" Ø CMP
INLET INVERT = 519.13'
OUTLET INVERT = 517.86'
LENGTH ≈ 87'
SLOPE = 1.46%

EMERGENT AND SHRUB WETLAND

EROSION ON STEEP SLOPE

FEA SURVEY AREA

SLUMPED MATERIAL NEAR PIPE INLET

MANMADE DAM ASSOCIATED WITH DISCONTINUED RAILWAY. CURRENTLY USED FOR LOGGING ACCESS

TRIBUTARY

CLASS II WETLAND DELINEATED BY FEA IN JUNE 2025

FLOW

ROAD PROFILE ALIGNMENT

SHALLOW POND WITH 1-1.5 FT OF SOFT SEDIMENT BASED ON FEA PROBING IN JUNE 2025

N/F MICHAEL STANLEY & KATE GLUCKMAN
SPAN 654-206-11088

FORMER LOCATION OF RAILROAD TRACKS. TRACKS NOW REMOVED.

CLASS II WETLAND DELINEATED BY FEA IN JUNE 2025

STREAM PROFILE ALIGNMENT

CLASS II WETLAND DELINEATED BY FEA IN JUNE 2025

FIELDS IN ACTIVE AGRICULTURAL USE

BEAR MOUNTAIN ROAD

NEW SQUASH CULVERT
(4.5'HX6'W) INSTALLED IN 2025
TO REPLACE TWO 30" Ø CMP
APPROX INLET INV = 520.0'
APPROX OUTLET INV = 519.8'

POOL

N/F VERMONT LAND TRUST
SPAN 654-206-11003

LEGEND

EXISTING

- PARCEL BOUNDARY
- GRAVEL
- TREE LINE
- WL — WETLAND BOUNDARY
- WETLAND BUFFER
- STREAM CENTERLINE
- OHW — ORDINARY HIGH WATER
- 5-FOOT CONTOURS
- 1-FOOT CONTOURS

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

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

50 0 25 50
1" = 50'

N

60% DESIGN PLANS

EXISTING CONDITIONS PLAN - OVERVIEW

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

DRAWN	CHECKED
RFS	EPF

SCALE	1" = 50'
DATE	2026-04-14
PROJECT NO.	25044
SHEET NO.	1 OF 9
SHEET NAME	EX-1

S:\2025\25044_VLT_STONE_DAM_REMOVAL\CAD\20260327_VLT_STONEDAM_60%.DWG 4/14/2026 2:33:36 PM

EXISTING CONDITIONS AND SOURCE NOTES:

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- 2-YR FLOOD FLOW = 29 CFS
- 100-YR FLOOD FLOW = 129 CFS

1500' TO CANADIAN BORDER

INDIVIDUAL TREE (TYP.)

N/F LAZOR FARM LLC
SPAN 654-206-10542

N/F VERMONT LAND TRUST
SPAN 654-206-11003

ROAD 8+22

ROAD 8+24

ROAD 8+73

STREAM 1+02

OVERGROWN WOODS ROAD

1200' TO MISSISQUOI RIVER

OBSERVED CHANNEL BANKFULL WIDTH DOWNSTREAM OF DAM ≈ 5-7 FT

EMERGENT AND SHRUB WETLAND

EXISTING 30" Ø CMP
INLET INVERT = 519.13'
OUTLET INVERT = 517.86'
LENGTH ≈ 87'
SLOPE = 1.46%

WETLAND GOING UPSLOPE NOT DELINEATED

EROSION ON STEEP SLOPE

SLUMPED MATERIAL NEAR PIPE INLET

FEA SURVEY AREA

TRIBUTARY

FLOW

FLOW

MANMADE DAM ASSOCIATED WITH DISCONTINUED RAILWAY. CURRENTLY USED FOR LOGGING ACCESS

CLASS II WETLAND DELINEATED BY FEA IN JUNE 2025

SHALLOW POND WITH 1-1.5 FT OF SOFT SEDIMENT BASED ON FEA PROBING IN JUNE 2025

N/F MICHAEL STANLEY & KATE GLUCKMAN
SPAN 654-206-11088

ROAD PROFILE ALIGNMENT

CLASS II WETLAND DELINEATED BY FEA IN JUNE 2025

FORMER LOCATION OF RAILROAD TRACKS. TRACKS NOW REMOVED.

ROAD 3+83

FIELDS IN ACTIVE AGRICULTURAL USE

ROAD 3+00

STREAM PROFILE ALIGNMENT

LEGEND

EXISTING

- PARCEL BOUNDARY
- GRAVEL
- TREE LINE
- WETLAND BOUNDARY (WL)
- WETLAND BUFFER
- STREAM CENTERLINE
- ORDINARY HIGH WATER (OHW)
- 5-FOOT CONTOURS
- 1-FOOT CONTOURS

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Colchester, VT 05446
Telephone: 802.876.7778
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SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

30 0 15 30
1" = 30'

N

60% DESIGN PLANS

EXISTING CONDITIONS PLAN - EARTHEN DAM

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

DRAWN	CHECKED
RFS	EPF

SCALE: 1" = 30'

DATE: 2026-04-14

PROJECT NO.: 25044

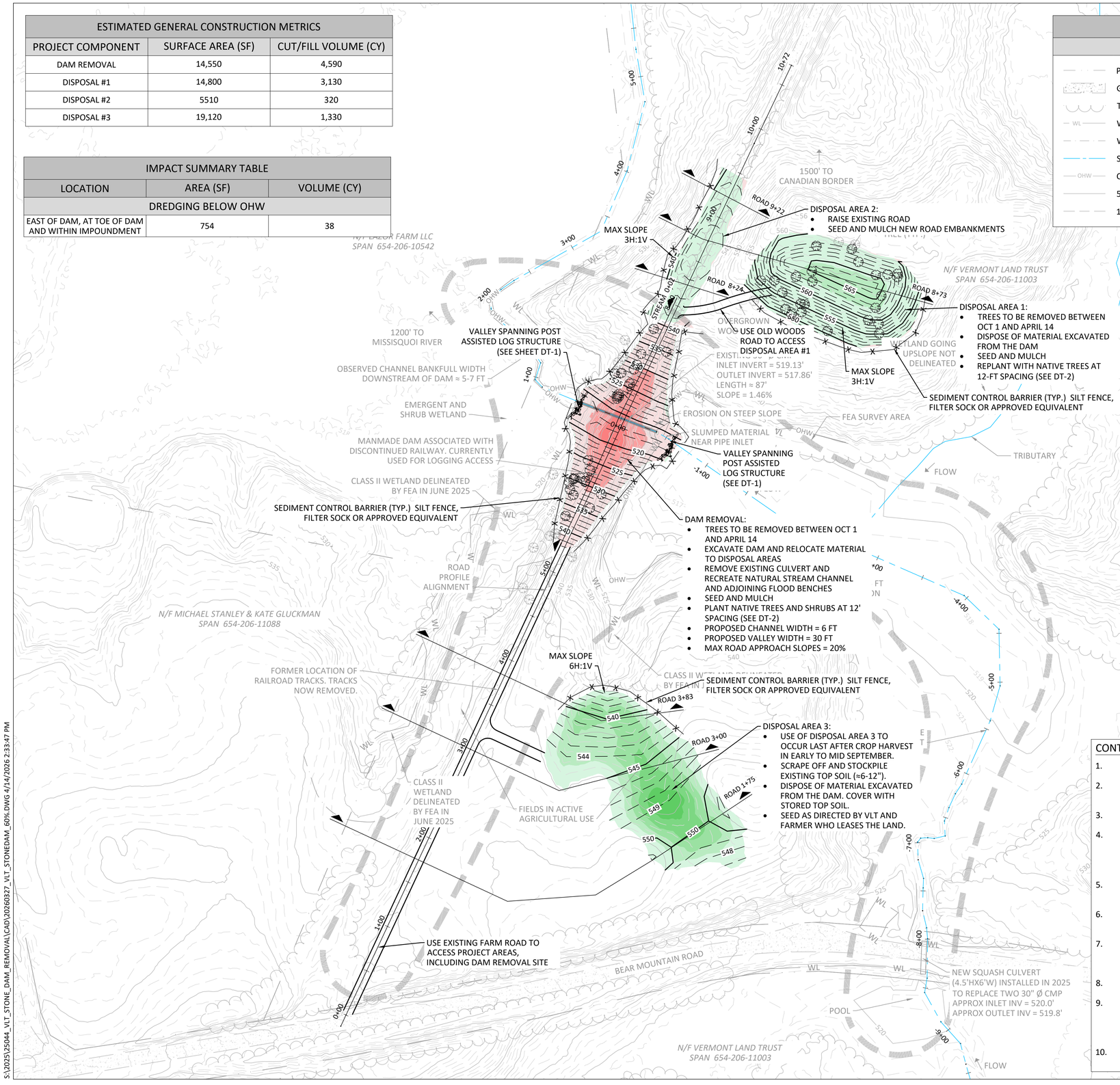
SHEET NO.: 2 OF 9

SHEET NAME: **EX-2**

S:\2025\25044_VLT_STONE_DAM_REMOVAL\CAD\20260327_VLT_STONEDAM_60%.DWG 4/14/2026 2:33:41 PM

ESTIMATED GENERAL CONSTRUCTION METRICS		
PROJECT COMPONENT	SURFACE AREA (SF)	CUT/FILL VOLUME (CY)
DAM REMOVAL	14,550	4,590
DISPOSAL #1	14,800	3,130
DISPOSAL #2	5510	320
DISPOSAL #3	19,120	1,330

IMPACT SUMMARY TABLE		
LOCATION	AREA (SF)	VOLUME (CY)
DREDGING BELOW OHW		
EAST OF DAM, AT TOE OF DAM AND WITHIN IMPOUNDMENT	754	38



LEGEND

EXISTING	PROPOSED
PARCEL BOUNDARY	5-FOOT CONTOURS
GRAVEL	1-FOOT CONTOURS
TREE LINE	PROPOSED CUT
WETLAND BOUNDARY	PROPOSED FILL
WETLAND BUFFER	PROPOSED SEDIMENT CONTROL BARRIER
STREAM CENTERLINE	PROPOSED TREE REMOVAL
ORDINARY HIGH WATER	
5-FOOT CONTOURS	
1-FOOT CONTOURS	

CONTRUCTION SEQUENCE:

2. ACCESS TO THE DAM SITE AND THE DISPOSAL AREAS WILL BE USING EXISTING ROADS AND STAGING OF MATERIAL SHALL BE ON OR NEAR THE ROADS LEADING ON AND OFF THE DAM TO THE GREATEST EXTENT POSSIBLE. THE REMOVAL OF THE DAM AND RESTORATION OF THE STREAM ARE DESIGNED TO USE ONSITE MATERIAL.
3. ALL EPSC MEASURES SHALL BE IN PLACE BEFORE CONSTRUCTION BEGINS. SEDIMENT CONTROL BARRIERS CONSISTING OF SILT FENCING, FILTER SOCKS OR TEMPORARY EARTHEN BERMS WILL BE INSTALLED WHERE EARTH DISTURBANCE IS SET TO OCCUR UPSLOPE OF SURROUNDING AREAS, IN PARTICULAR STREAMS, FLOODPLAINS, OPEN WATER, WETLANDS AND WETLAND BUFFERS.
4. THREE DISPOSAL AREAS ARE AVAILABLE FOR THE MATERIAL EXCAVATED FROM THE DAM. AREAS 1 AND 2 NORTH OF THE DAM SHOULD BE USED FIRST, AND AREA 3 IN THE SOUTH FIELD LAST. DISPOSAL OF MATERIAL IN AREA 3 WILL BE DONE IN CLOSE COORDINATION WITH THE FARMER WHO USES THE FIELD SO AS NOT TO EXCESSIVELY INTERFERE WITH THE THEIR ACTIVITIES AND TIMING OF HARVEST WHICH USUALLY OCCURS IN EARLY TO MID SEPTEMBER.
5. TREES IN THE PROPOSED LIMIT OF DISTURBANCE WILL BE CLEARED BETWEEN OCT 1 AND APRIL 14.
6. IT IS ASSUMED THAT THE EXISTING CULVERT AT THE BOTTOM OF THE DAM WILL REMAIN IN PLACE AND IN USE UNTIL THE LATER STAGES OF WORK WHEN THE STREAM AND ADJOINING FLOOD BENCHES ARE REGRADED. COMPLETION OF THE FINAL STREAM REGRADING IN HALVES (SOUTH THEN NORTH), POSSIBLY COMBINED WITH TEMPORARY BYPASS PUMPING, WILL BE USED TO CONTROL WATER FLOWS THROUGH THE PROJECT AREA AND MINIMIZE SEDIMENT DISCHARGE.
7. ONCE FINAL GRADE IS ACHIEVED, ALL REGRADED AREAS SHALL BE SEEDED AND MULCHED, THEN PLANTED WITH NATIVE TREES AND SHRUBS AS SHOWN ON THE PLANS.

EXPECTED TRIBUTARY FLOWS (DRAINAGE AREA = 361 ACRES)		
FLOOD EVENT	NOAA ATLAS 14 24-HR RAINFALL (IN)	STREAM FLOW AT DAM (CFS)
BASEFLOW	0	1.1
Q2	2.37	29
Q5	3.01	47
Q10	3.54	62
Q25	4.28	85
Q50	4.83	104
Q100	5.41	129

CONTROL OF WATER NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THESE NOTES AND SUBMITTING A CONTROL OF WATER PLAN TO BE APPROVED BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
2. WORK SHALL BE CONDUCTED UNDER THE DRYEST CONDITIONS POSSIBLE. BECAUSE THE PROJECT IS LOCATED ON OR NEAR STREAMS, WETLANDS AND FLOODPLAINS, WORK SHALL BEGIN DURING A LOW-FLOW PERIOD WITH NO SIGNIFICANT RAIN IN THE FORECAST FOR THE DURATION OF THE CONSTRUCTION.
3. CARE SHALL BE TAKEN TO MINIMIZE THE AMOUNT OF SEDIMENT LADEN WATER FLOWING OUT OF THE WORK AREA AT ALL TIMES.
4. CONTROL OF WATER THROUGH THE PROJECT AREA MAY BE ACHIEVED USING DIFFERENT APPROACHES. ONE SUITABLE APPROACH CONSISTS OF IMPOUNDING INCOMING WATERS UPSTREAM OF THE WORK AREA USING A TEMPORARY BARRIER (SANDBAGS, COFFERDAMS) AND PUMPING THAT WATER AROUND THE WORK AREA. OPEN CHANNEL DIVERSIONS WITH OR WITHOUT CULVERTS CAN ALSO BE UTILIZED TO ISOLATE WATER CONVEYANCE AWAY FROM ACTIVE CONSTRUCTION ZONES WITHIN THE PROJECT AREA.
5. IF BASE FLOW CONDITIONS ARE LOW ENOUGH, TEMPORARY BARRIERS OR COFFERDAMS WILL IMPOUND WATER UNTIL PUMPING IS REQUIRED. IF BASE FLOWS ARE HIGH, A CONSTANT PUMP AND BYPASS SYSTEM WILL BE UTILIZED TO KEEP THE WORK AREA DRY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PUMPS WITH ENOUGH CAPACITY TO ADEQUATELY HANDLE EXPECTED FLOWS. ADDITIONAL PUMPS SHALL BE KEPT ON SITE TO HANDLE LARGER FLOWS, AS NEEDED.
7. SUMP PUMPING MAY BE REQUIRED TO ADEQUATELY CONTROL THE GROUNDWATER WITHIN ANY AND ALL EXCAVATED AREAS. IF DEWATERING OF TRENCHES OR EXCAVATION IS NECESSARY, WATER SHALL BE PUMPED TO A SILT BAG, OR APPROVED EQUAL. EXACT LOCATION TO BE DETERMINED IN THE FIELD WITH CONTRACTOR AND ENGINEER.
8. THE DESIGN, INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL WATER CONTROL MEASURES SHALL BE IN ACCORDANCE WITH VT DEC REGULATIONS.
9. THE PROJECT AREA IS SUBJECT TO FLOODING IN RAIN EVENTS AND FOR THAT REASON THE CONTRACTOR SHALL MONITOR WEATHER FORECASTS DURING CONSTRUCTION. CONTRACTOR SHALL STABILIZE THE CONSTRUCTION SITE AND REMOVE EQUIPMENT FROM AREAS AT RISK OF FLOODING IF PUMPS AND OTHER WATER CONTROL MEASURES ARE NOT EXPECTED TO COPE WITH EXPECTED FLOWS. ALL EQUIPMENT SHALL BE STORED ON HIGH GROUND THROUGHOUT THE PROJECT.
10. EXPECTED FLOWS FROM BASEFLOW CONDITIONS UP TO LARGE FLOOD EVENTS ARE PROVIDED IN THE TABLE ABOVE FOR THE CONTRACTOR TO USE IN PROVIDING ADEQUATE PUMPS.

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REVISIONS

#	DESCRIPTION	DATE

50 0 25 50
1" = 50'
N

60% DESIGN PLANS

PROPOSED CONDITIONS PLAN - OVERVIEW

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

DRAWN	CHECKED
RFS	EPF

SCALE: 1" = 50'
DATE: 2026-04-14
PROJECT NO.: 25044
SHEET NO.: 3 OF 9
SHEET NAME: PR-1

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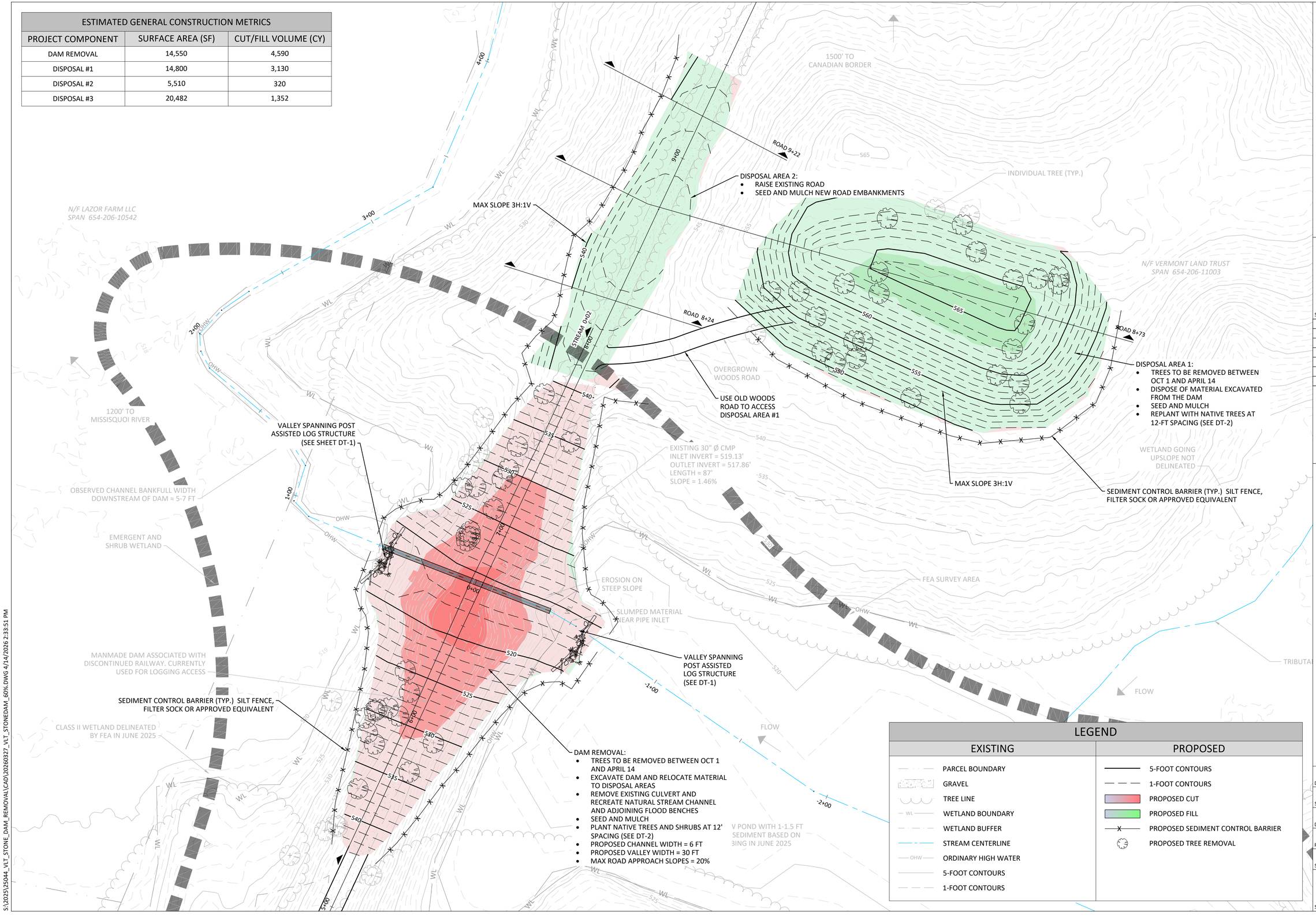
ESTIMATED GENERAL CONSTRUCTION METRICS		
PROJECT COMPONENT	SURFACE AREA (SF)	CUT/FILL VOLUME (CY)
DAM REMOVAL	14,550	4,590
DISPOSAL #1	14,800	3,130
DISPOSAL #2	5,510	320
DISPOSAL #3	20,482	1,352



LEGEND

EXISTING	PROPOSED
PARCEL BOUNDARY	5-FOOT CONTOURS
GRAVEL	1-FOOT CONTOURS
TREE LINE	PROPOSED CUT
WETLAND BOUNDARY	PROPOSED FILL
WETLAND BUFFER	PROPOSED SEDIMENT CONTROL BARRIER
STREAM CENTERLINE	PROPOSED TREE REMOVAL
ORDINARY HIGH WATER	
5-FOOT CONTOURS	
1-FOOT CONTOURS	

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20 0 10 20
1" = 20'
N

PROPOSED CONDITIONS PLAN - DAM REMOVAL AND SOIL DISPOSAL #1 AND #2

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

60% DESIGN PLANS

DRAWN	RFS
CHECKED	EPF
SCALE	1" = 20'
DATE	2026-04-14
PROJECT NO.	25044
SHEET NO.	4 OF 9
SHEET NAME	PR-2

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ESTIMATED GENERAL CONSTRUCTION METRICS		
PROJECT COMPONENT	SURFACE AREA (SF)	CUT/FILL VOLUME (CY)
DAM REMOVAL	14,550	4,590
DISPOSAL #1	14,800	3,130
DISPOSAL #2	5,510	320
DISPOSAL #3	20,482	1,352

SPAN 654-206-11088

MAX SLOPE 6H:1V

SEDIMENT CONTROL BARRIER (TYP.) SILT FENCE, FILTER SOCK OR APPROVED EQUIVALENT

ROAD 3+83

ROAD 3+00

ROAD 1+75

DISPOSAL AREA 3:
- USE OF DISPOSAL AREA 3 TO OCCUR LAST AFTER CROP HARVEST IN EARLY TO MID SEPTEMBER.
- SCRAPE OFF AND STOCKPILE EXISTING TOP SOIL (≈6-12").
- DISPOSE OF MATERIAL EXCAVATED FROM THE DAM. COVER WITH STORED TOP SOIL.
- SEED AS DIRECTED BY VLT AND FARMER WHO LEASES THE LAND.

FORMER LOCATION OF RAILROAD TRACKS. TRACKS NOW REMOVED.

ROAD PROFILE ALIGNMENT

CLASS II WETLAND DELINEATED BY FEA IN JUNE 2025

FIELDS IN ACTIVE AGRICULTURAL USE

USE EXISTING FARM ROAD TO ACCESS PROJECT AREAS, INCLUDING DAM REMOVAL SITE

BEAR MOUNTAIN ROAD

OHW

WL

4+00

3+50

1+00

LEGEND	
EXISTING	PROPOSED
PARCEL BOUNDARY	5-FOOT CONTOURS
GRAVEL	1-FOOT CONTOURS
TREE LINE	PROPOSED CUT
WETLAND BOUNDARY	PROPOSED FILL
WETLAND BUFFER	PROPOSED SEDIMENT CONTROL BARRIER
STREAM CENTERLINE	PROPOSED TREE REMOVAL
ORDINARY HIGH WATER	
5-FOOT CONTOURS	
1-FOOT CONTOURS	

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#	DESCRIPTION	DATE

20 0 10 20
1" = 20'
N

PROPOSED CONDITIONS - SOIL DISPOSAL #3
VLT - STONE DAM REMOVAL
BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

60% DESIGN PLANS

DRAWN	RFS
CHECKED	EPF
SCALE	1" = 20'
DATE	2026-04-14
PROJECT NO.	25044
SHEET NO.	5 OF 9

PR-3
SHEET NAME

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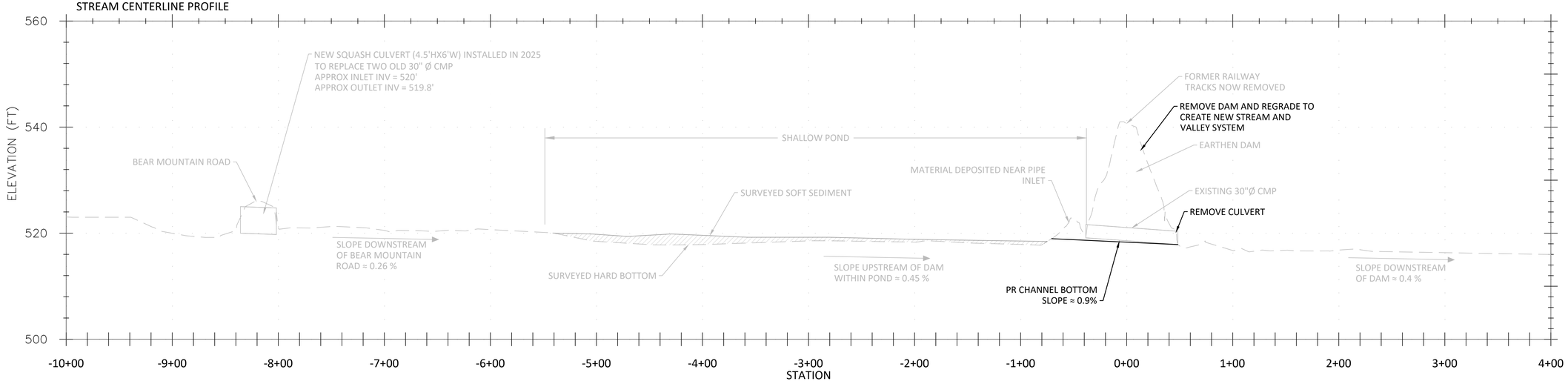
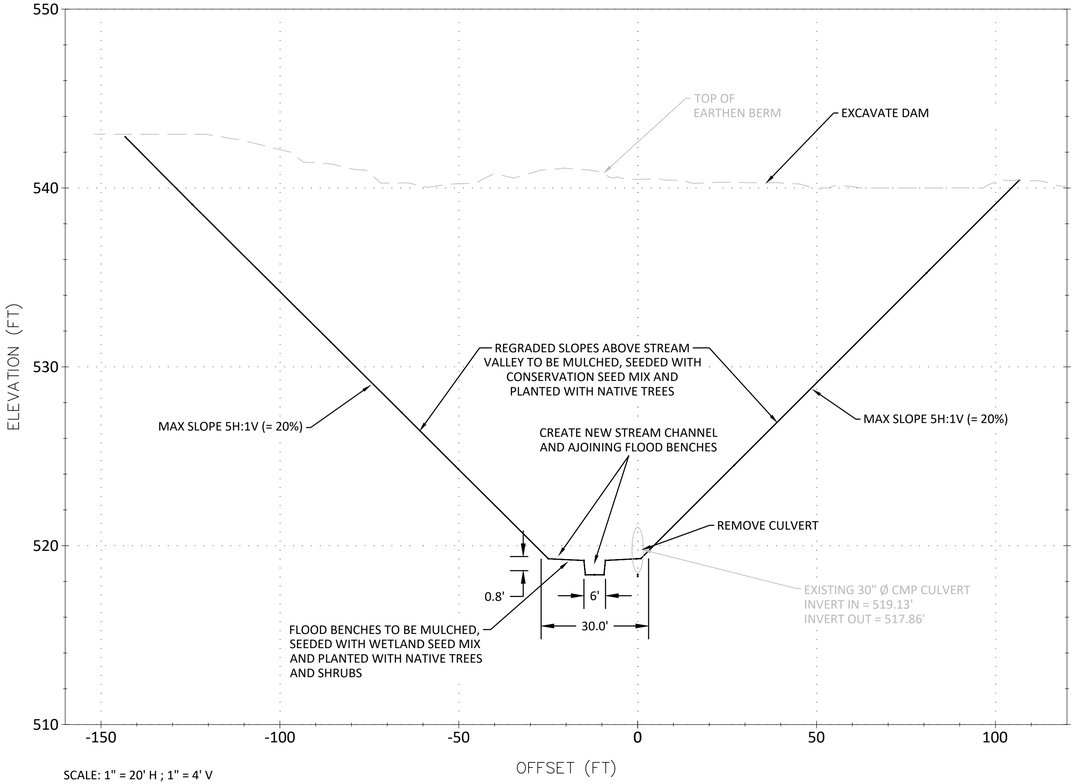
STREAM CENTERLINE PROFILE



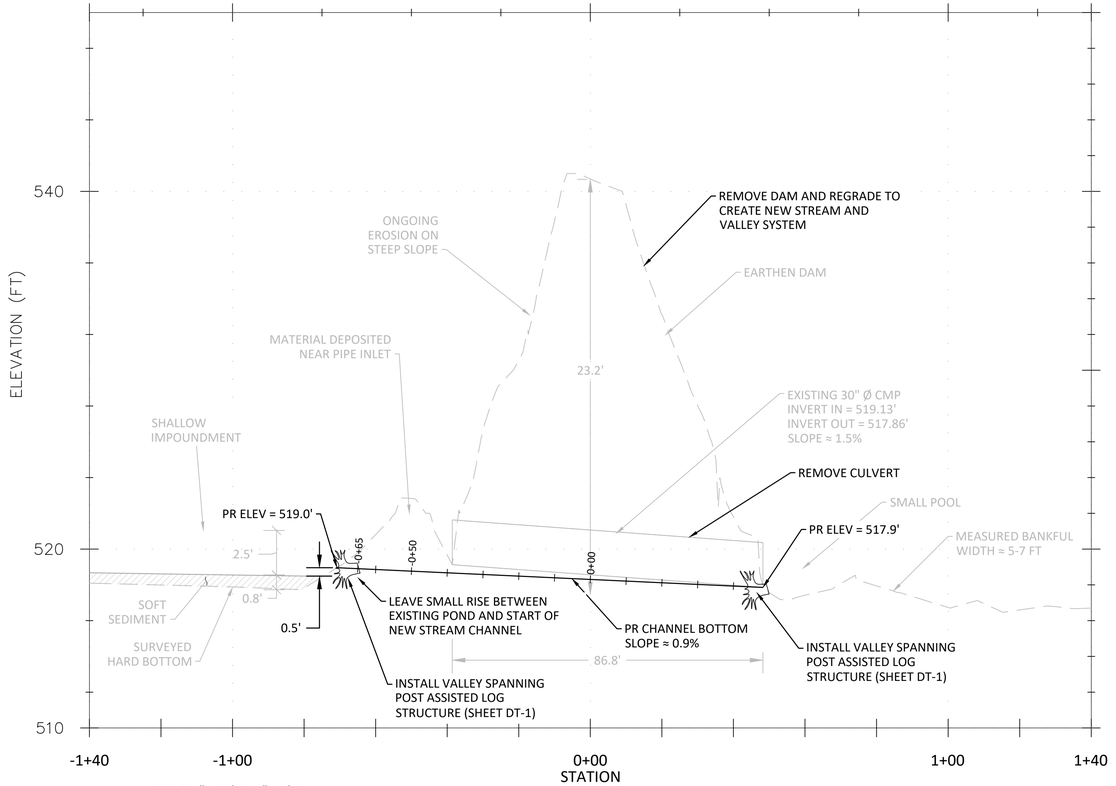
SCALE: 1" = 50' H ; 1" = 10' V

STREAM 0+02



SCALE: 1" = 20' H ; 1" = 4' V

STREAM CENTERLINE PROFILE



SCALE: 1" = 20' H ; 1" = 4' V

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DAM REMOVAL AND STREAM RESTORATION -
PROFILE AND CROSS SECTION
VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

60% DESIGN PLANS

DRAWN: RFS	CHECKED: EPF
SCALE: AS NOTED	
DATE: 2026-04-14	
PROJECT NO.: 25044	
SHEET NO.: 6 OF 9	

PRO-1
SHEET NAME

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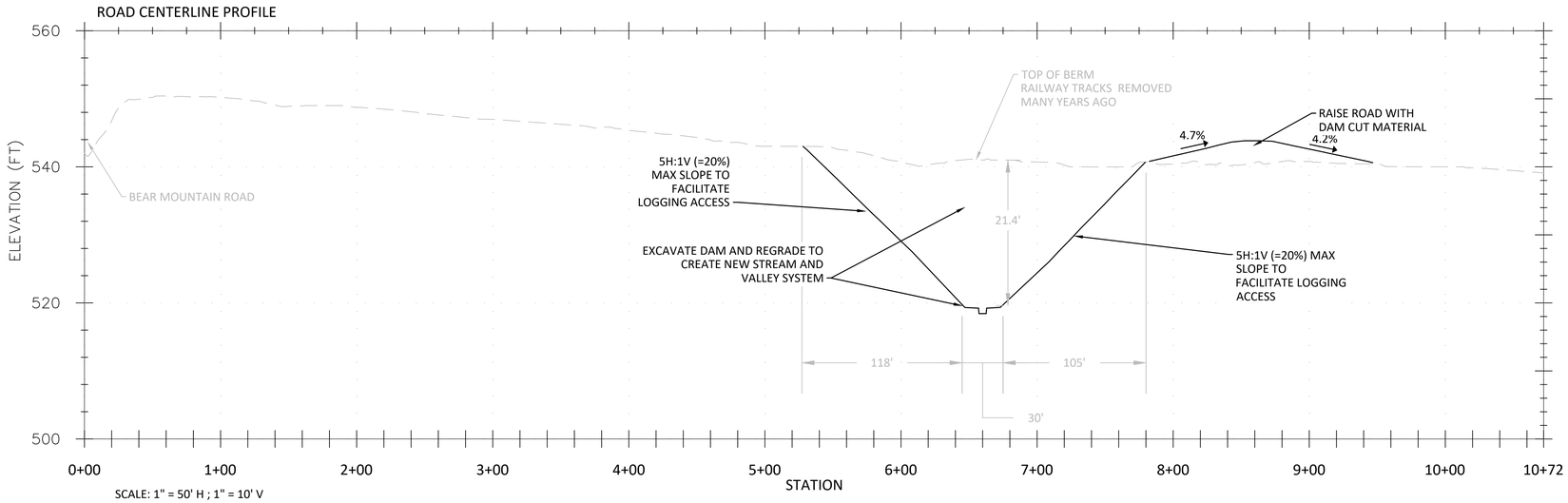
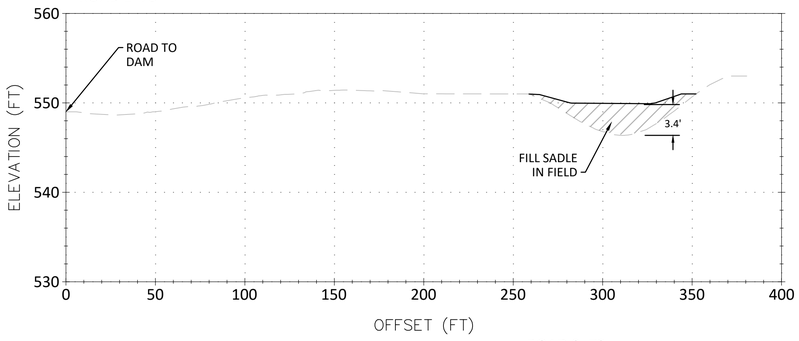
ROAD CENTERLINE PROFILE



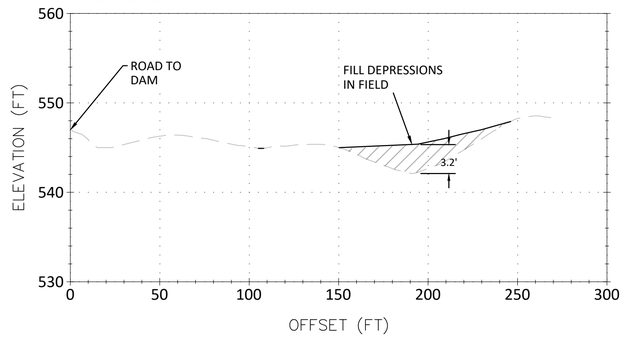
SCALE: 1" = 50' H ; 1" = 10' V

SOUTHERN DISPOSAL AREA

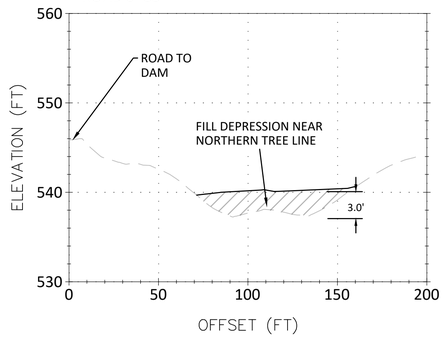
ROAD 1+75



ROAD 3+00

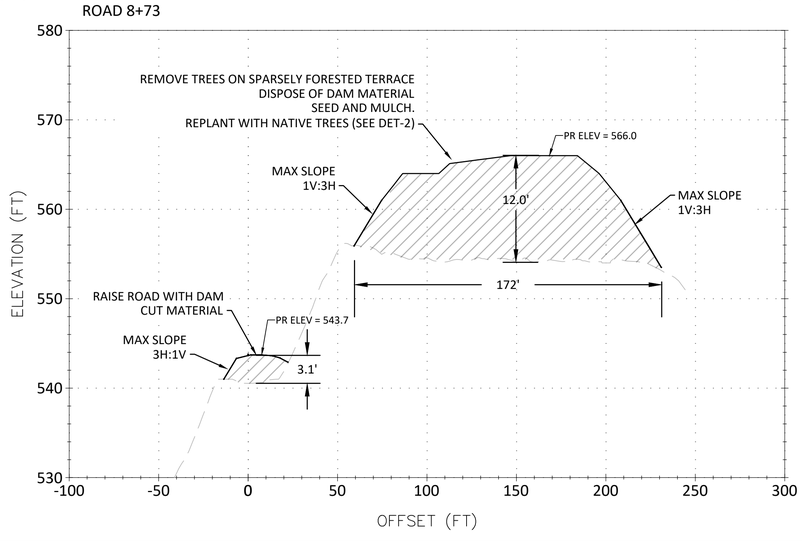


ROAD 3+83

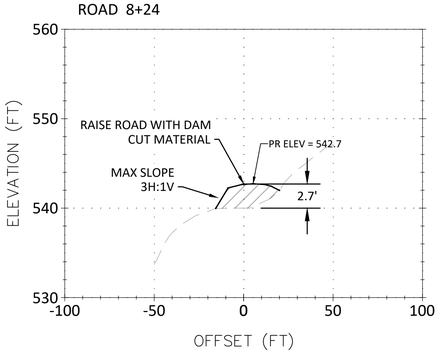


NORTHERN DISPOSAL AREA

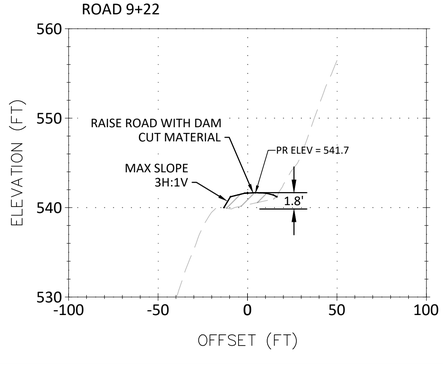
ROAD 8+73



ROAD 8+24



ROAD 9+22



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LOGGING ROAD - PROFILE AND CROSS SECTIONS

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

60% DESIGN PLANS

DRAWN: RFS	CHECKED: EPF
SCALE: AS NOTED	
DATE: 2026-04-14	
PROJECT NO.: 25044	
SHEET NO.: 7 OF 9	

PRO-2

SHEET NAME

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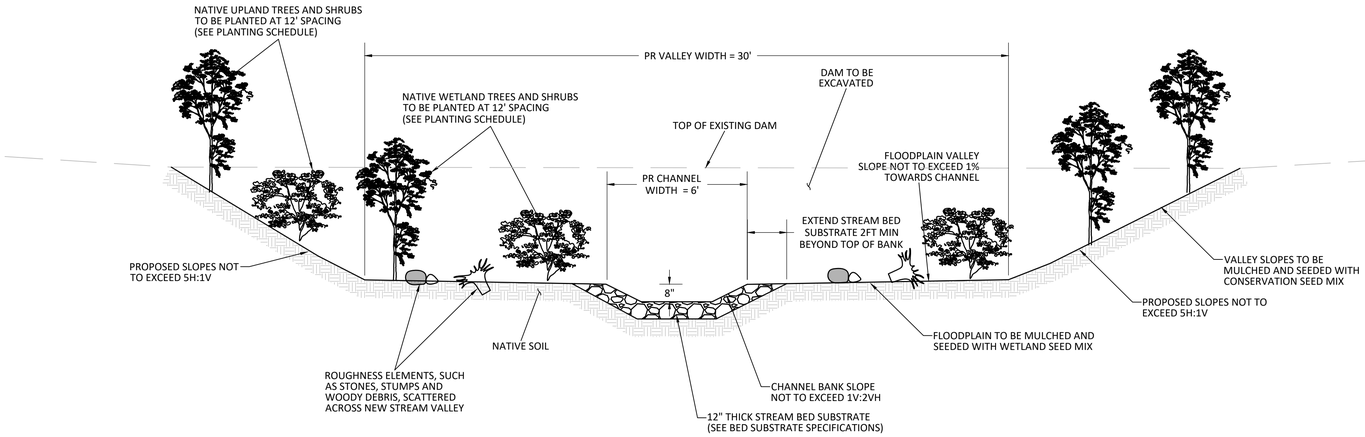


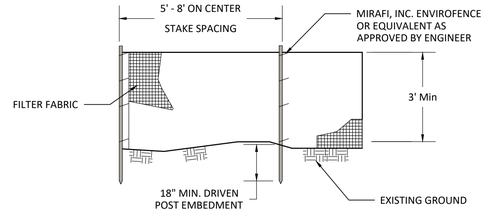
STREAM BED SUBSTRATE SPECIFICATIONS

1. EXISTING STREAM BED MATERIAL, IF ANY IS ENCOUNTERED AT THE SITE AND APPROPRIATE IN SIZE GRADATION, SHALL BE USED PREFERENTIALLY OVER OTHER SOURCES.
2. PROPOSED STREAM BED SUBSTREATE SHALL MEET TYPE I STONE SPECIFICATIONS WITH ADDED FINES (1 VOLUME OF FINES FOR EVERY 2 VOLUMES OF STONE).
3. TYPE I STONE SPECIFICATIONS: THE LONGEST DIMENSION OF THE STONE SHOULD VARY FROM 1 TO 12 IN, AND THE D50 OF THE STONE SHOULD BE 4 IN.
5. FINES SHOULD INCLUDE AN EVEN DISTRIBUTION OF FINE SAND (0.05-0.25 MM), MEDIUM SAND (0.25-0.5 MM) COARSE SAND (0.3-2 MM) AND GRAVEL (2 - 7.5 MM).
6. STONE IN THE STREAM BED SHALL BE HARD, BLASTED, ANGULAR ROCK, RIVER RUN DEPOSITS/ROCK, OR A MIXTURE OF ANGULAR ROCK AND RIVER ROCK.
7. ADD FINES TO STONES AS NEEDED TO SEAL THE STREAM BED AND PREVENT SUBSURFACE FLOW.

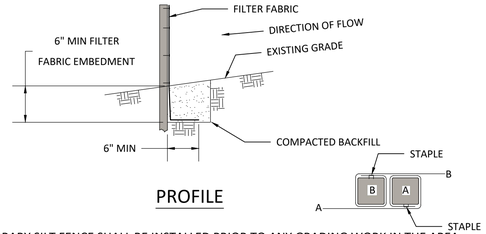
CONSTRUCTION NOTES:

1. PROPOSED STREAM CHANNEL PLAN FORM GEOMETRIES SHALL BE CONSTRUCTED AS SHOWN ON SHEET PR-1 AND PR-2. LOCATION OF CHANNEL TO BE STAKED OUT WITH THE CONTRACTOR AND PROJECT ENGINEER.
2. ADDITIONAL STREAM BED GRAVEL (AS SHOWN ABOVE) SHALL BE INSTALLED AS NEEDED, IF THE MATERIAL UNCOVERED AT THE BASE OF THE DAM DOES NOT MEET THE SPECIFIED GRADATION.
3. FLOODPLAIN SHALL BE GENERALLY FLAT, WITH UNDULATING MICRO-TOPOGRAPHIES, FLOODPLAIN/ WETLAND POOLS, AND ROUGHNESS ELEMENTS. CROSS SLOPE TO CHANNEL NOT TO EXCEED 1%.
4. SIDE SLOPES OF NEW CHANNEL SHALL NOT EXCEED 2H:1V
5. VALLEY WALL SLOPES SHALL NOT EXCEED 5H:1V

STREAM CHANNEL AND FLOODPLAIN RESTORATION (DAM REMOVAL)



ELEVATION



PROFILE

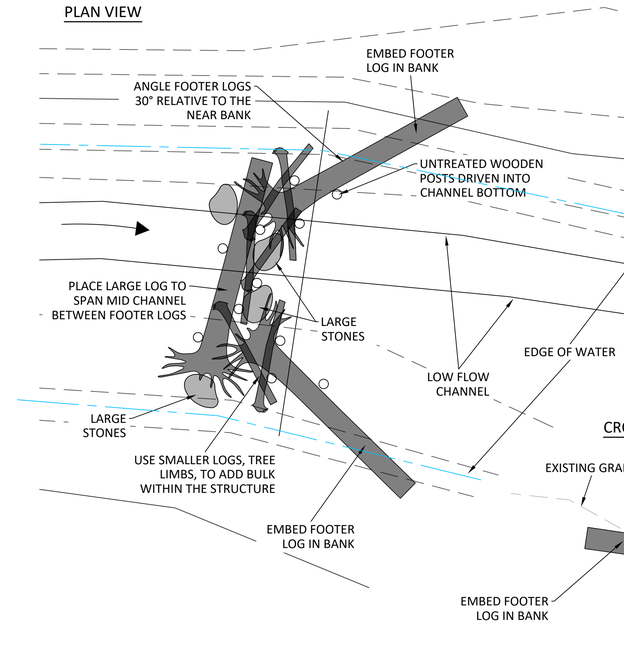
NOTES:

1. TEMPORARY SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL SITE STABILIZATION.
2. FILTER FABRIC SHALL BE MIRAFI GEOTEXTILE OR APPROVED EQUIVALENT.
3. FENCE POSTS SHALL BE WOODEN STAKES WITH MINIMUM DIMENSIONS OF 1.5" X 1.5".
4. WHEN SPLICES ARE NECESSARY , PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE. ROTATE BOTH POSTS TOGETHER AT LEAST 180 DEGREES TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
5. SILT MATERIAL SHALL BE REMOVED WHEN ACCUMULATION REACHES HALF OF THE FABRIC HEIGHT
6. SILT FENCE SHALL BE REINFORCED WITH WIRE MESH WHEN WITHIN 100 FEET OF A NATURAL RESOURCE.

ADAPTED FROM NRCS DETAIL IL-ENG-49

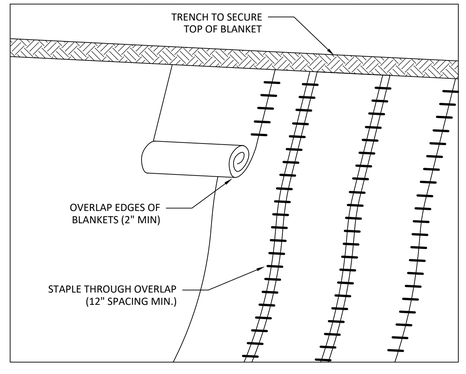
SILT FENCE

N.T.S



POST ASSISTED LOG STRUCTURE (PALS)

N.T.S



NOTES:

1. ROLLED EROSION CONTROL PRODUCT (RECP) SHALL BE BIODEGRADABLE WITH LOOSE WEAVE NETTING.
2. PREPARE SOIL BEFORE INSTALLING RECP, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
3. BEGIN AT TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
4. ROLL BLANKETS DOWN THE SLOPE.
5. OVERLAP THE EDGES OF PARALLEL BLANKETS WITH MIN. 2" OVERLAP AND STAPLE.
6. WHEN MULTIPLE BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END WITH MIN. 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART.
7. STAPLES SHALL BE 11 GAUGE WIRE AND AT LEAST 6" TALL

ROLLED EROSION CONTROL BLANKET ON SLOPES

N.T.S

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SIGNATURE

REVISIONS		
#	DESCRIPTION	DATE

60% DESIGN PLANS

CONSTRUCTION DETAILS

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

DRAWN: RFS	CHECKED: EPF
SCALE: N.T.S	
DATE: 2026-04-14	
PROJECT NO.: 25044	
SHEET NO.: 8 OF 9	
SHEET NAME: **DT-1**	

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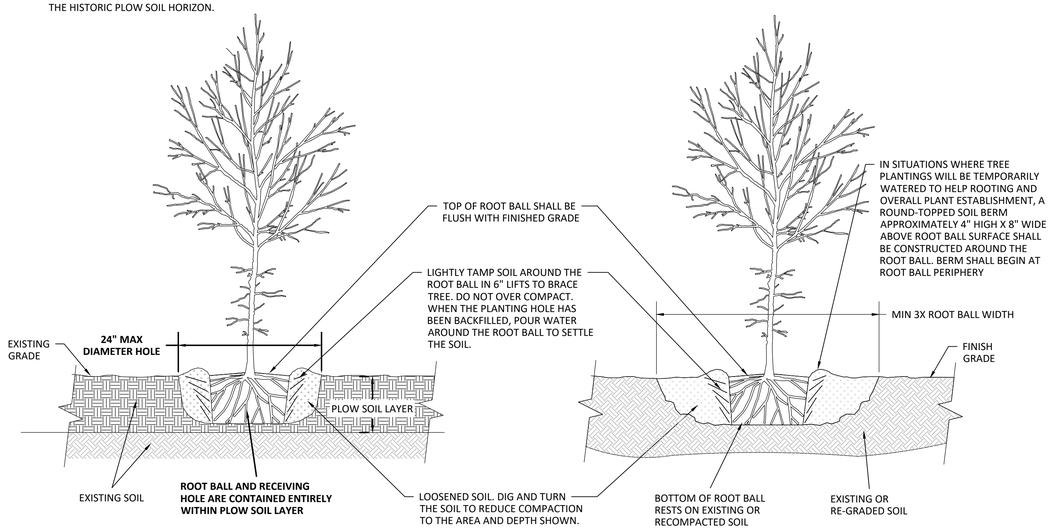
VDHP METHOD

- THIS METHOD IS APPROVED BY THE VERMONT DEPARTMENT OF HISTORICAL PRESERVATION (VDHP) FOR CONTAINER STOCK PLANTINGS TO AVOID POTENTIAL DISTURBANCE TO UNKNOWN ARTIFACTS AND RESOURCES OF HISTORICAL AND ARCHEOLOGICAL SIGNIFICANCE.
- THE METHOD MINIMIZES GROUND DISTURBANCE BY REQUIRING THAT THE PLANTING HOLES BE NO GREATER THAN 24" IN DIAMETER AND THAT THE PLANTING BE ENTIRELY CONTAINED WITHIN THE HISTORIC PLOW SOIL HORIZON.

STANDARD METHOD

- THIS METHOD IS APPLICABLE FOR CONTAINER STOCK PLANTING IN AREAS WHERE HISTORICAL OR ARCHEOLOGICAL SENSITITITES ARE NOT PRESENT AS DETERMINED BY VDHP, OR HAVE BEEN INVESTIGATED AND RULED OUT (ARA).
- THIS METHOD IS TYPICALY IMPLEMENTED WHERE SIGNFICANT GROUND DISTURANCE IS PROPOSED AS PART OF THE PROJECT.



CONTAINER STOCK PLANTINGS (VDHP AND STANDARD METHODS)

N.T.S

PLANTING SCHEDULE		
AREA	SPECIES	APPROXIMATE QUANTITY
STREAM VALLEY (WETLAND)	Yellow birch (Betula a.)	6
2,800 sf (≈ 24 PLANTS)	Speckled alder (Alnus i.)	6
	Willow shrubs (Salix spp.)	6
	dogwoods (Cornus spp.)	6
VALLEY SIDE SLOPES (UPLAND)	White pine (Pinus s.)	15
10,900 SF (≈75 PLANTS)	Black cherry (Prunus s.)	15
	Beech (Fagus g.)	15
	Birch (Betula spp.)	15
	Red maple (Acer r.)	15
	Balsam fir (Abies b.)	15
DISPOSAL AREA 1 (UPLAND)	White pine (Pinus s.)	20
14,800 SF (≈100 PLANTS)	Black cherry (Prunus s.)	20
	Beech (Fagus g.)	20
	Birch (Betula spp.)	20
	Sugar maple (Acer s.)	20

PROPOSED PLANTING SCHEDULES

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

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

60% DESIGN PLANS

CONSTRUCTION DETAILS

VLT - STONE DAM REMOVAL

BEAR MOUNTAIN RD
NORTH TROY, VT
NOT FOR CONSTRUCTION

DRAWN: RFS	CHECKED: EPF
SCALE: N.T.S	
DATE: 2026-04-14	
PROJECT NO.: 25044	
SHEET NO.: 9 OF 9	
SHEET NAME: **DT-2**	

S:\2025\25044_VLT_STONE_DAM_REMOVAL\CAD\20260327_VLT_STONEDAM_60%.DWG 4/14/2026 2:34:16 PM

	Area of Improved FP Access by Tributary West of Dam (Ac)	Area of Improved FP Access by Missisquoi River East of Dam (Ac)
In River Corridor	2.18	0.47
In Hand Model	9.88	0.14
Total	12.06	0.61

FEMA Flood Zone (Georeferenced)
River Corridors
HAND model (Missisquoi River)
2
5
10
25
50
100
200
500
Expanded FP access east of Stone Dam
Expanded FP access west of Stone Dam

0 200 400 Ft
1 inch = 400 feet

N

FEMA FLOOD ZONE GEOREFERENCED FROM FIRM MAP (EFF. YEAR 1980)

MODELED EXPANSION OF FLOODPLAIN ACCESS BY TRIBUTARY IN 100-YR FLOOD AFTER DAM REMOVAL

TRIBUTARY CENTER LINE AND 50 FT CORRIDOR ADJUSTED TO REFLECCT EXISTING ONSITE CONDITIONS

MODELED EXPANSION OF FLOODPLAIN ACCESS BY WINOOSKI RIVER IN 100-YR FLOOD AFTER DAM REMOVAL

MISSISQUOI RIVER CORRIDOR FROM VCGI

Town Hwy 4
FEMA FLOOD ZONE A
Pine St
Bear Mountain Rd
RC
550
600
VCGI

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

Notes:
- Aerial imagery from VCGI
- Contours based on DEM from VCGI (2013 LiDAR) unless otherwise noted

VLT STONE DAM
Flood And Floodplain Access Map
MOUNTAIN BEAR RD
NORTH TROY, VT

MAP BY	CHECKED
RFS	EPF

SCALE: 1 inch = 400 feet

DATE: March 6, 2026

SHEET NO: Attachment 6

Memo

To:	Missisquoi Basin 6 Clean Water Service Provider
From:	Allaire Diamond, Ecology & Restoration Program Director
Date:	May 15, 2026
Re:	Stone J&M Dam Removal Implementation - Landowner, Schedule and O&M

As the landowner of the Stone J&M property, Vermont Land Trust supports the removal of the dam here, which will increase and enhance Missisquoi floodplain storage and mitigate phosphorus.

Vermont Land Trust will also serve as the Operations and Maintenance Party for this project.

Schedule:

If awarded funding, VLT aims to remove this dam during the 2026 season:

June 2026: Bidding and selection of contractor, confirm FHARC requirements.

July-August 2026: Finalize design elements, hold pre-construction meeting

September-October 2026: Construction and site restoration/planting

Fall 2026 or Spring 2027: Finish or update plantings

December 2027: Project end date (this will give us an extra year in case construction is not possible in 2026)

14714 Trout River Floodplain Restoration

Project Type	
Step/Phase	Final Design
Basic Eligibility	Yes
Applicant Name	Lauren Weston
Applicant Organization	Franklin County NRCD
Applicant Email	lauren@franklincountynrcd.org
Applicant telephone	+1 (802) 582-3133
Project ID from WPD	14714
Description of Project	This project proposes to restore floodplain access along the Trout River in Montgomery Center, where homes are some of the most floodprone. This will include floodplain lowering of an estimated 2.1 - 6.1 acres of floodplain to reduce the velocity of high flows and increase flood resilience in Montgomery, VT. Disturbed areas will be replanted with native woody trees and shrubs.
Project Latitude	44.88036
Project Longitude	-72.61407
Project Phase	Final Design
Annual P Reduction KG	13.5
Any one time P reduction KG	0
Total Cost of Proposed Phase	231270.00
Amount of Funding Requested (Proposed Phase)	$231,270.00
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	$431,270.00
Design Life	10
Estimated Annual O&M cost total	$5,000.00
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	3
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	Yes
O&M Interest	Yes
continued project	No
earlier P estimate	

Project Details	
WPD ID	14714
Status	Proposed
Project Name	Trout River Floodplain Restoration - Final Design - Montgomery Center
Project Type	Floodplain/Stream Restoration - Final Design
Sector	River
Lat/Long	44.88036, -72.61407
Estimated Cost of Project Implementation ($)	
Estimated Phosphorous Reduction (kg/year) (estimated prior to project implementation)	
Stream Segment	04150407000024
Technical Project Manager	
Description	This project proposes to restore floodplain access along the Trout River in Montgomery Center, where homes are some of the most floodprone. This will include floodplain lowering of an estimated 2.1 - 6.1 acres of floodplain to reduce the velocity of high flows and increase flood resilience in Montgomery, VT. Disturbed areas will be replanted with native woody trees and shrubs.
Development Notes	
Submission Number	HQM-F8ZC-K7SYT

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Montgomery	Trout River		Clean Water Fund

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
4/2/2026	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status
View	Parent	12355	Montgomery Flood Resilience Project Development	Funded

Records

	Date	Record Type	Record Title

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: Minimize Flood and Fluvial Erosion Hazards Minimize Anthropogenic Nutrient and Organic Pollution Protect and Restore Aquatic and Riparian Habitat	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream Restoration - Final Engineering D
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

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	14714
Watershed Project Database Project Name	Trout River Floodplain Restoration - Final Design - Montgomery Center

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

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 permit[7])?
   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."

[10] Note 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]	
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. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
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 area[12]**?** (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.	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Rose Watts, Floodplain Manager, rose.watts@vermont.gov	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Chris Brunelle, River Management Engineer, chris.brunelle@vermont.gov	
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."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: 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.)	Yes ○ No ○ Not Sure ◉
If you answered ***yes*** or ***not sure*** to either 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 either 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. **Regulatory Point of Contact Name/Position:** Krystal Sewell, District Wetlands Ecologist, krystal.t.sewell@vermont.gov	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
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. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 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	Yes ○ No ◉

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

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ○ No ◉

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.

Regulatory Point of Contact Name/Position: Everett Marshall, Will Eldridge

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 ○

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.

Regulatory Point of Contact Name/Position:

Thomas Benoit, Program Manager, thomas.benoit@vermont.gov

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 ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

a. Stream alteration, flood hazard and river corridor, wetland, USACE, FHARC state flood and river
b. Individual permit
c. Consideration of cutting woody vegetation for restoration/access, sediment management and disposal, invasive species treatment and management, presence of a S3 Species in vicinity of the project area
d. FCNRCD and contractors will work closely with regulators to ensure all permit requirements are met as the project develops and prior to project implementation.

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.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	◉ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

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.	◯ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? 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.	◯ **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. ◉ **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 (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **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.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☑	Submitted/ Pending
☐	Approved
☐	Denied

[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 VAAFM.

Please include a summary of the response here:

It's possible that CREP could help with planting the acreage where floodplain is proposed to be lowered on farmland if the intention is for all of the lowered area to come out of production. Would need landowner/farmer approval. If it's simpler to do the woody planting with CWSP funds and it helps for the ranking we don't want to get in the way.

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

Franklin County Natural Resources Conservation District
Project ID - 14714
Trout River Floodplain Restoration - Final Design - Montgomery Center

Budget Category	Budget Narrative	Amount Allocated
Staff expenses (i.e., salary and fringe benefits or ad hoc employees)	FCNRCD staff will perform grant management, procurement, field visits, coordination with landowners and contractors, and design review and oversight (366 hours at $75/hr)	$ 27,450.00
Total mileage charges	20 site visits with contractors and landowner (60 miles round trip at $0.725/mile)	$ 870.00
Engineering/Design Services expense	Engineering contractor will perform site visits, data collection, 60% design, permitting, Final Design Report and Cost Opinions, and Bid Phase Services ($160,000)*. Cultural resources contractor will perform Archaeological Resources Assessment and additional cultural resources investigations as needed ($40,000)*.	$ 200,000.00
Other eligible costs (see 2023 CWIP Funding Policy)	Relevant permitting fees: stream alteration individual permit ($350), flood hazard and river corridor permit ($350), wetland individual permit ($240 + $2,000), USACOE individual permit ($10.00)	$ 2,950.00
Indirect Expenses	N/A	$ -
	TOTAL	**$ 231,270.00**

* Consultant fees assume all potential project sites will have worthwhile project benefits, be cost effective, and have landowner support. If this is not the case, overall project budget will be reduced basded on level of effort required.

ALTERNATIVES 10 & 12
FLOODPLAIN RESTORATION
Montgomery, Vermont
5/11/2026

	Firm	SLR	SLR	SLR					SLR
	Personnel	RS	JL	AM					
	Project Role	*Technical Advisor*	*Project Manager*	*Project Engineer*	*Total Hours*	*SLR Personnel*	*Travel*	*Printing/ Survey*	*Fee*
	VT Preferred Rates and others	$260	$235	$190					
1.0	**Initial Project Site Visit**								
1.1	Project kickoff site meeting with project team and consultant		5	6	11	$2,315	$50		$2,365
	Sub-Total >	**0**	**5**	**6**	**11**	**$2,315**	**$50**	**$0**	**$2,365**
2.0	**Data Collection**								
2.1	Site survey and basemap		10	16	26	$5,390	$50	$12,000	$17,440
2.2	Review of Natural Resources	4		8	12	$2,560	$50		$2,610
2.3	Wetland Delineation & visit with VTDEC		2	32	34	$6,550	$200		$6,750
2.4	Soil Quality Testing	2	8	8	18	$3,920	$50	$5,000	$8,970
2.5	Floodplain documentation, river geomorphic data, river access	8	8	16	32	$7,000	$50		$7,050
	Sub-Total >	**14**	**28**	**80**	**122**	**$25,420**	**$400**	**$17,000**	**$42,820**
3.0	**Hydraulic Analysis, Alternatives, and Concept Design**								
3.1	Site visit with landowners, multiple meetings on one day		8	8	16	$3,400	$50		$3,450
3.2	Update model to check design		2	8	10	$1,990			$1,990
3.3	Team meeting to review alternatives to test, virtual		2	4	6	$1,230			$1,230
3.4	Test alternatives in model, up to three alternatives		2	16	18	$3,510			$3,510
3.5	Mapping of Velocity and Depths		2	10	12	$2,370			$2,370
3.6	Hydraulics Memo/ Recommendations		4	8	12	$2,460			$2,460
3.7	Team meeting, virtual		2	4	6	$1,230			$1,230
3.8	Stakeholder meeting, in person		5	6	11	$2,315	$50		$2,365
3.9	Concept design		4	8	12	$2,460			$2,460
3.10	Update memo and cost estimate		4	4	8	$1,700			$1,700
	Sub-Total >	**0**	**35**	**76**	**111**	**$22,665**	**$100**	**$0**	**$22,765**
4.0	**Engineering Preliminary (60%) Design**								
4.1	Team meeting to confirm design elements with new data, virtual		4	5	9	$1,890	$50		$1,940
4.2	Evaluation of impacts		16	16	32	$6,800			$6,800
4.3	Floodplain restoration 60% design plans	10	16	80	106	$21,560		$10	$21,570
4.4	Opinion of probable cost		6	6	12	$2,550			$2,550
4.5	Design report		6	6	12	$2,550			$2,550
4.6	Review plans with project team and 1 round of edits		4	10	14	$2,840			$2,840
	Sub-Total >	**10**	**52**	**123**	**185**	**$38,190**	**$50**	**$10**	**$38,250**
5.0	**Regulator Coordination**								
5.1	Coordination with regulators, review permit needs		8	2	10	$2,260			$2,260
5.2	Site visit with regulators		4	4	8	$1,700	$50		$1,750
	Sub-Total >	**0**	**12**	**6**	**18**	**$3,960**	**$50**	**$0**	**$4,010**
6.0	**Public Outreach**								
6.1	Public outreach meeting and visit		8	12	20	$4,160	$50		$4,210
	Sub-Total >	**0**	**8**	**12**	**20**	**$4,160**	**$50**	**$0**	**$4,210**
7.0	**Final Design Report & Cost Opinions**								
7.1	Meet with project team to confirm design elements		4	4	8	$1,700			$1,700
7.2	Final design plans	6	16	40	62	$12,920		$10	$12,930
7.3	Operation and maintenance plan and access agreement template		2		2	$470			$470
7.4	Cost opinion		4	6	10	$2,080			$2,080
7.5	Final report and Phosphorus reduction calculation	2	4	16	22	$4,500			$4,500
7.6	Review plans with project team and 1 round of edits		2	10	12	$2,370			$2,370
	Sub-Total >	**8**	**32**	**76**	**116**	**$24,040**	**$0**	**$10**	**$24,050**
8.0	**Permitting**								
8.3	US ACOE permit		8	12	20	$4,160			$4,160
8.1	VT construction general permit		8	12	20	$4,160			$4,160
8.2	Stream Alteration		8	6	14	$3,020			$3,020
8.4	Wetlands General Permit		2	16	18	$3,510		$10	$3,520
8.5	Local permit, includes 1 meeting, no rise memo		8	12	20	$4,160	$50		$4,210
8.6	Adjust plans to include regulator comments		4	8	12	$2,460			$2,460
	Sub-Total >	**0**	**38**	**66**	**104**	**$21,470**	**$50**	**$ 10**	**$21,530**
	TOTAL	**32**	**210**	**445**	**687**	**$142,220**	**$750**	**$17,030**	**$160,000**

Trout River Floodplain Restoration – Final Design Schedule

Franklin County Natural Resources Conservation District

Property Owners & Current Level of Support

- Marsha Phillips, 44.88253, -72.61761 (received landowner approval)
- Hoyt Hurtubise, 44.88439, -72.61781 (playing phone tag)
- Town of Montgomery, 44.88061, -72.61412 (received landowner approval)

- Therese Begnoche, 44.87912, -72.61327 (in contact with landowner, more information necessary)
- Wedel Trust (Brad Quintin and Karie Quintin), 44.87991, -72.61295 (interested landowner, more information necessary)

Typical Tasks	Typical Task Description
Data Collection, Hydraulic Analysis, Alternatives, & Concept Designs	The engineering consultant, in coordination with Montgomery and FCNRCD, will review existing data and site history, review survey data, and refine hydrologic and hydraulic modeling. Data Collection Tasks will include: Site Survey and basemap, review of natural resources, floodplain documentation, and river geomorphic data as well as wetland delineation and soil quality testing, pending landowner approval.
60% Design	The engineering consultant will refine 30% design based on landowner approval, survey, H&H data, and site investigations. Note: after 60% design is complete, there will be additional investigations and public outreach, before proceeding to 100% design. Engineer consultant will develop materials to submit a No Adverse Impact Report, including Designs, Specs, Engineering Analysis; Statement of no negative impacts up/downstream of project; H&H report/model data; and Pre- and Post-Project Inundation maps. Engineering consultant will consult with regulators to confirm project feasibility. A cultural resources/Archaeological resources consultant will be hired to complete an Archaeological Resources Assessment or other assessment if required by VDHP following review.
Permitting	The Engineering consultant will perform permitting analysis, submit permitting applications, and coordinate with regulatory entities.
Final Design Report & Cost Opinions	The engineering consultant will create a Final Design Report, including: a summary of existing site conditions; updated 100% final design sheets showing typical cross-section(s) and longitudinal profile; and feasibility summary, including stakeholder and regulator feedback and site-specific constraints. The engineering consultant will also create a 10-year access license or easement plan and 10-year operation and maintenance plan in coordination with FCNRCD. They will also complete an initial engineer's opinion of probable cost for permitting, construction, construction oversight, and long-term maintenance and operation.

Reporting	FCNRCD will complete reporting for CWSP funding requirements. Deliverables will include DEC Programmatic staff comments on design, signed VDHP Project Review Form, Final Design Report, 10-year O&M Plan, 10-year access licenses or easement documentation, relevant permit materials, Media Announcement, Final Performance Report or ANR Online Clean Water Project – Project Closeout Form (once available) and/or Batch Import File or ANR Online Clean Water Project – New Project Form.

Montgomery Floodplains - Alternative 10 & 12
P Calculations
5/11/2026, revised 5/18/2026

ALTERNATIVE 10

Corridor unit	Acres	Notes
57_M03C_1_C00	1.28	No increase in buffer or storage
57_M03C_2_C00	5.68	No increase in storage, small increase in buffer - 0.19 acres in 50-foot, 1.3 acres within rc outside of 50-foot
Total	6.96	

FFI RESULTS

Estimated Floodplain and Stream Connectivity Benefits and Phosphorus Credits

SubUnit(s) IDs: 57_M03C_2_C00, 57_M03C_1_C00
Town: MONTGOMERY
Rivers Projects Included: Create Flood Bench
Streams Projects Included:
Stream Names:
Project Area (acres): 6.96

Stream Stability and Storage Credit Summary

	Annual Credit (kg/yr)
Floodplain Connectivity (Lateral - Vertical)	
Stream Stability	4.7
Storage	0.0
Stream Connectivity (Longitudinal - Temporal)	
Stream Stability	0.0
TOTAL	4.7

ALTERNATIVE 12

Corridor unit	Acres	Notes
57_T4.01-_1_C00	0.19	No increase in buffer or storage
57_M04-_2_C00	5.33	No increase in buffer or storage
57_M04-_1_C00	0.43	No increase in buffer or storage
Total	5.95	

FFI RESULTS

Estimated Floodplain and Stream Connectivity Benefits and Phosphorus Credits

SubUnit(s) IDs: 57_M04 _1_C00, 57_M04 _2_C00, 57_T4.01 _1_C00
Town: MONTGOMERY
Rivers Projects Included: Lower Floodplain
Streams Projects Included:
Stream Names: Trout River
Project Area (acres): 5.95

Stream Stability and Storage Credit Summary

	Annual Credit (kg/yr)
Floodplain Connectivity (Lateral - Vertical)	
Stream Stability	7.3
Storage	0.0
Stream Connectivity (Longitudinal - Temporal)	
Stream Stability	0.0
TOTAL	7.3

ALTERNATIVE 12 - ADDITIONAL

Corridor unit	Acres	Notes
57_M03C_2_C00	1.6	0.5 acres west of river, 1.1 acres east of river; 0.5 acres planted buffer within 50-foot zone

FFI RESULTS

Estimated Floodplain and Stream Connectivity Benefits and Phosphorus Credits

SubUnit(s) IDs: 57_M03C_2_C00
Town: MONTGOMERY
Rivers Projects Included: Create Flood Bench
Streams Projects Included:
Stream Names:
Project Area (acres): 1.6

Stream Stability and Storage Credit Summary

	Annual Credit (kg/yr)
Floodplain Connectivity (Lateral - Vertical)	
Stream Stability	1.5
Storage	0.0
Stream Connectivity (Longitudinal - Temporal)	
Stream Stability	0.0
TOTAL	1.5

Vermont Division for Historic Preservation
Project Review Form

This form is to be used for both the Preliminary and Final Project Review for clean water projects funded by the Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP). See applicable sections below.

Preliminary Project Review Section

To start the VDHP review process for CWIP-funded Clean Water Projects, please complete this form and submit it to the Vermont Division for Historic Preservation (VDHP) at ACCD.projectreview@vermont.gov with the information requested below. This Preliminary Project Review form, once completed and signed by VDHP, should be submitted as a project deliverable.

This is for non-exempt CWIP project types or conditionally exempt that have failed to meet the project qualifications. Exempt project types should NOT submit this form. Please refer to the CWIP Funding Policy for a listing of exempt and conditionally exempt project types. The CWIP Funding Policy can be found here: https://dec.vermont.gov/water-investment/cwi/grants#policy

For questions on architectural resources, archaeology, and below-ground resources, please contact Scott Dillon at (802) 272-7358 or scott.dillon@vermont.gov.

1. **Contact information**:
   a. Contact name: Kerry Brosnan
   b. Email address: kerry@franklincountynrcd.org
   c. Phone number: (802) 309-2081
2. **WPD Project Title**: Trout River Floodplain Restoration - Final Design - Montgomer
3. **WPD – ID**: 14714
4. **Project site map**: Please attach a project site map. An annotated Google map or ANR Atlas map will suffice but professional design plans are also welcome. An example image is provided below. Site map should outline:
   a. Project Area of Potential Effects[1] with clearly marked GPS coordinates for project boundaries.

[1] The project APE or "area of potential effects" means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The

b. Proposed ground disturbance locations. Note that stream bank regrading is considered ground disturbance.

5. **Project information**:
   a. Select CWIP project type from drop down (if not listed, it's categorically exempt)
      i. Floodplain/Stream Restoration - Final Engineering Design
   a. Please provide a short description of the project's proposed scope of work (CWIP Preliminary Design Report is acceptable instead)

      This project proposes to restore floodplain access along the Trout River in Montgomery Center, where homes are some of the most floodprone. This will include floodplain lowering the floodplain to reduce the velocity of high flows and increase flood resilience
   b. Are there other Agencies or funding partners involved?: Yes ○ No ◉
      i. **If yes**, who?
   c. Does the project involves ground disturbance?: Yes ◉ No ○
      i. **If yes,** please describe type and extent of ground disturbance. Specifically,
         1. Whether disturbance will be performed by hand or heavy machinery,
         2. The estimated total acreage and maximum depth of disturbance, and

---

APE is influenced by the scale and nature of an undertaking and may be different from different kinds of effects caused by the undertaking [36 C.F.R. § 800.16(d)]. When determining a project's APE remember to consider/include extent of restoration footprint; new, upgraded or existing access or haul roads; staging, storage, and stockpile areas; disposal sites or waste areas; borrow areas and other source locations for fill material; and areas impacted by drainage diversions or mechanical tree clearing and similar landscape alterations.

3. The history of prior naturally-caused or man-made ground disturbance to the site (if known):

The disturbance will be performed by heavy machinery, in order to remove sediment and lower the floodplain. Some trees may need to cut with heavy machinery as well.

d. Will the project cause direct or indirect impact or disturbance to any man-made building or structure more than 50 years old (including dams, culverts, and bridges) or to any federally listed historic building or structure?

Yes ○ No ◉ Unknown ○

i. **If yes or unknown**, provide any known details on the buildings or structure(s) location/condition and extent of proposed impact or disturbance. Please include whether the structure is listed in the National Register of Historic Places if known:

e. Is the project APE located within, intersect with, or adjacent to a state- or federally listed historic district, Designated Downtown or Village Center?

Yes ○ No ○ Unknown ◉

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◉ Historic Properties/Sites Affected

☐ Potential for Architectural Historic Properties to be affected – A Qualified Architectural Historian or Historian Consultant* is required (**please see* pre-approved list of consultants)

☐ Determination of Eligibility required

Comments:

☑ Potential for Archaeological Historic Properties to be affected – a Qualified Archaeological Consultant* is required (**please see* pre-approved list of consultants)

☑ Archaeological Resource Assessment (ARA) required

☐ Phase 1 archaeological investigation required

Comments: The ARA will need to include a stratigraphic analysis that identifies the full depth range of archaeologically sensitive soil strata.

◯ No Historic Properties/Sites Affected/No Effect

☐ No Historic Resource Present in Area of Potential Effect

☐ Work will have No Effect on Historic Resource

Comments:

Vermont State Historic Preservation Office Concurrence and Date:

X: R. Scott Dillon

Digitally signed by R. Scott Dillon
Date: 2026.05.20 11:08:39 -04'00'

Final Project Review Section

To complete Final Project Review, re-submit this VDHP Project Review Form with the following additional elements included. Note that this should be added to the VDHP-signed version of the Preliminary Review Form so VDHP can reference their prior guidance on this project. This Final Project Review Form, once completed and signed by VDHP, should be submitted as a CWIP project deliverable.

1. Please provide a short description of any changes to the project's proposed scope of work since the Preliminary Project Review:

2. Please attach:
    a. Final (100%) Design Plans
    b. Project narrative description of scope of work (CWIP Final Design Report will suffice)
    c. Any historical resource assessments, or determination of eligibility forms
    d. Any archaeological resource assessments, other archaeological reports, or end-of-field documents
    e. Any Treatment Plans

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ No Historic Properties/Sites Affected/No Effect
- ☐ No Historic Resource Present in Area of Potential Effect
- ☐ Work will have No Effect on Historic Resource

Comments:

◯ No Adverse Effect

◯ Adverse Effect
- ☐ Project Treatment Plan or other agreement documents executed

Other:

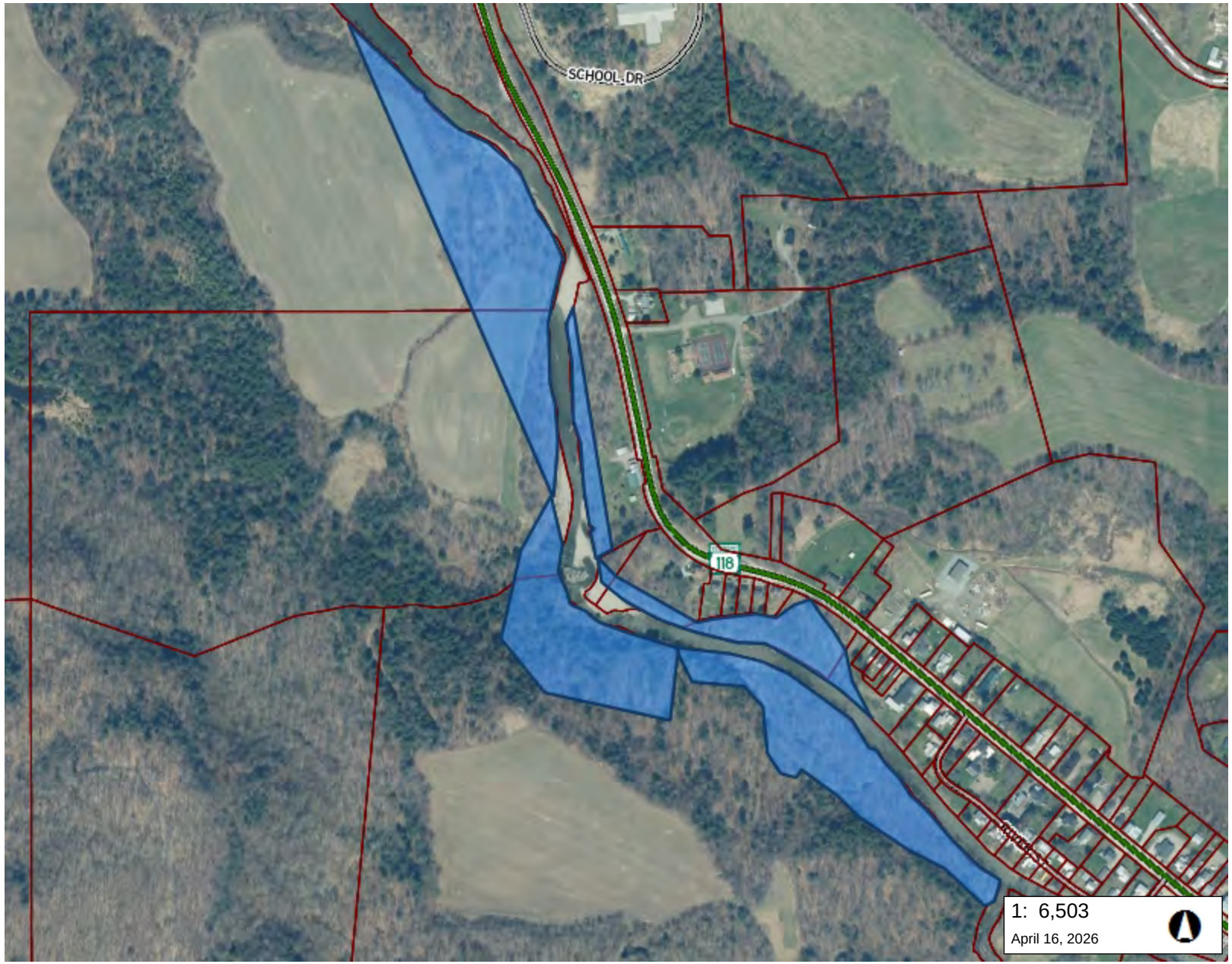
Vermont State Historic Preservation Office Concurrence and Date:

X: _____

Map

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Parcels (standardized)
- Roads
  - Interstate
  - US Highway; 1
  - State Highway
  - Town Highway (Class 1)
  - Town Highway (Class 2,3)
  - Town Highway (Class 4)
  - State Forest Trail
  - National Forest Trail
  - Legal Trail
  - Private Road/Driveway
  - Proposed Roads
- Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

330.0 0 165.00 330.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 542 Ft. 1cm = 65 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

April 6, 2025

Franklin County Natural Resources Conservation District
50 S. Main St. Ste B20
St. Albans, VT 05478

To whom it may concern,

The Town of Montgomery Selectboard writes this letter in support of an application for funding for final design for the Montgomery Center Trout River Floodplain Restoration in Montgomery, VT. The land is owned by the Town of Montgomery and thus this project falls under the purview of the Selectboard.

The Selectboard has heard from the Franklin County Natural Resources Conservation District previously regarding this project which came out of a yearlong flood resilience and hazard mitigation study that was led by the Conservation District with SLR Consulting as a subcontracted consultant. Past presentations highlighted the potential ecological, public safety, and flood resilience benefits of floodplain restoration at this parcel, as well as other opportunities throughout Montgomery. The community, through a series of public events and meetings, has prioritized this project because of its flood resilience and hazard mitigation benefits on land with an interested and willing landowner.

We are supportive of continued project progress through final design for this project. We understand that the Conservation District is submitting an application for funds to support the final design of this project. We would like to continue to be updated on the progress of this project and meet with project managers and engineers at relevant stages of this process.

Thank you for your consideration.

Sincerely,

Charlie Hancock
Chair, Montgomery Selectboard

14750 West Hill SWA

Project Type	
Step/Phase	Final Design
Basic Eligibility	Yes
Applicant Name	Lauren Weston
Applicant Organization	Franklin County NRCD
Applicant Email	lauren@franklincountynrcd.org
Applicant telephone	+1 (802) 582-3133
Project ID from WPD	14750
Description of Project	This project will design roughly 60 course wood structures along forested streams in Montgomery VT. The targeted streams are a collection of 1st, 2nd, and 3rd order streams in the Trout River Outlet subbasin. This design will build upon previous preliminary work to further narrow in the scope and improve understanding of the fluvial systems at work.
Project Latitude	44.81126
Project Longitude	-72.65488
Project Phase	Final Design
Annual P Reduction KG	6.29
Any one time P reduction KG	4.202
Total Cost of Proposed Phase	13450.00
Amount of Funding Requested (Proposed Phase)	$13,450.00
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	$65,000.00
Design Life	10
Estimated Annual O&M cost total	$1,600.00
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	2
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	Yes
O&M Interest	Not sure
continued project	Yes
earlier P estimate	4.808

Project Details	
WPD ID	14750
Status	Proposed
Project Name	West Hill Brook - Strategic Wood Additions - Final Design
Project Type	Floodplain/Stream Restoration - Final Design
Sector	River
Lat/Long	,
Estimated Cost of Project Implementation ($)	
Estimated Phosphorous Reduction (kg/year) (estimated prior to project implementation)	
Stream Segment	
Technical Project Manager	
Description	This project will design roughly 60 course wood structures along forested streams in Montgomery VT. The targeted streams are a collection of 1st, 2nd, and 3rd order streams in the Trout River Outlet subbasin. This design will build upon previous preliminary work to further narrow in the scope and improve understanding of the fluvial systems at work.
Development Notes	
Submission Number	HQN-7GHS-WZSP3

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Montgomery	Trout River	Franklin County Natural Resources Conservation District	

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
5/11/2026	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status

Records

	Date	Record Type	Record Title

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:	Protect and restore aquatic and riparian habitats

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards		
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream Restoration - Final Engineering Design	
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○	No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

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	14750
Watershed Project Database Project Name	West Hill Brook - Strategic Wood Additions Final Design

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

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 permit[7])?
   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."

[10] Note 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]	
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. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
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 area[12]**?** (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.	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Rebecca Pfeiffer	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
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. **Regulatory Point of Contact Name/Position:** Chris Brunelle	
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."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: 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.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either 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 either 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. **Regulatory Point of Contact Name/Position:** Krystal Sewell	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
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. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 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	Yes ○ No ◉

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

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◉ No ○

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.

Regulatory Point of Contact Name/Position: Everett Marshall

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 ◉

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.

Regulatory Point of Contact Name/Position:

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 ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

No permits needed for Final Design. Permitting and programmatic review will be re-examined before any implementation

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.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

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.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? 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.	○ **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. ○ **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 (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **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.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[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 VAAFM.

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.

WPD ID	14750	
Staff Expenses	$75/hr for 30 hours	$ 2,250.00
Contractor	Redstart - see budget table	$ 11,200.00
Total		**$ 13,450.00**

*VDHP review indicates Cultural Resources Contractor not required.

Activity	Person Days
West Hill Brook field work to measure streams (roughly 2.5 miles of stream)	5
Data review and processing	3
Project Permitting	3
Correspondence with landowner, DEC, project partners, or other required parties	3
Total:	14 person days 140 hours

West Hill Brook Strategic Wood Additions – Final Design Project Schedule

Deliverable	Anticipated Completion Date
Final Design level documentation of stream incisions and opportunities for floodplain engagement	July 2026
Draft 10-year (minimum) DEC **Operation and Maintenance (O&M) Plan** and documentation of support/commitment from O&M responsible party and landowner	August 2026
Draft 10-year (minimum) **access license or easement** and documentation of project support/commitment from landowner	August 2026
Draft permit application materials (including associated assessment reports or plans if applicable), **wetlands individual permit** (if applicable)	August 2026
DEC programmatic staff comments on design	August 2026
Signed VDHP Project Review Form	August 2026
Final Design Report	August 2026
Media announcement	August 2026
Final Performance Report or ANR Online Clean Water Project - Project Closeout Form (once available)	August 2026
Batch Import File or ANR Online Clean Water Project - New Project Form (once available)	September 2026

Cost Effectiveness Calculator for Formula Grant Project Prioritization

Cost effectiveness of a project with a design life 15 years or greater:
Cost effectiveness ($/kg/yr) = total capital project cost (dollars) for design and construction / annual average phosphorus load reduction (kg/yr)

Cost effectiveness for a project with less than 15-year design life:
Cost effectiveness ($/kg/yr) = (15 years/design life years)*(Total Project Cost $) /Average annual P load reduction

Notes

The calculation of cost effectiveness used in this tool is intended to be used to inform project prioritization for projects proposed to be funded under Formula Grants. The cost effectiveness calculation in this tool considers the project lifespan in the context of the 15-year Formula Grant implemnetation timeframe and utilizes the cost effectiveness formula presented in Chapter 6 of Act 76 Guidance. The cost effectiveness equation used in this tool is subject to revision following conclusion of the public notice period for Chapter 6 of the Act 76 Guidance Document. Cost effectiveness metrics presented elsewhere, such as in the Vermont Clean Water Initiative Performance Report, may use a different equation to calculate cost effectiveness.

For more information on Act 76 and Guidance, please visit https://dec.vermont.gov/water-investment/statues-rules-policies/act-76

Enter the project ID exactly entered in the phosphorus calculator tab to autofill calculated estimated P load reduction.			It is recommended that cost effectiveness is calculated with and without inclusion of any anticipated match or leveraged funds, if applicable.	*Optional* if different than total project costs. Consider Chapter 6 Guidance on co-funded projects and proportional credit for co-funders that are reporting partners.	Value will autofill based on project ID. If project type is a stormwater treatment practice, calculated estimated P load reduction should be copied and pasted from the STP calculator output.		
Input	*Input*	*Output*	*Input*	*Input*	*Input*	*Output Value*	*Output Value*
Project ID	**Project Type**	**Estimated Project Type Design Life**	**Total Estimated Project Cost (design and construction)**	**Estimated Project Cost to be Covered by Formula Grant Funds (design and construction)**	**Calculated Estimated P Load Reduction (kg/yr)**	**Total Project Estimated Cost Effectiveness ($/kg/yr)**	**Formula Grant Estimated Cost Effectiveness ($/kg/yr)**
TAW SWA	Strategic Wood Addtion	10	$64,000.00	$64,000.00	6.29	$15,255.13	$15,255.13

Vermont Division for Historic Preservation
Project Review Form

This form is to be used for both the Preliminary and Final Project Review for clean water projects funded by the Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP). See applicable sections below.

Preliminary Project Review Section

To start the VDHP review process for CWIP-funded Clean Water Projects, please complete this form and submit it to the Vermont Division for Historic Preservation (VDHP) at ACCD.projectreview@vermont.gov with the information requested below. This Preliminary Project Review form, once completed and signed by VDHP, should be submitted as a project deliverable.

This is for non-exempt CWIP project types or conditionally exempt that have failed to meet the project qualifications. Exempt project types should NOT submit this form. Please refer to the CWIP Funding Policy for a listing of exempt and conditionally exempt project types. The CWIP Funding Policy can be found here: https://dec.vermont.gov/water-investment/cwi/grants#policy

For questions on architectural resources, archaeology, and below-ground resources, please contact Scott Dillon at (802) 272-7358 or scott.dillon@vermont.gov.

1. **Contact information**:
   a. Contact name: Lauren Weston
   b. Email address: lauren@franklincountynrcd.org
   c. Phone number: 8025823133
2. **WPD Project Title**: West Hill Brook - Strategic Wood Additions Preliminary Design
3. **WPD – ID**: 12909
4. **Project site map**: Please attach a project site map. An annotated Google map or ANR Atlas map will suffice but professional design plans are also welcome. An example image is provided below. Site map should outline:
   a. Project Area of Potential Effects[1] with clearly marked GPS coordinates for project boundaries.

[1] The project APE or "area of potential effects" means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The

b. Proposed ground disturbance locations. Note that stream bank regrading is considered ground disturbance.

5. **Project information**:
   a. Select CWIP project type from drop down (if not listed, it's categorically exempt)
      i. Floodplain/Stream Restoration - Preliminary Engineering Design
   a. Please provide a short description of the project's proposed scope of work (CWIP Preliminary Design Report is acceptable instead)

      This project is located along a series of 1st, 2nd and 3rd order segments of West Hill Brook and surrounding tributaries. The primary goal of this project implementation is to improve river water quality by reducing the export of inorganic nutrients and sediments

   b. Are there other Agencies or funding partners involved?: Yes ◉ No ○
      i. **If yes**, who? DEC, USACE, NRPC
   c. Does the project involves ground disturbance?: Yes ◉ No ○
      i. **If yes,** please describe type and extent of ground disturbance. Specifically,
         1. Whether disturbance will be performed by hand or heavy machinery,
         2. The estimated total acreage and maximum depth of disturbance, and

---

APE is influenced by the scale and nature of an undertaking and may be different from different kinds of effects caused by the undertaking [36 C.F.R. § 800.16(d)]. When determining a project's APE remember to consider/include extent of restoration footprint; new, upgraded or existing access or haul roads; staging, storage, and stockpile areas; disposal sites or waste areas; borrow areas and other source locations for fill material; and areas impacted by drainage diversions or mechanical tree clearing and similar landscape alterations.

3. The history of prior naturally-caused or man-made ground disturbance to the site (if known):

By hand, see attached Inventory Sheet

d. Will the project cause direct or indirect impact or disturbance to any man-made building or structure more than 50 years old (including dams, culverts, and bridges) or to any federally listed historic building or structure?

Yes ◯ No ◉ Unknown ◯

i. **If yes or unknown**, provide any known details on the buildings or structure(s) location/condition and extent of proposed impact or disturbance. Please include whether the structure is listed in the National Register of Historic Places if known:

e. Is the project APE located within, intersect with, or adjacent to a state- or federally listed historic district, Designated Downtown or Village Center?

Yes ◯ No ◯ Unknown ◉

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ Historic Properties/Sites Affected

☐ Potential for Architectural Historic Properties to be affected – A Qualified Architectural Historian or Historian Consultant* is required (**please see* pre-approved list of consultants)

☐ Determination of Eligibility required

Comments:

☐ Potential for Archaeological Historic Properties to be affected – a Qualified Archaeological Consultant* is required (**please see* pre-approved list of consultants)

☐ Archaeological Resource Assessment (ARA) required

☐ Phase 1 archaeological investigation required

Comments:

◉ No Historic Properties/Sites Affected/No Effect

☑ No Historic Resource Present in Area of Potential Effect

☐ Work will have No Effect on Historic Resource

Comments:

Vermont State Historic Preservation Office Concurrence and Date:

X: Signed by: R. Scott Dillon B920F8A4E1B1464... 1/27/2026

Final Project Review Section

To complete Final Project Review, re-submit this VDHP Project Review Form with the following additional elements included. Note that this should be added to the VDHP-signed version of the Preliminary Review Form so VDHP can reference their prior guidance on this project. This Final Project Review Form, once completed and signed by VDHP, should be submitted as a CWIP project deliverable.

1. Please provide a short description of any changes to the project's proposed scope of work since the Preliminary Project Review:

2. Please attach:
    a. Final (100%) Design Plans
    b. Project narrative description of scope of work (CWIP Final Design Report will suffice)
    c. Any historical resource assessments, or determination of eligibility forms
    d. Any archaeological resource assessments, other archaeological reports, or end-of-field documents
    e. Any Treatment Plans

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ No Historic Properties/Sites Affected/No Effect
- ☐ No Historic Resource Present in Area of Potential Effect
- ☐ Work will have No Effect on Historic Resource

Comments:

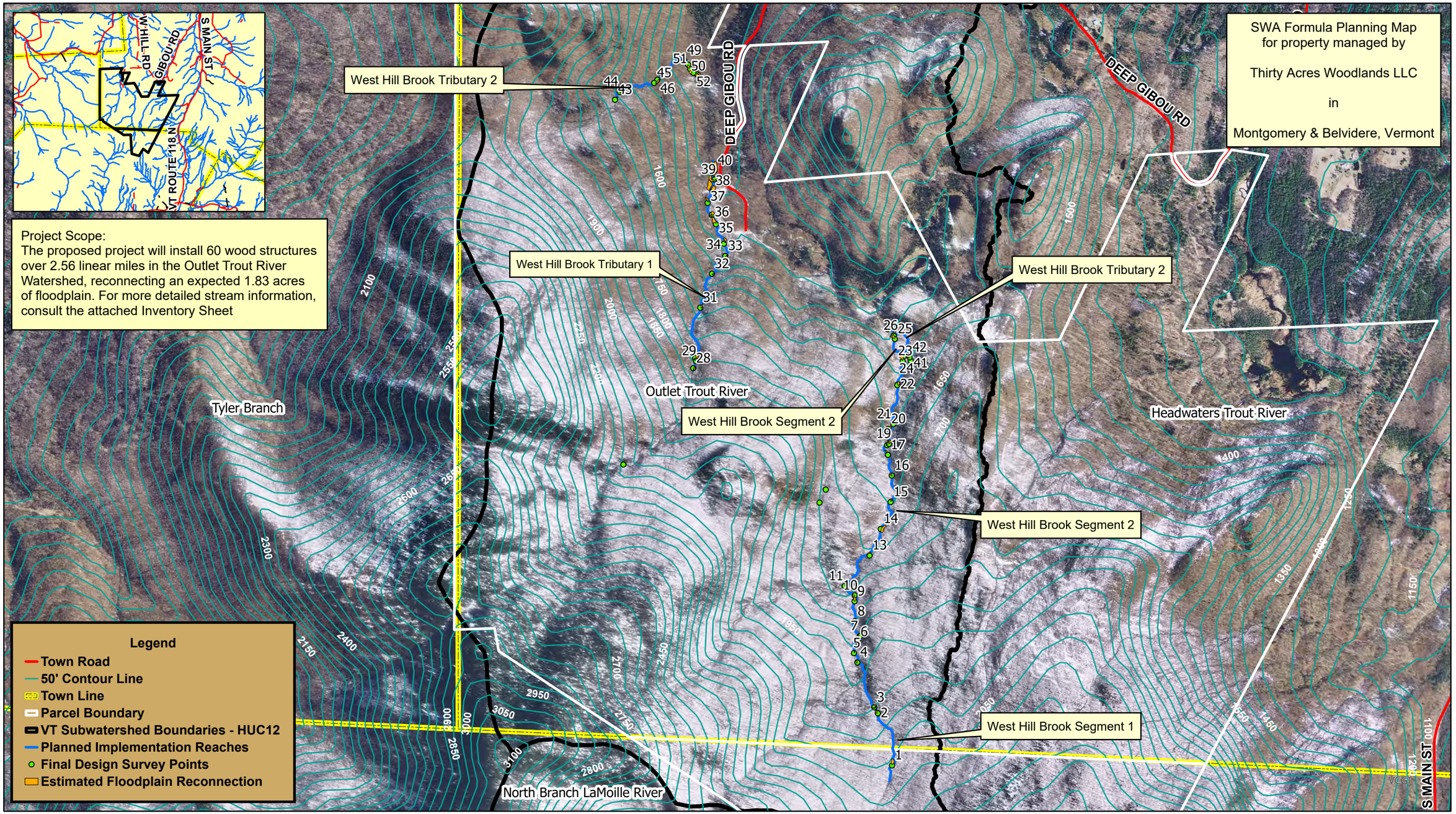
◯ No Adverse Effect

◯ Adverse Effect
- ☐ Project Treatment Plan or other agreement documents executed

Other:

Vermont State Historic Preservation Office Concurrence and Date:

X: _____



Coordinate System: NAD 1983 StatePlane Vermont FIPS 4400
This map was created from the Town tax maps, handheld GPS points, and on the ground observations.
THIS IS NOT A SURVEY

N

1:16,000

1:16,000

0 500 1,000 2,000 Feet

Map Created By: Redstart
DATE: 12/2025

Redstart Natural Resource Management

Gmail **Ben Machin <ben@redstartconsulting.com>**

30-Acre Woodlands stream restoration

3 messages

Ben Machin <ben@redstartconsulting.com> Wed, May 14, 2025 at 5:34 AM
To: Rick Morrill <rick.morrill.nfcs@gmail.com>, Ethan Dreissigacker <edreissigacker@gmail.com>
Cc: Dana Hazen <dana@redstartconsulting.com>

Hi Ethan and Rick,

I hope you are both doing well!

The State of Vermont is ramping up efforts to clean up Lake Champlain, particularly targeting the Phosphorus issues. Because the stream restoration approach we use (see attached for a refresher on Strategic Wood Addition, or "SWA") keeps Phosphorus out of the larger streams and the Lake, they are encouraging organizations to partner with landowners and apply for funding. We have been working with Franklin County Natural Resources Conservation District on numerous tree and shrub plantings along rivers and wetlands, and now on SWA projects. Assuming you're amenable, we'll work with them to submit an application to do some of the necessary further study and modeling of Phosphorus impacts of restoring the streams at 30-acre woodlands. There is an application deadline coming soon, and the work would occur over the next few months.

How does all this sound? Are we OK to proceed with an application?

Thanks, Ben

--
Redstart
http://www.redstartconsulting.com/

Redstart SWA intro.pdf
3063K

Ethan Dreissigacker <edreissigacker@gmail.com> Wed, May 14, 2025 at 8:05 AM
To: Ben Machin <ben@redstartconsulting.com>
Cc: Rick Morrill <rick.morrill.nfcs@gmail.com>, Dana Hazen <dana@redstartconsulting.com>

Ben,

I had been thinking the federal funding on this was probably not going to happen, but it's great that there are local options that might help facilitate this work. I think this sounds great. Please go ahead and proceed with the application!

Thanks,

Ethan
[Quoted text hidden]

Staggering of member terms

MEMORANDUM

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: CWSP STAFF
RE: POSSIBLE STAGGERING OF MEMBER TERMS
DA: MAY 27, 2026
==========

A member of the BWQC has suggested that membership terms run on a staggered basis. CWSP staff are not aware of any other BWQCs currently doing so. But, we believe the topic merits discussion and time has been included on the agenda for this purpose.

To help prepare for the discussion, we offer the following:

Technical Considerations

- **Term Length Requirements:** Department of Environmental Conservation (DEC) guidance mandates **two-year terms** for all BWQC members and alternates. Any staggering plan must eventually return to this two-year cycle to remain in compliance.
- **Bylaw Authority:** The Council has the legal authority to use its bylaws to establish specific procedures for how members are cycled.
- **Officer Terms:** Staggering general membership does not change the statutory requirement that the Chair and Vice-Chair serve one-year terms.
- **Notification Deadlines:** Members must still notify the CWSP and statutory partners of their interest in reappointment at least four months before their term expires.

Practical Considerations

- **Institutional Continuity:** Staggering prevents a "clean sweep" where all nine members could potentially leave at once, thereby preserving institutional knowledge.
- **Partner Coordination:** The CWSP would need to coordinate closely with partners and statewide coordinating groups (e.g., WUV) to ensure they know which of the seats in their sector is up for renewal in a given year.
- **Administrative Distribution:** Staggering could distribute the administrative burden of conducting "open processes" for vacancies across different years. (It could also increase administrative burdens owing to less “scale.”)

Potential Path Forward

If the Council wishes to implement this change, the most practical approach would be an amendment to the bylaws, which requires an affirmative two-thirds vote of the members present and voting.

Such an amendment would need to clearly define which specific seats would serve a one-time modified term length to launch the alternating cycle."

Updates/In brief

Future Meeting topics /Conclusion