Technical/Cost Proposal

Town of Danville

April 11, 2025

Danville Sidewalk Infrastructure Project

Danville CDS CD25(1)

Engineering Design Services

Contents

April 11, 2025

Mr. Ken Robie
Municipal Project Manager

RE: Danville Sidewalk Infrastructure Project – Danville CDS CD25(1)

Dear Mr. Robie:

The Town of Danville desires to develop pedestrian access improvements that will increase the safety and visibility of pedestrians through a shared use path and sidewalk project and has asked for VHB's assistance with navigating the engineering design phase of this project. Community connectedness and improved walkability are the driving forces for this project, and this effort would accomplish the goal of safely connecting pedestrians to the important community assets that have been separated from them by vehicular corridors insufficient for multimodal travel. For over 30 years, the VHB team has supported numerous communities throughout the State of Vermont to improve or create built connections for pedestrians and vehicles alike through town and village centers, including several recent efforts in Danville associated with the LVRT and its surrounding infrastructure.

The VHB team provides a "Complete Streets" frame of mind, offering:

- **VHB's Transportation Team**. The proposed VHB project delivery Team has worked together on numerous projects involving multimodal enhancements with VTrans and Municipalities over the last several years. We have worked together to develop roadway rehabilitation projects like the New Haven VT-17/East Street/Sawyer Road Intersection Project as well as more intimate projects like the LVRT Riverfront Extension Project in St. Johnsbury, which expands upon the town's infrastructure to create a safe connection for pedestrians and cyclists from the LVRT to the town center.
- **A communicative, responsive team.** Having successfully delivered on many similar municipal infrastructure projects across Vermont, we know that communication is the key to bringing to life a vision for a community enhancement. Throughout the development of all our Municipal Assistance Section ("MAS") projects, our Team has developed a meeting schedule with the project stakeholders to ensure the projects were moving along as expected and challenges were navigated in a timely manner when they arose.

We are excited by this opportunity to continue to build upon our relationship with the Town of Danville while providing innovative and practical solutions to meet ADA, Federal, and VTrans standards. Should you need any further information or have any questions, please contact me at broberts@vhb.com or 802.497.6193.

Sincerely,

VHB

Branden Roberts, PE
Director of Transportation Engineering
broberts@vhb.com

Project Understanding and Approach

Where east-west traffic traveling on US Route 2 meets the north-south major collectors Peacham Road and Hill Street, the heart of Danville is established. With existing pedestrian connections focused within the immediate blocks adjacent to this town center and a number of town amenities existing beyond the current limits of the pedestrian facilities, the Town has recognized the importance to enhance multimodal connections to a variety of additional community assets.

With significant investments made along the LVRT, including the new trailhead under construction on Peacham Road, the success of this recreational asset is based on connectivity to the adjacent towns to boost economic growth. By bettering connections to the Peacham Road recreational fields, the LVRT, Danville School, Hill Street Park, and the various community assets along the way, a safe corridor is created for all modes of transportation looking to explore Danville center.

VHB understands that the preferred alternative identified within the Bicycle & Pedestrian Pathway Scoping Study STP BP13(19) dated December 11, 2014, aims to connect these community resources through improvements to existing pedestrian infrastructure and extending that infrastructure northerly and southerly to desired project terminuses. This equates to approximately 2,000 linear feet of shared use path along the westerly side of Peacham Road from Town Highway 120 to Park Street; a gap in proposed improvements from Park Street through the US-2 crossing; picking back up on the north side of US-2 to improve a crossing of Hill Street and design a new sidewalk connection on the westerly side of Hill Street to Grand View Avenue before crossing Hill Street and continuing the sidewalk connection on the Easterly side of Hill Street to Highland Avenue – a total of approximately 1,350 linear feet of new sidewalk north of US-2. To achieve this desired multimodal connection, the engineering team will look to navigate various challenges including right-of-way, utilities, drainage infrastructure, natural and cultural resources, and potential conflicts with current parking areas in the Town center.

The VHB Team's approach is simple and straightforward:

- Introduce the project team to the stakeholders to develop a strong working relationship, review the project limits, settle on project goals, and determine the appropriate project timeline to bring the entire package together into construction.
- Gather existing condition data and resources required; evaluate the feasibility of the preferred alternative identified in the previously completed scoping study (by others); and discuss any potential challenges or deviations in the concept with project stakeholders.
- Develop and utilize the conceptual plans to complete the NEPA process.
- Make necessary adjustments to mitigate concerns derived from the NEPA process and advance the project into a complete Preliminary Plan package.
- Work with the Town to acquire the necessary right-of-way to construct a final design package and implement any remaining design modifications to complete a final and contract submittal of plans, specifications, and construction estimates.
- Assist with the project bid process and as needed support throughout construction.

Scope of Work

VHB has based our proposed Scope of Work on the items outlined in the Town's RFP and has added detail where appropriate to clarify our anticipated activities and assumptions. Our team will build off the previously completed Bicycle & Pedestrian Pathway Scoping Study STP BP13(19) from December 11, 2014, to advance the chosen design concept through the project design process and into construction. VHB's detailed Scope of Work is as follows:

1.0 Project Kickoff, Coordination, and Administration

VHB will organize and virtually host a project kickoff meeting to introduce the project team to the stakeholders, discuss project goals, define the exact limits of the project corridor, and determine the appropriate project timeline to bring the entire package together into construction. At the conclusion of the meeting the team will define desired routine check-ins and reiterate the next steps.

We anticipate the VHB project manager and/or project engineer will participate in up to sixteen virtual coordination meetings throughout the development of the project to ensure project stakeholders remain informed of progress, challenges, and opportunities as they are identified. Additionally, VHB will provide project management and administration activities including managing the VHB staff, reviewing and updating the project schedule and budget, coordinating necessary permits and approvals, and project invoicing.

Deliverables: Kickoff Meeting Agenda and Meeting Notes

2.0 Topographic Survey and Base Mapping

With the defined limits of the project corridor discussed in the kickoff meeting, VHB will compile a Base Map to include Ground Survey, Utility Location, and existing Right-of-Way (ROW) information. We will conduct a topographic survey using ground surveying methods to produce a topographic map showing one-foot contour intervals. The horizontal and vertical control will be based on VT State Plane coordinates NAD83(2011) and NAVD88. The survey will result in a three-dimensional base plan of the project area's current conditions including horizontal and vertical control points and roadway approaches.

The topographic survey will also include the location of existing utilities visible from the ground surface. Invert elevations, pipe size, pipe type, and direction of flow will be field located, where accessible. Additional subsurface utility information will be compiled using available record plans from previous roadway project(s) and coordination with the utility companies. VHB will request plans of existing and planned facilities from the public and private utility providers servicing the area.

VHB will research the existing highway right of way to confirm the preliminary determination presented in the scoping study. There was a total of 53 adjacent properties identified in the scoping report. At a minimum, VHB will research the vesting deeds for each of these properties as well as recorded surveys. VHB has estimated up to 2 hours per parcel to do this research, if time permits, VHB will continue building a chain of title for each of these properties to help in the determination of the right of way, as well as for the title abstracts during the right of way phase of the project (Task 6.0).

VHB will compile the field survey, roadway plans, land records, property deeds, and tax maps to create an existing base plan of the project corridor. The compiled roadway plans, property deeds, and tax maps will be used to create the existing ROW information that will be utilized throughout the plan set development phase of this project, in addition to supporting the ROW Plans and Acquisition Process (Task 6.0). Once VHB determines the location and width of the right of way, that information will be presented to the town for their review and concurrence.

Deliverables: Three-dimensional base plan with ROW limits shown.

3.0 Conceptual Plans

With current conditions mapped from Tasks 2.0, 4.1, and 4.2, VHB will kick off the Conceptual Plan development task by reviewing the feasibility of the preferred alternative identified within the scoping study completed by others in 2014. This task is anticipated to include a rudimentary layout of the proposed improvements over the base map. We will identify challenges discovered as well as potential solutions for discussion with the project steering committee prior to advancing the engineering design into a Conceptual Plan submittal.

VHB will develop a conceptual plan set in accordance with State and Federal standards and guidelines. The Conceptual Plans are anticipated to consist of:

- Title Sheet
- Typical Section(s)
- Layout Sheet(s) with graphical representation of limits of disturbance
- Preliminary Profile(s) where appropriate
- Cross Sections

A Traffic Management Plan ("TMP") checklist, which will list the appropriate MUTCD Typical Applications, will be included with this submission. VHB will submit for review a conceptual construction cost estimate with the entire Conceptual Plan package to the Town and VTrans in PDF form.

Following the development of the Conceptual Plans, VHB will conduct a constructability field assessment to evaluate the proposed impacts along the corridor.

Deliverables: Conceptual Plans, Cost Estimate, and TMP Checklist.

4.0 Resource Constraints and CE Documentation

VHB will identify natural and cultural resources on the project plans to support the Town in satisfying the NEPA compliance process, which is expected to be at the level of a Categorical Exclusion ("CE").

4.1 Natural Resource Identification

VHB will complete a desktop and field-based natural resource assessment to identify the presence of both previously mapped and observable known natural resources in the project vicinity. VHB will identify these resources on the Conceptual Plans. Based on the previously developed nature of the project corridor, we do not anticipate encountering any significant natural resources that would be affected by the project. That said, a cursory review of previously

mapped natural resources via the Agency of Natural Resources ("ANR") Natural Resources Atlas and an air-photo analysis and does indicate that wetlands are likely present near the project corridor. There are six prior Wetland Projects documented by the Vermont Department of Environmental Conservation ("DEC") Wetlands Program abutting the corridor. Additionally, a tributary to Water Andric is conveyed under the project corridor just south of the intersection of Hill Street and Grandview Avenue.

A VHB Environmental Scientist will complete a site visit to review the project area, complete a wetland and waters delineation within the ROW limits, and collect representative photographs of conditions within the corridor. To the extent feasible, the VHB Scientist will document readily observable natural resources beyond the ROW in order to assess resources such as Class II wetlands that may be accorded buffers that encroach on the project corridor. Based on the ANR Natural Resources Atlas, there are no known occurrences of state-mapped rare, threatened, or endangered ("RTE") plant or animal species within one mile of the project center. Therefore, VHB will not complete any RTE surveys under this task. This task does include a VHB Environmental Scientist accompanying the DEC District Wetland Ecologist on a walkover of the project corridor to confirm any delineated wetland features.

VHB will prepare a brief report describing the methodology used to evaluate the project corridor for resources and the findings, which will also include a map of previously mapped and VHB-observed natural resources and any recommendations for additional studies.

4.2 Cultural Resource Identification

4.2.1 Section 106 Review and Section 4(f) Evaluation

As part of the Section 106 review process, VHB will begin by reviewing the conceptual plans and defining the Area of Potential Effect ("APE"). Next, VHB will compare the APE with the study area of the 2014 *Historic Preservation Assessment* completed by Hartgen as part of the scoping study. An initial review shows that the majority of properties in the project area have been included in the study. While VHB will be able to incorporate the 2014 study into the Section 106 review, due to the gap in time between the assessment and now, VHB will need to compare the existing conditions of the Area of Potential Effect ("APE") to those described in the report and will verify recommendations of eligibility of individual properties and historic districts.

In advance of fieldwork, VHB will complete desktop research as needed, which could include a review of the Vermont Division for Historic Preservation's ("DHP") Online Resource Center ("ORC") for Vermont Historic Sites and Structures Survey ("VHSSS"), State Register ("SR") listings, and National Register ("NR") listings, as well as other available sources as necessary. As part of the fieldwork, VHB will photograph each resource in the APE and obtain relevant information from records at town libraries and historical societies (if applicable). This includes VHB collecting digital scans of historic photographs, drawings, maps, and/or paintings (if available).

VHB will prepare a draft Section 106 Project Review Memorandum using the current VTrans template. The draft memorandum will include a description of the Project, a Project Area overview and discussion of the APE, a brief historic context, description of above-ground resources, discussion of project alternatives, analysis of project effects to historic resources, and a recommendation of effect. Where applicable, VHB will use information from the 2014 Hartgen study to ensure work is not duplicated. Information for each resource will include:

- Photographs of each property
- Descriptions of the properties
- Discussion of integrity and recommendations of eligibility for the NR

The memorandum will also include an APE map, historic photographs and maps (as appropriate, a discussion of Public Consultation (as applicable and summarized from existing records), an analysis of effects, stipulation(s) (if required), maps, design plans, and other supporting information as appropriate. VHB will submit the preliminary plans to the VTrans Historic Preservation Officer for their review, as part of the Section 106 submittal. VHB assumes that no Vermont Architectural Resource Inventory ("VARI") forms for above-ground historic resources will be required.

VHB will use the findings of the Archaeological Resources Assessment ("ARA," see Task 4.2.2 below) to complete the Archaeological Resources section of the Section 106 project review memorandum.

VHB will identify Section 4(f) resources within the APE. At this time, minor ROW impacts are anticipated to historic properties, which VHB anticipates resulting in a Section 4(f) historic *de minimis* determination. VHB will complete the Section 4(f) determination draft on the VTrans template.

Deliverables: Section 106 Project Review Memorandum in Word format; Section 4(f) draft historic *de minimis* determination.

Assumptions/Limitations

- This scope of services assumes one report of the deliverable noted above, and that the Project (or cultural resources investigations) will not be broken into separate phases.
- VHB assumes that a Section 4(f) historic *de minimis* determination will be required and that an individual Section 4(f) will not be required as part of this project. If that changes, an amendment can be prepared to complete the individual Section 4(f) evaluation.

4.2.2 Archaeological Survey

Based on the 2014 Scoping Report, VHB understands that prior Archaeological Resources Assessments ("ARAs") have been completed along the project corridor by Hartgen Archaeological Associates, Inc. ("Hartgen," in 2003 and 2014) and other archaeological studies have been completed in the vicinity to support VTrans projects. VHB understands that the outcome of these evaluations is that no further archaeological investigations are recommended if disturbance is limited to within 15 feet of the edge of pavement.

A VHB Archaeologist will review all available archaeological reports for the area to confirm this recommendation and will evaluate the design plan to determine if additional studies are warranted. If no such studies are required, the VHB Archaeologist will draft a brief memorandum to support the Section 106 review. VHB assumes that all prior studies (other than the 2014 ARA included as Appendix B in the Scoping Report) will be made available.

If ground disturbance cannot avoid previously identified archaeologically sensitive areas, further study will be required to determine the presence/absence of potentially significant sites. Such studies are not included in this scope of services but can be provided through a contract amendment.

Deliverables: The archaeological review will be included in the Section 106 review, with previously completed ARAs and other studies as a supporting documentation.

Assumptions/Limitations

- The Town will provide the 2003 Hartgen ARA and other VTrans studies to VHB to support the Section 106 review.
- This scope of services assumes one report for the deliverable noted above, and that the Project (or cultural resources investigations) will not be broken into separate phases.

VHB will submit the conceptual plans to the VTrans Cultural Resources Staff for their review.

4.3 Permitting

VHB will work with the Town to acquire federal, state, and local permits necessary to complete the project. VHB assumes that the total limit of disturbance will likely trigger the need for authorization under Construction Stormwater General Permit 3-9020 and will prepare this permit application with the assumption that this will be a "Low Risk" project.

The project is likely to require coverage under a DEC operational stormwater permit for the expanded impervious surface associated with the shared-use path and sidewalk enhancements. It is expected that the planned construction will involve less than the net one acre of impervious area expansion to a single receiving water and therefore only water quality treatment for the net expanded surface will be required, and the remaining treatment standards (i.e., recharge, peak flow) of the 2017 DEC Stormwater Management Manual and Rule will not be required. VHB will prepare an application for coverage under DEC GP 3-9050 for operational stormwater runoff from the project. The stormwater treatment design will incorporate the use of low-impact, green stormwater infrastructure where feasible. In accordance with DEC requirements, VHB will perform up to two days of soil test pit observation and infiltration testing to support the stormwater design.

VHB anticipates that a Section 1111 State Highway Access and Work Permit will be required for the crossing enhancements at US-2.

Based on an initial assessment of the corridor, VHB anticipates that the project may require coverage under the Vermont Wetlands General Permit 3-9025 for minor but unavoidable impacts to Class II wetland buffers. VHB will prepare the necessary application materials for Town review and signature and will submit to the DEC Wetlands Program on behalf of the Town. VHB assumes that any unavoidable project impact to Waters of the U.S. will be eligible for Self-Verification (*i.e.,* no authorization required) under the Department of the Army Vermont General Permit 18.

Lastly, there is no FEMA-designated floodway or Special Flood Hazard Area (*i.e.,* 100-year floodplain) or DEC-mapped River Corridor within the project corridor. VHB assumes that a Flood Hazard and River Corridor ("FHARC") permit would not be required. However, coordination with the DEC Rivers Program would be carried out as necessary should any modifications be necessary to the culvert conveying the unnamed tributary to Water Andric under Hill Street.

VHB will reach out to the Act 250 District Commission Coordinator to determine if any existing Act 250 permits exist within the project area, and whether any permit amendments would be

triggered by the project. There are no such permits mapped by the ANR Natural Resources Atlas. Therefore, we do not anticipate that any Act 250 permits will need to be amended as part of this project.

4.4 NEPA Review

VHB assumes that the appropriate Class of Action for the project will be a Categorical Exclusion ("CE"). VHB will prepare a CE Environmental Analysis Sheet. VHB will draft the appropriate cover letter to the Federal Highway Administration and then we will forward it to the VTrans Environmental Section. VHB will also complete the VTrans Natural Resources Clearance Memorandum, Environmental Specialist Resources Memorandum, and Resource Identification Completion Memorandum. VHB assumes that because the project would not result in significant excavation, significant right-of-way acquisition, or bridge demolition or rehabilitation, an Initial Site Assessment will not be required.

To complete this task, VHB will use information from field survey, Town and VHB resource identification research, and the Conceptual Plans. VHB will also leverage, as applicable, any information from the 2014 Scoping Report.

VHB will use the Conceptual Design, and the environmental studies described above to assess the project's potential impacts on:

- Historic and Archaeological Resources (Section 106)
- Public Lands, Wildlife and Waterfowl Refuges, and Historic Properties [Section 4(f)]
- Private properties through Right of Way impacts

A draft of the CE documents will be provided electronically to VTrans for review, and VHB will incorporate their comments into the final document.

Deliverables: Categorical Exclusion worksheet and supporting documentation

5.0 Preliminary Plans

Once the NEPA process has concluded and VHB receives an authorization to proceed with the Project Design work, the VHB team will develop Preliminary Plans. The preliminary plan set will include:

- Title Sheet
- Project Notes
- Typical Sections and Details
- Quantity Sheet(s)
- Drainage Detail Sheet(s)
- Tie Sheet(s)
- Layout Sheet(s) with detailed definition of slope and construction limits
- Profile Sheet(s)
- Traffic Signs & Pavement Markings Sheet(s)
- Traffic Sign Summary Sheet(s)
- Erosion Control Sheet(s) applicable to a low-risk project

- Traffic Control Sheet(s)
- Cross Sections every 50' and at critical locations
- Preliminary Construction Cost Estimate
- Work Zone TMP Checklist with applicable supplemental documents

VHB will identify potential light fixture locations and conduit layout to improve street lighting at the proposed pedestrian crossing locations.

VHB will provide the plans to Town Officials and VTrans for review. We will coordinate a submission review meeting to discuss comments received and determine the required design modifications prior to proceeding into the ROW process. VHB anticipates that a Revised Preliminary submission will not be required prior to proceeding into the ROW phase.

Deliverables: Preliminary Plans, Cost Estimate, and TMP Checklist

6.0 Right-of-Way Plans and Acquisition Process

6.1 Right-of-Way Plans

Reviewing the preferred alternative defined within the scoping study and available parcel mapping, VHB assumes right-of-way (ROW) acquisition will be required to construct the project. Using the project construction limits and any anticipated need for temporary rights during construction, VHB will determine the need for additional ROW, including permanent and temporary easements, beyond the existing ROW.

Existing ROW, and all areas of additional ROW, whether temporary or permanent, will be clearly indicated on ROW plans prepared by VHB in accordance with standard survey practices. Draft ROW plans and draft deeds (deeds to be prepared by the Town) will be submitted to VTrans for review and approval prior to negotiating with property owners. Easement language will be consistent with guidance provided by the VTrans ROW section. ROW plans will include all of the Preliminary Plan elements with the addition of the following:

- Right-of-Way Layout Sheets
- Property Acquisition Table

VHB will also provide title abstracts to VTrans specifications for all of the impacted parcels. For the purposes of this scope and estimate, VHB has assumed that 28 of the 53 parcels will have impacts and therefore will need title abstracts. The land records research gathered under Task 2.0 will be used as the basis for the title abstracts.

6.2 Right-of-Way Coordination

For the purposes of this proposal, we have assumed that the Town will be responsible for all necessary appraisals, property owner negotiations, and acquisitions needed to complete the project. The VHB Project Manager or Project Engineer will attend up to two ROW meetings with impacted property owners.

7.0 Final Plan Development

VHB will complete Final Plans, quantities, and cost estimates according to VTrans MAS guidelines. VHB will prepare draft bid documents and special specifications based on the MAS standard boilerplate templates. We will finalize the project TMP Checklist and supplemental documents. VHB will prepare a "Utility & Railroad Clearance" that indicates that all necessary utility coordination has been completed. VHB will submit these final plan documents to the Project Stakeholders for distribution and review.

8.0 Develop Contract Plans

Upon receipt of comments from the Final Plan submission, VHB will prepare stamped Contract Plans, Specifications, and Estimate to complete the preparation of the Bidding Documents for this project.

9.0 Bid Analysis

VHB assumes that the Town will administer the bidding process, but VHB will be available to answer technical questions during the bidding period and provide support during the bid opening to ensure all required components of the bid have been submitted. VHB will conduct a bid analysis of the bids and will make a recommendation to the Town on the project award.

10.0 Construction Services

VHB will hand off the responsibility for the TMP checklist and supporting documentation to the construction inspector at the pre-construction conference. VHB will provide limited assistance during the construction phase, primarily to answer any design questions that come up. We will also review for conformance, any required contractor submittals. It is anticipated that up to three visits to the project site during construction will be requested.

Project Schedule

VHB's management approach is based on the quality of our personnel and our ability to manage projects to provide on-time, within-budget completion of milestones. We know that frequent communication is essential to keeping projects moving forward through design and construction. In addition to frequent communication, we have learned through experience that a successful management plan must:

- Define an organizational structure with direct lines of responsibility and communication
- Base activities on a clear, agreed-upon understanding of the objectives of the client, the required products, the technical requirements, and the required external and internal relationships and coordination
- Be flexible to meet constantly changing demands and circumstances
- Assign the right leadership and staff who are committed to the project for its duration
- Make effective use of technology to inform, assure, and communicate with stakeholders

Assuming that a Notice to Proceed is provided prior to May 2, 2025, and that no unforeseen delays or obstacles are encountered during the course of the project, we anticipate the project to proceed along the following schedule:

TASK	ANTICIPATED SCHEDULE
Project Kickoff Meeting	May 2025
Collect and Compile Available Information	May – June 2025
Conceptual Plans	June – August 2025
Resource Constraints and CE Documentation	May – August 2025
Develop Preliminary Plans	January – March 2026
Right-of-Way Plans and Acquisition Process	May 2026 – March 2027
Final Plan Development	April - June 2027
Develop Contract Plans	July - August 2027
Construction	Summer 2028

Assumptions

VHB has made the following assumptions for the preparation of this scope and fee estimate:

- VHB assumes that lighting enhancements will be required only at three pedestrian crossing locations (Town Highway 120, entrance to the school, and at the Hill Street Park). Should additional lighting design be requested as part of this project, VHB can provide these services under a supplemental agreement.
- There was a thorough project definition process completed by others on December 11, 2014, that included public engagement. The scoping report does not indicate project opposition and a potential need for Necessity and Condemnation meetings. VHB assumes up to two Right-of-Way coordination meetings will be required throughout the acquisition process. Should further support be required during the ROW process, VHB can prepare hearing graphics and attend Necessity and Condemnation meetings under a supplemental agreement.
- VHB has not included structural detailing as part of this contract. Should retaining walls be required to accommodate the proposed pedestrian infrastructure, VHB can provide the appropriate structural services under a supplemental agreement.
- VHB assumes that no further public engagement is required as part of this project. Should a public meeting or other form of public engagement be required, VHB can provide those services under a supplemental agreement.
- VHB assumes no contaminated soil investigations will not be required as part of this contract. VHB will provide a review of hazardous materials listings and residual waste liabilities mapped on the Agency of Natural Resources Atlas ("ANR Atlas") to satisfy obtaining a NEPA CE, and should an Initial Site Assessment be required, VHB can provide those services under a supplemental agreement.
- VHB assumes that an excavator rental is not required for any soil testing associated with the operational stormwater permit, and that the Town will provide excavation services through their roadway maintenance crew. Should excavator rental be required, VHB can contract that work under a supplemental agreement.
- VHB assumes that the project area is defined by the limits of shared use path and sidewalk noted as the preferred alternative within the Bicycle & Pedestrian Pathway Scoping Study STP BP13(19) dated December 11, 2014. This equates to approximately 2,000 linear feet of shared use path along the westerly side of Peacham Road from Town Highway 120 to Park Street; a gap in proposed improvements from Park Street through the US-2 crossing; picking back up on the north side of US-2 to improve a crossing of Hill Street and design a new sidewalk connection on the westerly side of Hill Street to Grand View Avenue before crossing Hill Street and continuing the sidewalk connection on the Easterly side of Hill Street to Highland Avenue – a total of approximately 1,350 linear feet of new sidewalk north of US-2.

Key Personnel

Our Vermont engineering staff brings passion for improvement to mobility for pedestrians and cyclists. We are well versed in planning, designing, permitting, and constructing facilities in Vermont's downtown areas. Specific to the initial NEPA tasks, VHB also brings a strong component for environmental assessments, inclusive of supporting disciplines such as historic analysis, wetlands delineation, and hazardous materials identification. VHB personnel can provide a full range of services from project administration, path and sidewalk design, parking area and amenities layout and detailing, hydraulics, and survey, to environmental permitting and historic preservation, public engagement, and construction services. Our integrated team is committed to this project and has extensive experience providing similar services for communities throughout Vermont. For the successful completion of this project, the below listed key personnel are the intended champions of their specific expertise with further support from the full suite of VHB's Design and Support staff found within the VTrans ATR Consultant Engineering Services for Design 2023.

Branden Roberts, PE – Project Manager | 11 years of professional experience

The Vermont Director of Transportation Engineering at VHB, Branden has a wide-ranging portfolio that includes managing and supporting both the planning and design of roadway, bicycle, pedestrian facility, and stormwater design projects for the Vermont Agency of Transportation (VTrans) and municipal clients throughout Vermont, as well as field construction inspection experience. He manages a team comprised of nine Vermont based transportation project managers, engineers, and designers that focus on the successful delivery of projects not only in Vermont, but also for clients in Maine, New Hampshire, and upstate New York.

Evan Detrick, PE – Technical Advisor, QA/QC Manager | 40 years of professional experience

Evan is a Civil Engineer with over 40 years of experience supporting federal, state, municipal, and private sector projects. As VHB Vermont's Chief Transportation Engineer, Evan's responsibilities include Quality Assurance and Control processes are followed on each assignment delivered, and mentoring the 30-person transportation team delivering projects in Vermont. He has completed the planning and design of projects, including traffic signal and roadway reconstruction; a variety of sidewalks, pathways, and trails; property and topographic surveys; and stormwater improvement projects. He has managed more than 75 projects developed for municipalities through the VTrans MAS/MAB. He served as Project Manager for the design of several sidewalk enhancement and complete streets projects like the Wilmington East Main Street, Winooski Main Street, and Burlington Great Streets projects.

Brad Ketterling – Lead Environmental Scientist | 28 years of professional experience

Brad works as an environmental scientist specifically in the fields of wetland mitigation site feasibility and design, stream assessment, watershed planning, state and federal permitting, and NEPA compliance. As Director of VHB Vermont's Natural Sciences Team, Brad helps clients navigate complex regulatory requirements and achieve successful results by identifying and assessing natural and cultural resource issues and constraints and developing strategies to obtain authorizations that are in the best interest of the client and the environment. For this project, Brad will have a key role leading our environmental team through the NEPA process.

Ryan Cloutier, LS – Right-of-Way | 26 years of professional experience

Ryan provides overall program management for the Vermont office's survey team. Ryan has over 26 years of experience surveying projects across New England for both public and private sector clients. He has in-depth experience planning, collecting, analyzing and managing right-of-way information for transportation projects. Ryan held senior positions at VTrans including head of plans and titles and survey in the VTrans ROW section. He spent nearly a decade making right of way information more accessible by improving processes, implementing standards, developing interoperability, modernizing right of way data, and integrating systems.

Kaitlin O'Shea – Historic/Cultural Resources | 19 years of professional experience

Kaitlin is a Preservation Planner a strong background in and understanding of preservation principles and practices. With 19 years of professional preservation experience, Kaitlin provides expertise in regulatory processes and compliance, particularly Section 106 review and Section 4(f) evaluations of transportation projects, as well as historic documentation, historic resource identification, and project management. Kaitlin meets the Secretary of the Interior's Professional Qualification Standards for Architectural Historian and Historian (36 CFR 61).

Zack Clark – Contaminated Sites Consultant | 13 years of professional experience

Zack is a Project Manager with 13 years of professional experience in contaminated sites investigation, remediation, management, and reporting, in Vermont. He has written and directed the implementation of numerous Corrective Action Plans and Soil Management Plans, for contaminated sites in the State of Vermont, including several large-scale infrastructure projects, and is intimately familiar with the incorporation of contaminated material management into construction contracts.

Carolyn Black – Environmental Planner | 4 years of professional experience

Carolyn is an Environmental Planner with the South Burlington Environmental Services team. Carolyn earned her master's degree in environmental planning and management while working for the National Park Service in a facilities management and administrative support role. With her combined professional and academic background, Carolyn supports developing NEPA documents, GIS/mapping for compliance needs, and assisting with agency and public coordination. She has contributed to a range of NEPA documents for a variety of roadway, bridge, and multi-use path projects for a variety of Federal and state agencies.

Tanner Burt, PE – Project Engineer | 6 years of professional experience

Tanner is a highway engineer in the VHB South Burlington Office with significant highway design experience in the geometric design for both permanent and temporary roadways and intersections. Tanner is highly experienced with three-dimensional model design using Bentley OpenRoads having led the highway and railroad modeling effort on the Royalton Project. Tanner is also involved with highway design and modeling for the Colchester Exit 17 and Poultney bridge projects.

Chris Ramos, EIT – Project Designer | 1 year of professional experience

Chris is a Transportation Designer in VHB's Vermont office, who gained experience in plan development during his previous internship with VHB. He is graduated from the University of Vermont spring of 2024 with a bachelor's in science civil engineering. Chris has assisted in several transportation and traffic projects for VTrans and our Municipal clients alike.

Note: Resumes that were not previously included in VHB's Design and Support staff found within the VTrans ATR Consultant Engineering Services for Design 2023 have been appended to the back of this proposal.

Cost Proposal - Summary

VHB
40 IDX Drive, Building 100, Suite 200
South Burlington, VT 05403

COST SUMMARY
Danville Sidewalk Infrastructure Project
Danville CDS CD25(1)

	PHASE DESCRIPTION	Labor Hours	Direct Labor Cost	Overhead 169.78%	Fee 10%	Task Totals
1.0	Project Kick-Off Meeting & Project Management	87	$5,134	$8,717	$1,385	$15,236
2.0	Topographic Survey and Base Mapping	282	$10,777	$18,297	$2,907	$31,981
3.0	Conceptual Plans	207	$9,106	$15,460	$2,457	$27,023
4.0	Resource Constraints and CE Documentation	300.5	$13,243	$22,484	$3,573	$39,300
5.0	Preliminary Plans	272	$11,889	$20,185	$3,207	$35,281
6.0	Right-of-Way Plans and Acquisition	163	$6,578	$11,168	$1,775	$19,521
7.0	Final Plan Development	181	$7,987	$13,560	$2,155	$23,702
8.0	Develop Contract Plans	81	$3,588	$6,092	$968	$10,648
9.0	Bid Analysis	26	$1,068	$1,813	$288	$3,169
10.0	Construction Services	44	$1,922	$3,263	$519	$5,704
	Labor Subtotal	**1643.5**	**$71,292**	**$121,039**	**$19,234**	**$211,565**
	PROJECT LABOR GRAND TOTAL	**1643.5**	**$71,292**	**$121,039**	**$19,234**	**$211,565**
	VHB DIRECT EXPENSE TOTAL					**$2,380**
	PROJECT GRAND TOTAL					**$213,945**

COST PROPOSAL - VHB LABOR SUMMARY

Danville Sidewalk Infrastructure Project - Danville CDS CD25(1)

LABOR BUDGET

	TASK DESCRIPTION	QA/QC Manager *Detrick*	Project Manager *Roberts*	Project Engineer *Burt*	Light. / Permit. / ROW Specialist *Willard / Ketterling / Cloutier*	Stormwater Engineer *Mills*	Natural/Cultural Resources *Black / O'Shea Clark / Honsinger*	Project Designer *Ramos*	Survey Crew Chief *Watuch*	Surveyor *Goodwin*	Total Hours	Direct Labor Costs
1.0	**Project Kick-Off Meeting & Project Management**											
	Prepare for, Attend, and Document Kick-Off meeting	1	2	2			2	2	0.5	0.5	10	$ 502
	Coordination Meetings and Project Administration	1	60	16							77	$ 4,632
2.0	**Topographic Survey and Base Mapping**											
	Collect Ground Survey and Compile into Base Plan		2	2					80	20	104	$ 3,924
	Existing Utility Location and Coordination							4		8	12	$ 484
	Existing Right-of-Way Compilation			2	4				120	40	166	$ 6,369
3.0	**Conceptual Plans**											
	Scoping Study Feasibility Review	1	6	20							27	$ 1,354
	Conceptual Planset Development	2	16	40				80	4		142	$ 5,880
	Conceptual Construction Estimate and TMP Checklist		2	4				8			14	$ 580
	Constructability Field Reconnaissance		12	12							24	$ 1,292
4.0	**Resource Constraints and CE Documentation**											
	Natural Resource Identification			4	1		24				29	$ 1,218
	Section 106 Review and Section 4(f) Evaluation				0.5		40				40.5	$ 1,654
	Archaeological Resources Assessment Review						20				20	$ 809
	Construction Stormwater					2		30			32	$ 1,161
	Operational Stormwater			60		30					90	$ 4,439
	Vermont Wetland General Permit Application		1	8	4		16				29	$ 1,349
	USACE Self-Verification Coordination (if required)			2			2				4	$ 168
	DEC Rivers Coordinaton (if required)				2		8				10	$ 468
	NEPA Review and VTrans Clearance Memos		2	2	2		40				46	$ 1,977
5.0	**Preliminary Plans**											
	Preliminary Planset Development	2	20	80	24			120			246	$ 10,857
	Preliminary Construction Estimate and TMP Checklist		2	8				16			26	$ 1,032
6.0	**Right-of-Way Plans and Acquisition**											
	Right-of-Way Plans	1	2	16	8			56	64		147	$ 5,717
	Right-of-Way Coordination		8	8							16	$ 861
7.0	**Final Plan Development**											
	Final Planset Development	2	12	40	12			80			146	$ 6,346
	Finalize Construction Estimate and TMP Checklist	0.5	2	8				16			26.5	$ 1,081
	Develop Bid Docs	0.5	8								8.5	$ 560
8.0	**Develop Contract Plans**											
	Final Plan Review Meeting and Revisions	1	12	24	4			40			81	$ 3,588
9.0	**Bid Analysis**											
	Assist in Bid Process and Complete Bid Analysis		2	12				12			26	$ 1,068
10.0	**Construction Services**											
	Limited Construction Phase Services		8	18				18			44	$ 1,922
	TOTAL HOURS:	12	179	388	61.5	32	152	482	268.5	68.5	1643.5	
	DIRECT HOURLY RATES:	$ 96.60	$ 63.94	$ 43.71	$ 72.00	$ 60.56	$ 40.45	$ 34.67	$ 35.56	$ 43.17		$ 71,292

DIRECT LABOR COSTS: $ 71,292

Direct Expenses Sheets

40 IDX Drive, Building 100
Suite 200
South Burlington, VT 05403

DIRECT EXPENSES

Danville Sidewalk Infrastructure Project - Danville CDS CD25(1)

	DESCRIPTION	Unit	Unit Costs	Quantity	ESTIMATED DIRECT EXPENSES
1	Full Size Plotting - Working Drawings	SF	$0.300	0	$0.00
2	Half Size Printing - Working Drawings	EA	$0.081	0	$0.00
3	Full Size Plotting	SF	$0.30	1,200	$360.00
4	Large Format Photocopying (Black & White)	SF	$0.500	0	$0.00
5	Color Plots	SF	$3.25	0	$0.00
6	Photocopying (Black & White)	EA	$0.081	100	$8.00
7	Photocopying (Color)	EA	$0.47	25	$12.00
8	Travel	Mile	$0.700	2,000	$1,400.00
9	Miscellaneous	LS	$200.00	3	$600.00
				Grand Total =	**$2,380.00**

Education

BS, Civil Engineering, Worcester Polytechnic Institute, 2007

Registrations/Certifications

Professional Engineer (Civil), VT, 01/2025

Affiliations/Memberships

American Society of Civil Engineers, Vermont, 2007

Andrew G. Mills, PE

Task Leader—Stormwater/Phosphorous Reduction

Andrew is a Project Manager at VHB, and performs a wide range of design, permitting, and project management tasks. He has extensive experience in all aspects of civil/environmental engineering, particularly the stormwater management field. Andrew also performs construction administration and observation duties for a variety of clients including erosion control monitoring and reporting. With over 17 years of engineering experience, Andrew uses his broad range of skills and experience working on demanding, fast-paced projects to complete projects in an efficient and effective manner. He maintains good working relationships with a host of State and local regulators as well as provides quality project presentations at local hearings and meetings.

17 years of professional experience

VTrans, Stormwater Retrofit Program, Various Locations, VT

VTrans engaged VHB to provide final design and permitting for operational stormwater retrofits as required by the TMDL for the Allen Brook, Rugg Brook, Stevens Brook, Potash Brook, and Indian Brook watersheds in northwest Vermont. Andrew served as the lead stormwater engineer for these projects, which included the first impaired watershed retrofit project undertaken by VTrans, and included the design and permitting of over 40 stormwater treatment practices, primarily along Interstate 89 between Williston and St. Albans. The treatment practices were designed to maximize treatment towards meeting the high-flow target of the TMDLs while also maximizing water quality treatment to provide phosphorus reduction and credit towards the VTrans phosphorus control plan and Lake Champlain TMDL.

VTrans, I-89 Exit 17 Interchange, Colchester, VT

VHB was the lead operational stormwater designer for this major transportation infrastructure project to reconstruct Exit 17 on Interstate 89 in Colchester. The project addressed safety concerns and replaced the structurally deficient bridge over the interstate. In addition, the project included new ramp construction, ramp relocation, roadway widening, reconstruction of three signalized intersections, bicycle and pedestrian accommodations, and stormwater treatment. VHB also led the environmental permitting and engineering design efforts including traffic modeling and engineering, highway geometry design, structural engineering, environmental permitting, transportation management, and public outreach. Andrew led the design and permitting of the operational stormwater treatment system across the project footprint, which included three different types of water quality treatment practices and extensive modeling to demonstrate compliance with peak storm events.

VTrans, Public Transportation Projects, Various, VT

Andrew has served as the lead stormwater engineer for a variety of transportation projects for the Vermont Agency of Transportation. This work included designing and permitting stormwater treatment systems for roadway and bridge projects which includes BMPs such as dry swales, gravel wetlands, media filter drains, infiltration practices, and detention practices.

Andrew G. Mills, PE

Some of the projects that Andrew has assisted on or led the design and permitting for include Barre City-Barre Town—MEGC M 6000(11), New Haven HES 032-1(8), Chester—BO 1442(39), Royalton—BF 0147(29), Swanton—NH 036-1(9), Barre City HES 037-1(8), Hinesburg HES 021-1(19, and Rockingham (Bellows Falls) BO 1442(41). These transportation projects typically present significant site constraint challenges and required creative designs to accomplish the treatment goals of the project.

City of South Burlington, Exit 14 East/West Connection, South Burlington, VT

Andrew provided stormwater engineering design and permitting services for this project which consists of a new multiuse path and bridge through the Exit 14 interchange of Interstate 89 in South Burlington. The project required coordination with the City of South Burlington as the owner of the path and VTrans due to the use of the interstate ROW and the establishment of maintenance agreements for the stormwater treatment practices on both sides of the interstate. The project also required extensive pre-application coordination with the VT DEC Stormwater Program due to its location on the border of two impaired watersheds.

City of St. Albans, Federal Street Multimodal Connector, St Albans, VT

The City of St Albans engaged VHB to provide design and permitting services for this project which seeks to provide a connecting route from the St Albans State Highway to Federal Street to the north. Andrew provided stormwater treatment design and permitting services for the project, which includes a section of new road along undeveloped ROW and extensive redevelopment of additional public roads. The project is located in the impaired Stevens and Rugg Brook watersheds and as a result the stormwater treatment practices needed to not only meet the treatment requirements for the project but also the treatment targets of the Flow Restoration Plans for the impaired waterways.

VTrans, Williamstown-Northfield Park and Ride, Williamstown, VT

Andrew served as the stormwater design engineer for a new park-and-ride in Northfield and Williamstown, VT. The stormwater design for the project consisted of multiple dry swales which provided both water quality treatment and runoff conveyance. Originally contemplated as infiltrative practices the design was subsequently revised with an impermeable liner to address potential migration of contaminated groundwater on an adjacent site.

Zack Clark

Site Investigation & Remediation – Task Leader

Education

BS, Environmental Science, UVM, 2010

Registrations/ Certifications

Class 2 Public Water System Operator (State of Vermont – DEC)

Grade 1 Wastewater System Operator (State of Vermont – DEC)

Class A Designer License (State of Vermont – DEC, Field Exam Pending)

40 Hour HAZWOPER Certification and 10 Hour Construction Safety Certification (OSHA)

50-Ton Master Mariner Captains License (United States Coast Guard)

Zack is an Environmental Scientist with over five years of professional experience in the preparation of various State of Vermont permitting applications, construction oversight and environmental engineering review. Zack also has substantial experience with the physical implementation of various Corrective Action Plans, including the installation and maintenance of active groundwater and soil vapor remediation systems. Zack is a Class 2 Public Water System Operator, a Grade 1 Wastewater Treatment Facility Operator and a licensed wastewater disposal system designer, in the State of Vermont, with experience in the design and operation of various public and private water supply and wastewater disposal systems.

12 years of professional experience

North Hero – Grand Isle Drawbridge Replacement Project, Grand Isle, VT
Zack was the field team lead and boat captain for site investigation sampling efforts through to Soil/Sediment Management Plan implementation monitoring and documentation. Site Investigation sampling included collection of several hundred sediment and soil samples collected on a defined grid via multiple collection methods. Additionally, Zack was responsible for the preparation of various ongoing technical documents for waste profiling and disposal of contaminated media, interim DEC reporting, and spill/release reporting, as necessary.

Green Mountain Power, On-Call Environmental Permitting Services, Vermont
Zack is supporting VHB in working with Green Mountain Power (GMP) on a variety of permitting and compliance tasks including: substation remediation projects for Section 248 certificates issued by the Vermont Public Utility Commission; TSCA/RCRA compliance; SPCC Plans; air compliance monitoring; management of hazardous and PCB wastes; employee hazard waste awareness, SPCC, and other compliance trainings; and FERC license compliance.

Bolton Falls Hydroelectric Facility FERC Relicensing, Duxbury and Waterbury, VT

Zack is contributing to VHB's Pre-Application Document (PAD) for the Federal Energy Regulatory Commission (FERC) Relicensing for the Bolton Falls Hydroelectric Facility. The PAD portions VHB is responsible for include Geology and Soils; Water Quality Standards and Classifications; Section 303(d) Listing, Non-Compliant Waters and TMDLs; Rare, Threatened and Endangered Species; and Wildlife and Botanical Resources.

Burlington Amtrack Siding and Station Redevelopment Project, Burlington, VT
Zack is responsible for research, design and implementation of Environmental Site Assessment design and reporting through to development of a soil management plan for this linear downtown rail transportation project.

East Fairfax Substation Project, Fairfax, VT
Zack is responsible for construction oversight, project status reporting, and soil sampling during excavation and disposal of PCB contaminated soils. Work was completed in accordance with the approved ABCA/CAP/SIP.

Hydroelectric Forecasting: Winooski River Watershed, VT

Zack is supporting VHB in helping Green Mountain Power (GMP) improve its ability to forecast the amounts of hydroelectric power that it can generate, for use in planning "day-ahead" reporting of expected power production rates, in order to meet requirements of the ISO-New England electric grid operator. GMP also seeks a forecast system to report daily information about the equivalent amount of energy stored, as water, in certain impoundments. Zack is contributing to VHB's development of a computerized flow and energy model to be used by GMP to forecast power production for up to three days into the future.

Middlebury Bridge and Rail Project, Middlebury, VT

Zack is responsible for preparation of a Corrective Action Plan as well as implementation compliance monitoring on this large-scale linear transportation project. Also responsible for compliance monitoring and amendment of a NPDES permit for critical excavation dewatering treatment and discharge to waters of the state.

NYPA PV-20 Submarine Cable Replacement Project

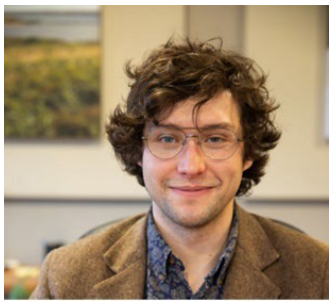
As Boat Captain for field studies, Zack contributed services to the Preliminary Design Phase of this project, which will replace subsurface power transmission lines that were installed between 1958 and 1970 under Lake Champlain to connect the systems of the New York Power Authority (NYPA) and the Vermont Electric Company (VELCO) in New York and Vermont. The project will install four new 230 kV electric transmission cables and remove seven existing 115 kV electric transmission cables crossing under Lake Champlain.

Winooski Main Street Reconstruction, Winooski, VT

Zack participated in design and implementation of soil pre-characterization assessment for the redevelopment of a portion of Main Street that passes through multiple known hazardous sites. He prepared a soil management plan for management of contaminated media during construction and will be the field team lead for construction monitoring in accordance with the Soil Management Plan.

Alexander Honsinger, RPA

Archaeologist/Cultural Resources Specialist



As an Archaeologist and Cultural Resources Specialist in VHB's South Burlington, VT, office, Al specializes in completing archaeological investigations for regulatory reviews. He is well-versed with all stages of archaeological research and review throughout New England, beginning with predictive modeling and ending with the timely submission of completed project deliverables to clients and regulatory partners. Alexander's research expertise concerns pre-contact archaeology throughout Vermont and greater New England, but he also possesses demonstrative experience evaluating historic archaeological resources in the region.

Education

MA, Anthropology, University of New Brunswick, 2021

BA, Anthropology, University of Massachusetts Amherst, 2017

Alleghany Valley Project Archaeological Field School, 2016

Registrations/Certifications

Register of Professional Archaeologists

7 years of professional experience

Winooski River Four Dam Project ARA – Vermont River Conservancy, Montpelier and East Montpelier, VT

Under contract with Vermont River Conservancy, the VHB team has been tasked with completing an ARA for the removal of four dams along the Winooski River in Montpelier and East Montpelier, VT. The project has integrated archival research, GIS-based predictive modeling, and thorough field investigations to produce project-specific cultural contexts for archaeological resources. VHB will provide punctual recommendations for planning purposes and work to develop avoidance measures for archaeologically sensitive portions of the Project Area.

VTrans On-Call Archaeological Support Services Retainer Contract, Statewide, VT

As part of the General Environmental Services Agreement 2024 Contract (#PS0781), VHB was selected from four firms to provide various archaeological services to VTrans. Under this authorization, Al has begun Section 106 reviews and archaeological resource assessments ("ARAs") for various transportation projects. Al draws from his experience as a Cultural Resources Specialist for VTrans providing punctual project reviews while maintaining thigh quality research standards.

Panton Solar Substation ARA – SunEast Development LLC, Vergennes, VT

Under contract with SunEast, the VHB team has been tasked with environmental permitting for the Panton Solar Project. In addition to managing broader cultural resource studies for the Panton Solar Project, our Cultural Resources Group has also been recently tasked with the ARA of a newly proposed substation which will distribute energy generated by the proposed 404-acre solar array. The project integrated archival research, GIS-based predictive modeling, and thorough field investigations to produce project-specific cultural contexts for archaeological resources. The effort resulted in the identification several portions of the project containing pre-contact archaeological sensitivity. VHB is developing recommendations for archaeologically sensitive portions of the Project Area which fall within the Otter Creek watershed, an important pre-contact travel corridor and highly archaeologically

Catamount Gas Station Project, Vermont Gas Systems Inc., Milton, VT
Under contract with Vermont Gas Systems Inc., Al was part of the VHB team completing the environmental permits for the project. The project integrated archival research, GIS-based predictive modeling, and thorough field investigations to produce project-specific cultural contexts for archaeological resources. Al completed the ARA for gas system upgrades in Milton, Vermont, providing punctual recommendations for project planning purposes while maintaining high quality research standards.

Bennington STP 0137(20) and Bennington NH 019-1(30) Intersection Upgrades ARA – VTrans, Bennington, VT

Under contract with VTrans, the VHB team was tasked with designing, engineering, and completing the environmental permits for the project. Our Cultural Resources Group completed the ARA for two proposed upgrades to intersections in Bennington, Vermont, which abut the Battenkill River, an important pre-contact travel corridor and highly archaeologically sensitive waterway. The project integrated archival research, GIS-based predictive modeling, and thorough field investigations to produce project-specific cultural contexts for archaeological resources. The effort resulted in the identification several portions of the project containing pre-contact archaeological sensitivity. VHB provided punctual recommendations for planning purposes and worked to develop avoidance measures for archaeologically sensitive portions of the Project Area with design internally at VHB.

VT Silver Lake Dam Rehabilitation - Pare Corporation and Vermont Department of Environmental Conservation (VTDEC), Barnard, VT

Under contract with the Pare Corporation and VTDEC, the VHB team was tasked with completing the environmental permits for the project. Our Cultural Resources Group completed the ARA for the rehabilitation of the Silver Lake Dam in Barnard. To complete this effort, VHB drew upon the skills of its multifaceted Cultural Resources Group to produce a holistic assessment of both pre-Contact and historic period archaeological resources. The project integrated archival research, GIS-based predictive modeling, and thorough field investigations to produce project-specific cultural contexts of archaeological resources. The effort resulted in the identification of a newly registered archaeological site comprised of historic mill remains and project portions containing pre-contact archaeological sensitivity. VHB provided punctual recommendations for planning purposes and worked with Pare to develop avoidance measures for archaeologically sensitive portions of the Project Area.