

January 6, 2017 | Qualifications

**Vermont Agency of Transportation**

# At-the-Ready Consultant Engineering

Municipal Project Management Services



January 6, 2017



Ms. Nydia Lugo  
Technical Development Engineer  
Vermont Agency of Transportation  
One National Life Drive  
Montpelier, VT 05633-5001

**Re: Vermont Agency of Transportation –  
At-the-Ready Consultant Engineering Services for Municipalities  
Municipal Project Management Services**

VHB is pleased to present our proposal in response to the Agency's Request for Qualifications for At-the-Ready **Municipal Project Management Services**. Our proven dedication to VTrans and its municipal transportation partners spans nearly 30 years. We understand the challenges facing Vermont and its communities and are firmly committed to helping achieve the vision of a safer, more efficient, and more connected transportation network. We believe in making meaningful contributions to our communities and our state by providing a balanced relationship between economic growth and environmental stewardship. We are committed to quality and at 1,300-strong, we provide both the local connection and depth of resources to meet the full needs of the VTrans Municipal Assistance Bureau (MAB) program.

Our team members' expertise and previous experience planning, permitting, and designing a wide range of roadway, bicycle, pedestrian, and multimodal projects across Vermont and New England has provided us with insights into innovations and potential issues that may arise during the course of these projects. Our staff members have served as Project Administrators for VTrans MAB, Structures, and Park and Ride projects, managing consulting engineers through VTrans process and procedures, giving VHB even greater insight into what makes projects successful.

We are extremely pleased to present our proposal and we look forward to working together with Vermont municipalities and VTrans on projects that make our communities even better places to live.

Sincerely,

A handwritten signature in black ink that reads "Evan P. Detrick".

Evan Detrick, PE  
**Program Manager**  
Director of Transportation Engineering  
[edetrick@vhb.com](mailto:edetrick@vhb.com)

A handwritten signature in blue ink that reads "David Saladino".

David Saladino, PE, AICP  
**Principal-in-Charge**  
Managing Director  
[dsaladino@vhb.com](mailto:dsaladino@vhb.com)

**Our team is  
dedicated to  
our clients  
and the  
projects that  
improve  
mobility,  
enhance  
communities,  
and make  
Vermont a  
better place  
to live.**

# General Firm Information





VHB  
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Building 100, Suite 200  
S. Burlington, VT 05403  
802.497.6100  
edetrick@vhb.com

## Overview

The Vermont Agency of Transportation (VTrans) Municipal Assistance Bureau (MAB) was initially established in the 1990's as the Local Transportation Facilities (LTF) section of the Program Development division. Since its inception, the mission of this unit has been to provide assistance to municipalities and other organizations (project sponsors) to implement transportation improvement projects in their communities. These projects span a wide range of topics which may include sidewalks and pathways, intersection improvements, bridge replacements, rehabilitation of covered bridges, Safe Routes to School projects, Scenic Byway corridor plans, transportation scoping studies, stormwater improvements, crosswalk enhancements, and the rehabilitation of historic structures.

Projects through the MAB are funded using a variety of sources, often including federal monies such as Transportation Alternatives Program grants, along with local matching funds, and occasionally state funds. With the use of federal and state funds, the projects are administered through VTrans and must be developed following the VTrans project development process outlined in the MAB's Local Projects Guidebook for Locally Managed Projects. Under this process, the municipality manages and develops the project, and VTrans administers the funding and verifies the established process is being followed. Although VTrans helps the municipality with many aspects of the project development, it is ultimately the municipality's responsibility to advance the project. To do so, municipalities rely on the help of consultants. Consultants can assist the municipalities in three different ways:

- Manage the project on behalf of the municipality by serving as the Municipal Project Manager (MPM);
- Serve as the designer responsible for developing plans and specifications or preparing scoping reports;
- Provide construction administration and inspection services.

To retain the services of a consultant, municipalities have traditionally solicited proposals or statements of qualifications to identify and determine which consultants are best qualified for the project. This process has been burdensome on some municipalities, especially those with small staffs that are not familiar with the solicitation process. To streamline and simplify the process, the VTrans MAB has issued this request for qualifications to identify a list of consultants that can provide services to municipalities on an “At the Ready” basis.

VHB is happy to respond to VTrans’ RFQ to provide Municipal Project Management services to municipalities and other project sponsors across the state.

**VHB has a long history of delivering multi-faceted transportation services throughout Vermont. Through our extensive experience on numerous VTrans retainer contracts and individual MAB projects, we are ideally suited to provide project management services under this retainer. The VHB staff members dedicated to providing MPM services under this retainer have provided MPM services to municipalities across the State, and/or have served as consultant project managers working side-by-side with VTrans MAB staff to advance Park & Ride projects directly on behalf of VTrans. Our managers have a deep understanding of MAB’s process and procedures and are committed to helping municipalities advance their projects from concept to completion.**

Our Vermont team is the right size to provide caring and responsive services, and with the support of many experts across New England, we have the resources to tackle the most challenging of assignments. We look forward to working with VTrans and municipalities for the betterment of Vermont’s transportation infrastructure.

## General Firm Information

Since 1979, VHB has partnered with private- and public-sector clients to provide high-quality transportation engineering services through an integrated team approach. VHB has continued to grow and hone a diverse workforce that delivers personalized service and brings value, responsiveness, and excellence to municipalities. We pride ourselves on our ability to guide our clients from initiation to completion of multi-disciplined, challenging, and important transportation projects of all sizes.

Collaboration is a focal point of our approach to projects; VHB professionals routinely work together across practice areas and geographies to provide holistic project solutions. We emphasize truly listening to and understanding our client’s needs while working collaboratively and in partnership. We also routinely incorporate input from stakeholders into our proposed solutions early in each project’s development. This approach has helped us develop our strong track record of delivering comprehensive, forward-thinking, and well-supported projects in a timely and cost-effective manner. Evidence of this success can be found in the industry recognition VHB projects receive – and the number of repeat clients we are happy to serve.

## The VHB Difference

Because VHB combines an understanding of VTrans procedures with in-depth knowledge of local communities, we are well-suited to assist municipalities with At-the-Ready services for their transportation improvement needs. VHB offers a broad range of services through our in-house staff, and we are fully capable to provide Municipal Project Management services to municipalities and other local sponsors under this retainer. We have provided similar services on dozens of projects similar to those expected, both directly for VTrans and municipalities across Vermont.

### Local Presence and Knowledge, Regional Expertise and Resources

VHB's services under this retainer will be provided out of our Vermont office. With nearly 60 professional civil and structural engineers, planners, landscape architects, and environmental specialists, our Vermont office provides the full range of services anticipated under this contract.

We live, work, and play here and we consistently hire Vermonters. We understand what makes our state special. We take great pride in helping VTrans and municipalities improve the already great quality of life in Vermont. Our Vermont staff will be supported by the resources and relationships of over 500 professional designers, engineers, scientists and planners throughout VHB's New England offices. Our local presence, knowledge of VTrans' practices and expectations, and depth of resources allows us to provide personal service, value, and responsiveness every time.

We've put together a team in this proposal that reflects VHB's continued commitment to improve mobility, enhance Vermont communities, and balance development and infrastructure needs with environmental stewardship. While not every project requires this deep pool of talent, the resources are there for our Vermont team to call upon.

### Integrated Services Approach

VHB's staff collaborate to integrate our service offerings and we strive to meet our ultimate goal of delivering projects that improve the quality of life in Vermont communities.

The VHB Vermont staff has a wide range of skills and experience to cover the complete range of services needed under this retainer. These include:

- Preparation of RFPs/RFQs for design and construction phase services
- Budget preparation and tracking
- Schedule preparation and tracking
- Meeting arrangement and facilitation
- Project administration
- Acting as liaison between VTrans and municipalities

Through our diverse in-house staff, VHB offers support services that include: topographic and boundary survey; stormwater permitting and design; utility identification and coordination; right-of-way investigations and documentation; site design; historic assessments; funding assistance; traffic engineering; GIS mapping and database development; environmental investigations, permitting and NEPA compliance; railroad engineering; structural engineering; and pavement condition assessment and design. As projects are progressed, VHB's Project Manager can coordinate with each discipline as needed to fully understand the impacts and implications and can provide feedback that further informs the overall project strategy. This approach means that our MPMs have a deep understanding of all project issues, that the best design ideas advance, and the final product meets the goals of the community.

### Team Accessibility and Responsiveness

When providing services on behalf of clients our goal is to be as accessible as possible. Our team members pride themselves in being accessible for a client's needs day and night. Our local presence allows us to take a hands-on approach with attendance at regular work sessions during development of the project.

One advantage that VHB offers is that all of our MPMs are engineers. They understand the design and construction aspects of their projects, and provide an additional layer of checks and balances to verify that the engineering design is sound, and the construction is being performed in accordance with the municipality's and designer's intentions.

### Previous Experience

VHB's Vermont office was built around our relationships with local municipalities and VTrans. We have proudly been working side by side with them for more than two decades. During this time we've seen VTrans' processes and goals evolve, and we feel privileged to be a part of that development. We are excited to continue our partnerships throughout the state and look forward to completing innovative, high quality transportation infrastructure projects in the future.

Providing consulting services to municipalities, and to state and federal agencies, is a core purpose of our company and a key focus of our Vermont staff. Our overall approach to the management of this contract is informed by our successful experience on a wide range of similar on-call assignments.

### Listing of Current Vermont On-Call Retainers and Contracts

#### VTrans

- Roadway, Traffic, & Safety On-Call Retainer
- Structures On-Call Retainer
- Railroad Engineering On-Call Retainer
- Park & Ride On-Call Retainer
- General Environmental On-Call Retainer
- Biological On-Call Retainer
- Planning & Policy On-Call Retainer
- Design-Build Engineering & Construction Support
- Asset Management
- Highway Resurfacing

#### Chittenden County Regional Planning Commission (CCRPC)

- Transportation Project Development & Scoping
- Planning & Technical Services

#### United States Department of Agriculture (USDA)

- Forest Service Survey and Engineering Services IDIQ Contract

#### City of Winooski

- General Engineering Services

## Commitment to Quality

VHB's Quality Control and Quality Assurance program (QA/QC) is founded on our belief in quality focus and customer service. It is a program that is practiced every day and begins with the commitment of the management of the company. It is a continuous program wherein all members of the project team are focused on on-time delivery within the project budget.

Since the firm's inception, VHB has practiced a Quality Control process that was not only based on checking a product, but also included a review by senior technical engineers to confirm conformance with the design requirements. Today this process has evolved into a formal QA/QC program. This is an integral part of the client-focused service at VHB. QA/QC is about elevating VHB's clients needs to greater heights through a planned program of continual improvement of VHB's work processes and project management techniques. This means that the VHB Project Manager provides greater service, faster production, better ideas, and more cost-effective ways in which to produce the work. This translates into such client benefits as cost savings, accelerated schedules, and reduced problems during construction and startup.

Through the QA/QC program, quality is improved not by more checking, but by making sure the design accurately addresses the project purpose and need, and is permittable and fundable. This approach reduces the needs for re-working, saving time and money.

## Organizational chart

The Organizational Chart on the following page shows the core team and key support staff that will work on this retainer contract. The staffing for the VHB team will be flexible, and we will always provide the right people for each individual project.

Under this retainer, **Evan Detrick, PE** will be the initial point of contact for VTrans and municipalities for all assignments. Depending on the specific project, Evan will either serve as the MPM himself, or may assign another VHB Project Manager in consultation with the municipality and VTrans MAB Project Supervisor. The VHB Project Manager will be determined based on the best interests of the municipality, and will not be finalized until the municipality and VTrans are in agreement. For every assignment, Evan will conduct regular check-ins with the MPM to verify the project is moving along as expected and VHB's services are meeting the expectations of VTrans and the client. Additionally, Evan will be available as a resource to each MPM to ensure the MPM has a firm understanding of the project development requirements, and has the resources they need to be effective.



## At-The-Ready Project Team

### VTrans Municipal Assistance Bureau



**Program Manager**  
Evan Detrick, PE



**Principal-in-Charge**  
Dave Saladino, PE, AICP

### MUNICIPAL PROJECT MANAGEMENT (MPM)

*Project Manager*  
Evan Detrick, PE

*Project Manager*  
Scott Burbank, PE

*Project Manager*  
Jenny Austin, PE

*Project Manager*  
Dan Peck, PE

### ENGINEERING SERVICES - KEY SUPPORT STAFF

*Permitting/NEPA*  
Brad Ketterling

*Hydrologic & Hydraulic Studies*  
Ryan Lizewski, PE

*Bridges & Structures*  
Ryan Barnes, PE

*Historical/Cultural Resources*  
Kaitlin O'Shea

*Landscape Architecture*  
Mark Hamelin, CLARB certified,  
PLA, ASLA

*Rail Engineering*  
Mark Louro, PE

*Stormwater Management/  
Permitting*  
Marla Keene, PE

*Lighting Design*  
Kathryn Lee, PE

*Survey Manager*  
Glen Johnson, PLS,LLS

*Survey Chief*  
Judd Vear

## Availability chart

NAME	ROLE	AVAILABILITY FOR THIS CONTRACT
Evan Detrick, PE	Program Manager	20%
Dave Saladino, PE, AICP	Principal-in-Charge	15%
Dan Peck, PE	Project Manager	20%
Jenny Austin, PE	Project Manager	20%
Scott Burbank, PE	Project Manager	20%
<b>Support Staff</b>		
Brad Ketterling	Permitting	25%
Kaitlin O'Shea	Historic/Cultural Resources	25%
Marla Keene, PE	Stormwater	25%
Ryan Lizewski, PE	Hydrologic/Hydraulics	25%
Mark Hamelin, PLA, ASLA	Landscape Architecture	20%
Kathryn Lee, PE	Lighting Design	10%
Ryan Barnes	Bridges & Structures	10%
Mark Louro, PE	Rail Engineering	10%
Glen Johnson, LS	Survey Manager	10%
Judd Vear, SIT	Survey Chief	35%

# Municipal Project Management Services





## Municipal Project Management

### Understanding

The Municipal Project Manager (MPM) has a very important role in the development of projects through the MAB. In addition to being the liaison between VTrans and the Town, the MPM prepares solicitations to retain the design consultant and the construction inspection firm, monitors the design consultant to verify they are advancing the project in accordance with the VTrans project development process and advancing the project on time and within budget, reviews project invoices and pay requisitions, and manages the overall project development process to ensure it is advancing as planned. The MPM is also responsible for keeping the sponsor apprised of the project's progress by providing regular updates and coordinating directly with municipal officials, and for explaining any aspect of VTrans MAB requirements to the municipality. VHB's approach to municipal project management is to take the burden of project management off the municipality, but to also act as a partner to ensure the municipality is fully involved in the process.

The responsibilities of the MPM typically include:

- Coordinate project activities and monitor aspects of project development on behalf of the municipality while acting as liaison between the Town, VTrans, consultants and/or contractors as necessary. The MPM is responsible for ensuring adherence to federal and state rules and regulations relative to developing and constructing a project.
- Review and monitor a master schedule to coordinate activities necessary for: completing the project design, coordinating necessary permits and approvals, relocating conflicting utilities, acquiring and clearing rights-of-way and preparing bid documents.

- Prepare Request for Proposals / Qualifications and Scope of Services for consulting needs subject to VTrans approval.
- Ensure that all provisions of consulting/contracting contracts are met and submitted on time and within cost limits.

## Qualifications

VHB's management team is very experienced with completing the full range of project management services required for municipal transportation projects. Municipal projects require a full range of expertise from concepts through the final design and construction phases. Our proposed team members have experience in all aspects of engineering, survey, environmental permitting, public involvement, traffic engineering, bicycle and pedestrian design, landscape design, right-of-way acquisition, and construction services. We know all the key aspects of these types of projects and have completed them all successfully on our own projects, on projects we have managed for VTrans, and for municipalities. VHB has managed projects from the owner's side as in this case and also has extensive experience in completing the actual design, permitting and construction of projects as consultant engineers.

VTrans has come to rely on VHB for our project management skills. We are the only consultant providing project management services on the VTrans design-build projects. VHB is also providing project management services on behalf of VTrans on several of their Park & Ride projects. We have worked side-by-side with VTrans MAB staff to manage the development of these projects and ensure they are moving along as expected. Our staff will apply the knowledge they have gained through this close relationship to the projects that we are asked to manage for municipalities.

VHB staff visit the National Life Building regularly, with several staff members providing Consultant Project Administration services on behalf of VTrans. This familiarity with VTrans processes and in-person accessibility allows us to provide guidance and respond to staff requests in a timely and thorough manner.

## Public Outreach Experience

A critical component of any public project is to maintain clear communications among the municipal staff, local stakeholders, state agencies, and the community, as well as establish channels to raise questions and find answers in a timely and cost-effective manner. The results of such a collaborative process will be consistent messages, public awareness and education, stakeholder buy-in, a consensus on priorities, and a project that meets the municipality's needs and the public's expectations.

VHB has extensive experience in facilitating the public outreach process. We understand that community involvement is an integral part of the public planning process. With the communities need to understand the transportation planning process, and how it affects and improves their quality of life, comes a significant investment and commitment to stakeholder participation and outreach. A personalized community outreach plan caters to the project and community's needs, as well as balances important planning goals. VHB's key staff have a strong record of successfully facilitating the public process throughout Vermont, whether it is conducted for a town-wide master plan, a highly contested infrastructure project, or a small intersection improvement.

## The VHB Public Engineer Approach

- 1. Listen intently** - We start by actively trying to understand the stakeholders vision, ideas, constraints and even frustrations. The best way we can help is by understanding your perspective and desired outcomes. We also want to understand the work that may have already transpired and build on it in moving forward.
- 2. Understand the Context** - No decisions can be made in a vacuum, so we try to understand how decisions in one aspect of the project might affect others. Our management brings extensive knowledge of projects from start to finish, so we are well suited to quickly comprehend how one aspect may relate to another.
- 3. Share Relevant Experiences and Examples** - We'll draw on our strong relevant experience gained through execution from both the management and design perspectives. We have the ability to point to real-life examples where our expert project management and design concepts have succeeded, and we're current in the latest techniques and technologies.
- 4. Involve Stakeholders** - Ultimately a municipality's decision makers will make the final selections on all issues with input from VTrans, but the local property owners, merchants, and the general public must be involved in shaping the improvements and planning for construction.
- 5. Tell it like it is** - We believe in explaining our honest opinions and factual information even if opposition arises. As engineers and design professionals, we rely on facts and we are trained to remain objective amidst controversy. We do not succumb to endorsing grand ideas if they are not also feasible, fundable, permitable, or sustainable. We strive to find creative and innovative solutions that are also grounded in practicality.
- 6. Communicate** - Informed decisions are generally the best decisions. Therefore, it is the MPM's goal and responsibility to communicate the relevant information that will allow the Town to make appropriate decisions and give constructive input. We will utilize a variety of tools to communicate facts and ideas. Our communication among the design consultant, contractor, local stakeholders and municipal decision makers may be through a variety of modern support systems such as web based document sharing, project-specific websites, and interactive polling tools.
- 7. Collaborate** - The VHB management team has successfully functioned as an integral part of management and design teams on dozens of Vermont projects. We know that our approach results in a working relationship that is productive, professional and enjoyable. Our skill sets complement our teaming partners, and we genuinely feed off the energy and creativity of a collaborative approach. In addition, we seek to actively collaborate with our clients. We are most effective when fully engaged as a team with the project and the people that are involved.

## Experience with Financial Management

VHB has provided financial management of a wide range of projects for clients throughout the East Coast and will provide a critical role during project development by ensuring all team members follow established best practices in financial management, reporting, and accounting procedures. VHB is committed to providing the tools and resources our clients need to successfully manage projects both technically and financially. Our financial management and reporting protocols have been used company-wide on projects that range from very small to \$200 million in construction costs. We bring our clients the expertise and insight of successful financial leaders in the profession on best practices such as reporting guidelines, accounting issues and risks, self-auditing, risk management, schedule and budget impacts, and much more. Following are some of the key recommendations we have for ensuring financial success on the projects we manage.

### Project Records and Document Access

In order to facilitate continuously evolving project records, decisions, designs, drawings, protocols, and procedures, VHB can deploy and manage a secure project collaboration internet site that will not only help to manage financial aspects of the project but all facets of document tracking. Consistent and sustained communication efforts with and among team members will optimize the process and minimize reworking or recalling information previously discussed. The site will have various access controls so MPM's and municipalities can manage who has access to what components. VHB has successfully established project collaboration sites for several of VTrans' complex projects Middlebury Railroad Bridges CMGC project, Ryegate Route 5 Culvert Design-Build project, and the I-91 Brattleboro Bridge Replacement project.

### Experience with Preparing RFQs and SOSs

VHB has experience in the preparation of Requests for Qualifications (RFQ) facilitating Qualifications Based Selection (QBS) Procurements as well as full knowledge of the process for preparing a Scope of Services (SOS). Our unique knowledge base of having been on both sides of recent large scale VTrans and MAB procurements as well as design-build and CMGC efforts provides unparalleled experience from the VHB Team.

We are well-versed in the federal requirements of consultant services contracting and have a thorough understanding of the Brooks Act (Public Law 92-582), which is the federal legislation that led to the requirement of QBS Procurement for Federal Aid Engineering Services Contracts. QBS selection requires the submission of both a technical SOQ and a separately sealed Price Proposal. While the initial selection of a consultant is based solely on qualifications, prior to award there is a negotiation phase that allows for further definition of consultant scope and fee. If the owner and consultant cannot come to terms on a mutually acceptable scope and fee, negotiations would then begin with the second most qualified firm.

Our development of RFQs for major VTrans Design-Build projects has added to our experience with the development of procurement documents and execution of construction contracts. The RFQ development process includes close daily coordination with FHWA, VTrans Legal Section, and VTrans Contract Administration and has helped to enhance our knowledge of state contracting requirements and the Code of Federal Regulations (CFRs) pertaining to both engineering services and construction contracts.

### Project Experience

VHB was the first to provide Project Administrative Services for the Structures Section and continues to provide these services today. In addition to providing Project Administrative Services on all of the Design-Build projects for the Structures Section, VHB has provided **Project Management/Administration Services that follow the VTrans Project Development Process** directly for the following VTrans sections:

**Highway, Safety, and Design Section - 17 Projects**

**Rail Section - 29 projects**

**Park & Ride - 4 Projects**

Project management services on behalf of VTrans MAB for oversight of design consultant include guidance throughout each step of the VTrans Project Development Process, coordination of VTrans resources, and site visits, public meetings, property owner visits, and plan reviews. VHB's responsibilities include overseeing the consultant design process, managing projects for the VTrans MAB Program Director, as well as coordinating with municipalities, utilities, regulators, and the design consultants. A VHB Project Manager is physically located in the VTrans Montpelier Offices one to two days a week for these projects. VHB staff also have experience providing MPM services on MAB projects. Recent examples include serving as MPM for roadway projects in South Hero, Hartford, and Brandon.

## Key Personnel



### **Evan Detrick, PE**

Program Manager | 32 years of professional experience

Evan is a Civil Engineer with over 30 years of experience supporting federal, state, municipal, and private sector projects. Evan's responsibilities include project scoping and budgeting, personnel and work assignment scheduling, project management, public engagement, and quality control. He has managed the design and construction of over 40 MAB/LTF projects and numerous projects directly for VTrans. His experience has included a variety of sidewalks, pathways, and trails; intersection and traffic signal upgrades; roadway resurfacing and reconstruction; property and topographic surveys; bridge rehabilitation and replacement; streetscape and lighting enhancements; stormwater improvement projects; and many projects involving public outreach. Evan has been the MPM on significant roadway design projects in Hartford and South Hero.



### **Jenny Austin, PE**

Project Manager | 17 years of professional experience

Jenny is a Highway Engineer in VHB's Vermont office. Her experience includes transportation engineering in both private and public sectors, with an emphasis of projects going through the VTrans LTF/MAB process. She has been involved in the planning, design, and construction of a wide variety of roadway and pedestrian projects, as well as scoping studies, with traffic engineering experience gained through development of numerous traffic impact studies. She also has experience assisting municipalities with Municipal Project Management, including the Route 7 Segment 6 project and Bridge 114 Rehabilitation Project, both in Brandon, VT.



### **Dan Peck, PE**

Project Manager | 16 years of professional experience

A civil engineer in VHB's Highway Department, Dan's focus is on transportation projects ranging from scoping studies and design projects (conceptual through contract design) of roadway, intersection, sidewalk and multi-use path projects that follow the VTrans MAB process, to include public informational meetings, preparation of right-of-way plans, development of construction estimates, and utility coordination. Some of his completed projects include the reconstruction of Main Street in downtown Barre City, VT Route 116/Charlotte Road in Hinesburg, Silver Street in Hinesburg, Cross Street Bridge and Main Street Reconstruction in Middlebury, and the scoping phase of corridor improvements along Putney Road (Route 5) through Brattleboro. Dan is currently working on the design of the Bennington Rail Trail through the MAB, and numerous VTrans and municipal projects across Vermont.



### **Scott Burbank, PE**

Project Manager | 19 years of professional experience

Scott is Director of Structures in VHB's Vermont office with extensive experience in planning, design and construction of both highway and railroad bridges and roadway reconstruction projects. His qualifications also include services for quality control and quality assurance, construction cost estimating, accelerated bridge construction (ABC), and structural inspections of both railroad and highway bridges. He also serves as a Project Administrator for VTrans, managing consultants for projects for the Local Projects Section of the MAB.



# Resumes



## Evan P. Detrick, PE

Program Manager



### Education

BA, Liberal Arts, East  
Stroudsburg University,  
1984

BS, Civil Engineering,  
Pennsylvania State  
University, 1984

### Registrations/ Certifications

Professional Engineer (Civil)  
VT, 2016

Professional Engineer (Civil)  
NH, 2015

### Affiliations/ Memberships

Vermont Society of  
Engineers, 2016

Institute of Transportation  
Engineers, Vermont, 2004

Evan is a Civil Engineer with over 30 years of experience supporting federal, state, municipal, and private sector projects. Evan's responsibilities include scoping and budgeting, personnel and work assignment scheduling, project management, and quality control. He has completed the planning and design of projects, including a variety of sidewalks, pathways, and trails; highway projects such as 4-lane, limited access highways on new alignments; arterial roadways on new alignments; roadway widening and rehabilitation; bridge construction and replacement; environmental assessments in accordance with NEPA; traffic signal improvements; property and topographic surveys; floodplain certifications; and numerous Safe Routes to School and Transportation Enhancement projects.

*1 year with VHB and 33 years of professional experience*

### Municipal Project Management Services, South Hero, VT

Prior to joining VHB, Evan was Municipal Project Manager working with the Town of South Hero and VTrans in developing a project to better accommodate bicyclists and pedestrians along portions of South Street and Martin Road in South Hero. Providing support to the Town by acting as a liaison between the Town and VTrans, advising the Town regarding the LTF Project Development Process, soliciting engineering proposals for the design of the project, reviewing engineering consultants progress as the design is developed, acting on behalf of the Town for right-of-way negotiations, facilitating public meetings and discussions, assisting in the review of construction bid documents once the design is completed, performing administrative duties during construction, and keeping records of project correspondence and files.

### Local Project Management, Hartford Roundabout Project, STP 0113(59)S, Hartford, VT

Prior to joining VHB, Evan was Local Project Manager for the construction of roadway improvements along the western end of Sykes Mountain Avenue. The project will improve traffic flow through and access to businesses, enhance safety, and improve roadway surfaces/stormwater drainage. The project included construction of two roundabouts, sidewalks, streetscape improvements, and roadway reconstruction. Evan provided support to the Town by acting as a liaison between the Town and VTrans, advising the Town regarding the VTrans MAB Project Development Process, reviewing engineering consultants progress as the design was developed, acting on behalf of the Town for right-of-way negotiations, facilitating public meetings and discussions, assisting in the review of construction bid documents once the design is completed, performing administrative duties during construction, and keeping records of project correspondence and files.

### Three Rivers Transportation Pathway, St. Johnsbury, VT

Prior to joining VHB, Evan was Project Manager for development of 1.1-mile-long, 10-foot-wide shared use pathway. He was responsible for project design, right-of-way, utility coordination, final design, and Contract Document preparation. Project developed through LTF Section. Evan developed alternatives to avoid wetlands and historic resources and minimal property owner impacts.

## David Saladino, PE, AICP

Principal-in-Charge



### Education

BS, Civil & Environmental Engineering, University of Delaware, 1998

### Registrations/ Certifications

Professional Engineer (Civil)  
VT, 2006

Professional Engineer (Civil)  
NH, 2005

American Institute of  
Certified Planners, 2015

### Affiliations/ Memberships

Institute of Transportation  
Engineers, New Hampshire,  
President (2014-15), 2006

Institute of Transportation  
Engineers, Vermont, Board  
Member (2016-), 2015

American Planning  
Association, 2015

Dave is the Managing Director of VHB's South Burlington, Vermont office and leads the Transportation Systems group in the Vermont office. He has nearly twenty years of project management, transportation engineering, traffic engineering and transportation planning related experience in both the public and private sectors. Dave's recent project experience includes transportation corridor planning, traffic impact studies, parking studies, transportation microsimulation modeling, and design of intersections, roundabouts, roads, sidewalks, and traffic signals.

*2 years with VHB and 20 years of professional experience*

### **Burlington Town Center Traffic Impact Study, Burlington, Vermont**

Project Manager for the Traffic Impact Study for the Burlington Town Center project in Burlington, Vermont. The Burlington Town Center project involved the reconstruction of an existing mall and replacing it with over 800,000 square feet of retail, office, and residential space in downtown Burlington. Services provided included development of a Traffic Impact Study and local permitting representation.

### **Williston Road Network Transportation Study, South Burlington, Vermont**

Project Manager for the Williston Road (US 2) Network Transportation Study which examined a twenty year growth horizon for the Williston Road corridor in South Burlington to identify a package of transportation and land use recommendations that would encourage a more vibrant, walkable, and safe corridor in the future. The project involved significant outreach to abutting landowners and members of the public.

### **US 5/VT 12 Hartland Three Corners Intersection Improvements, Hartland, VT**

Project manager for the scoping, conceptual, and final design of an intersection reconfiguration project in Hartland village. The project includes the development of alternatives and conceptual plans through the production of right of way plans, contract plans and construction engineering support.

### **Winooski Transportation Master Plan, Winooski, Vermont**

Project Manager for the development of a Transportation Master Plan for the City of Winooski, Vermont. The Master Plan was the culmination of significant, stakeholder outreach, planning and technical analysis, and coordination with City staff to develop an Action Plan for Winooski's transportation infrastructure.

### **US 7/Charles Avenue/Monroe Street Intersection Scoping Study, Middlebury, VT**

Project Manager for the scoping of intersection operational and safety improvements to the US 7/Charles Avenue and US 7/Monroe Street intersections in Middlebury, VT.

### **VT116-Tilley Land Use and Transportation Plan, South Burlington, Vermont**

Project Manager for the VT116-Kimball-Tilley Land Use and Transportation Plan which examined the Tilley Drive/Kimball Avenue area of South Burlington to identify a package of transportation and land use recommendations that would foster a dense, mixed-use, multimodal development pattern.

## Jenny Austin, PE

Project Manager



Jenny is a Transportation Engineer in VHB's Vermont office. Her experience includes transportation engineering in both private and public sectors, with an emphasis of projects going through the VTrans MAB process. She has been involved in the planning, design, and construction of a wide variety of roadway and pedestrian projects, as well as scoping studies, with traffic engineering experience gained through development of numerous traffic impact studies. She also has experience assisting municipalities with Local Project Management.

*5 years with VHB and 17 years of professional experience*

### Education

BS, Civil Engineering,  
University of Vermont, 1999

### Registrations

Professional Engineer VT,  
2005

### Affiliations/Memberships

Institute of Transportation  
Engineers

Vermont Society of  
Engineers

### Segment 6, US Route 7, Local Project Management Services, Brandon, VT

VHB was the Local Project Manager representing the Town of Brandon on the Segment 6, US 7 Brandon NH 019-3(496) project consisting of a full-depth reconstruction of a 1.2-mile stretch of US Route 7, including relocation and replacement of existing water and sanitary sewer lines, underground utilities and sidewalks and streetscapes through downtown Brandon. Jenny was the Assistant Local Project Manager on this contract.

### Bridge 114, Local Project Management Services, Brandon, VT

For the Town of Brandon, Jenny assisted with Local Project Management services for a project to rehabilitate a twin-stone-arch structure spanning the Neshobe River that carries US Route 7 through the town. Jenny assisted with project management and administration, review of proposals and cost estimates from submitting consultants, and assisting with day to day administrative tasks on behalf of the Town, and was the Assistant Local Project Manager on this contract.

### Rutland Gateways Project, Rutland, VT

Jenny is assisting with the design for proposed gateway improvements along the Strongs Avenue corridor in Downtown Rutland. Improvements include new crosswalks and bulbouts as well as parking definition, landscaping, and increasing green space along the roadway by narrowing the roadway typical section. Jenny is currently assisting with development of improvements as well as construction cost estimate preparation of such.

### Pulp Mill Bridge Road and Seymour Road Sidewalk Project, Middlebury, VT

Jenny is assisting with the design for proposed sidewalks approximately 0.5 miles in length. She has assisted with plan reviews, quantity calculations and construction cost estimates, and will assist with the remaining plan development process, updating cost estimates, and assisting with preparation of Bid Documents and advertising the project online.

### East Darling Hill Road Pedestrian and Bicycle Scoping Study, Burke, VT

Jenny assisted with a Scoping Study to develop alternatives for improved pedestrian and bicycle infrastructure along East Darling Hill Road in Burke. Project tasks included public outreach, development and evaluation of pedestrian and bicycle improvements, and development of a Scoping Study that the Town can use as a basis for bringing the project into the design phase.

## Scott Burbank, PE

Project Manager



Scott is a Project Manager in VHB's South Burlington office with extensive experience in planning, design and construction of both highway and railroad bridges and roadway reconstruction projects. His qualifications also include services for quality control and quality assurance, construction cost estimating, accelerated bridge construction (ABC), and structural inspections of both railroad and highway bridges.

### Education

BS, Civil Engineering,  
Worcester Polytechnic  
Institute, 1993

### Registrations/ Certifications

Professional Engineer  
(Structural I) VT, 2000

*7 years with VHB and 22 years of professional experience*

### VTrans Project Administrator

Scott has worked as Project Administrator for multiple Park and Ride projects for the Local Projects Section and numerous projects for the Rail Section. He has performed duties as Project Task Administrator for VTrans assisting other Consultant Project Managers with Artemis™, internal VTrans resource coordination, and plan submittals. Seated at National Life in the Structures Section at least one day a week to coordinate with internal resources.

### USDA, Green Mountain National Forest IDIQ, Vermont

Scott provided structural engineering support for bridges, culverts, embankments, and other structures when the United States Department of Agriculture (USDA) Forest Service retained VHB to provide surveying and civil and structural engineering services for a multi-year Indefinite Delivery/Indefinite Quantity (IDIQ) contract to support activities in the Green Mountain and Finger Lakes National Forests in Vermont and New York. VHB's services included civil and structural engineering for bridges, culverts, embankments, roads, and other structures.

### Brattleboro Town Highway Bridge #7, Brattleboro, VT

Scott was the Project Manager for the complete replacement of Town Highway Bridge No. 7 over Halladay Brook in Brattleboro VT. This project included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating throughout the development of the project.

### Guilford Town Highway Bridge #65, Guilford, VT

Scott was the Project Manager for the complete replacement of Town Highway Bridge No. 65 over Hinesburgh Brook in Guilford, VT. This project included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating for rapid bridge construction techniques. Accelerated bridge construction elements were used to minimize the roadway closure period during construction.

### VTrans ER BRF 0162(18) and Rochester, ER STP 0162(19), VT

Scott was the Project Manager for the complete replacement of two state bridges on VT 73 over Brandon Brook and the White River. Both bridges were destroyed during Tropical Storm Irene. These projects included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating for VTrans first multiple bridge replacement projects on a single corridor within one Town.

## Daniel M. Peck, PE

Project Manager



Dan is a Senior Project Engineer in VHB's Highway Department in South Burlington, Vermont. His experience has focused on highway, roadway, and bike/ped trail design projects involving hydrology, hydraulics, highway design, and sound wall design for state and municipal clients. Dan works with Microstation, as well as the hydraulic analysis programs HydroCad and StormCad.

### Education

BS, Civil Engineering,  
University of New  
Hampshire, 2000

### Registrations/ Certifications

Professional Engineer (Civil)  
NH, 2008

Professional Engineer (Civil)  
VT, 2009

*17 years with VHB and 17 years of professional experience*

### **Bennington Pathway, Bennington, VT**

Dan is the Project Manager for the design of a multi-modal path connecting downtown Bennington to a park and elementary school. The path will be constructed within a railroad right-of-way and will include the rehabilitation of two existing railroad bridges.

### **Federal Street Multimodal Connector Project, St. Albans, VT**

Dan is the Senior Roadway Designer/Task Manager on this project for the City of St. Albans to provide permitting, design and construction services for a multimodal connector on Federal Street. This project includes 1.75 miles of roadway reconstruction, roadway widening, new roadway alignment, bridge replacement, utility relocations, new signalized intersections, railroad grade crossings, and extensive permitting and environmental analysis. Dan is providing roadway design, development of the plans, right-of-way coordination, utility coordination, quantities, and estimate.

### **Lake Street Connection, St. Albans, VT**

Dan is Project Engineer for this project to provide engineering services, streetscape design and necessary infrastructure improvements on Lake Street between Main Street and Federal Street in accordance with the City's 2009 Downtown Master Plan. As Roadway Designer, he is developing the contract plans. This project is currently under construction.

### **VTrans, Route 116 at Shelburne Falls Road, Hinesburg, VT**

For the Vermont Agency of Transportation (VTrans), Dan is Project Engineer for intersection safety improvement project to install turn lanes and replace the current traffic signal at the VT 116 / CVU Road / Shelburne Falls Road intersection. The project also includes the replacement of one large box culvert at the intersection and three other culverts downstream of the intersection. Dan is responsible for the designing the roadway improvements.

### **NHDOT, I-93 Improvements Final Design – Exit 5 Park & Ride, Londonderry, NH**

For the New Hampshire Department of Transportation (NHDOT), Dan was Senior Project Engineer for the preparation of final design plans, specifications, and estimate for a new park and ride (P&R), bus terminal facility, bus maintenance facility, and associated roadway improvements at the I-93, Exit 5 interchange in Londonderry as part of an early action program (Phase 1) that will allow additional ridesharing and transit opportunities in the I-93 corridor before, during, and after the I-93 construction widening activities begin. The project was one of the first to include Intelligent Transportation Systems (ITS). Dan's responsibilities included drainage design, quantities, and generating drainage report.

# Engineering Support Staff Resumes



## Brad Ketterling

Permitting/NEPA



### Education

MS, Physical Geography,  
University of Western  
Ontario, 1995

BS, Geography, Concordia  
University, 1992

Brad has worked as an environmental scientist for close to two decades, specifically in the fields of wetland mitigation site feasibility and design, stream assessment, watershed planning, state and federal permitting, and NEPA compliance. 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. n. Brad has managed projects for a variety of private and public sector clients, including the National Park Service, the Department of Defense, the Vermont Agency of Transportation, the Vermont Telecommunications Authority, the Maryland Aviation Authority, Green Mountain Railroad Company, the City of Burlington, Vermont, and James City and Arlington Counties in Virginia.

*14 years with VHB and 21 years of professional experience*

### **Burlington Bike Path Rehabilitation Project, Burlington, VT**

Brad assisted with various permitting activities associated with the proposed rehabilitation of the Burlington Bike Path, including: coordinating the process of infiltration testing to support the use of a driveable grass pavement system in Waterfront Park; coordinating with Department of Public Works Stormwater Program Manager to discuss potential stormwater treatment approaches; permit applications for Construction and Operational Phase Permits from the DEC Stormwater Section; preparation of city permit applications (Zoning Permit and Small Project EPSC Plan); and coordination with Senior Planner at Department of Planning and Zoning

### **Federal Street Multimodal Connector, Environmental Assessment, St. Albans, VT**

Brad was Task Manager for National Environmental Policy Act (NEPA) compliance for the proposed Federal Street Multimodal Connector Project. He is the lead author of the Environmental Assessment (EA) and is responsible for outreach to and direct coordination with state and federal regulatory agencies. BHe presented the findings of the EA at a public hearing and finalized the EA to obtain a Finding of No Significant Impact (FONSI) in April 2013.

### **Main Street and Merchants Row Bridges, Middlebury, VT**

Brad is Task Manager for Environmental Services, evaluating potential natural resources and other constraints on the design for the proposed replacement of two bridges over the Vermont Railway in Downtown Middlebury as part of an Environmental & Historic Structures Evaluation and National Environmental Policy Act (NEPA) documentation.

### **Waterfront Park Improvements – Act 250 Permitting, Burlington, VT**

Brad prepared and submitted to the District 4 Commission an application to amend the existing Land Use Permit for Waterfront Park to reflect a suite of proposed physical improvements. Principal improvements include a rehabilitated and realigned Bike Path (being designed by VHB), electrical and potable water service, and lighting.



## Glen E. Johnson, PLS, LLS

Regional Survey Manager



Glen is the regional survey manager with VHB in Bedford, New Hampshire. He has significant experience throughout New England in field procedures and management of large-scale projects. His responsibilities include directing staff in utility investigation, roadway, GPS/photogrammetric, bridge, construction, topographic, and boundary surveys, as well as the production of all survey for plans including land court, property line, subdivision, and ALTA/ACSM land title survey plans.

### Education

AAS, Civil Engineering  
Technology, University of  
New Hampshire, 1982

### Registrations/ Certifications

Licensed Land Surveyor NH,  
2001

Professional Land Surveyor  
ME, 2012

Licensed Land Surveyor VT,  
2006

Professional Land Surveyor  
MA, 1995

### Affiliations/ Memberships

American Congress of  
Surveying and Mapping

Planning Board,  
Georgetown, MA, 1996-  
2001

National Society of  
Professional Surveyors

New Hampshire Land  
Surveyors Association

Massachusetts Association  
of Land Surveyors and Civil  
Engineers

Vermont Society of Land  
Surveyors

Maine Society of Land  
Surveyors

*32 years with VHB and 35 years of professional experience*

### Middlebury Main Street and Merchants Row Bridges, Middlebury, VT

Glen was the Survey Manager for land surveying for the replacement of two 93-year-old bridges spanning the Vermont Railway mainline track in downtown Middlebury. He was charged with research, field work, boundary calculations, and plan preparation for the project. Utility research and site investigation was conducted to determine the location and elevations of the subsurface utilities within the study corridor. The plans were prepared in Microstation and in accordance with the survey requirements of VTrans.

### Federal Street Multimodal Connector Project, St. Albans, VT

Glen was the Survey Manager for land surveying services related to the design and permitting of over two miles of the Federal Street project in St. Albans to facilitate improved mobility for all modes of transportation including pedestrian, bicycle, rail, transit, and motor vehicles. Utility research and site investigation was conducted to determine the location and elevations of the subsurface utilities within the study corridor. He was charged with research, field work, boundary calculations, and plan preparation for the project.

### VTrans, I-91 Bridge Replacement, Brattleboro, VT

For the Vermont Agency of Transportation (VTrans), Glen was the Survey Manager for land surveying services related to the design and permitting of the I-91 bridge replacement over the west river in Brattleboro. He was charged with research, field work, boundary calculations, and plan preparation for the project. Utility research and site investigation was conducted to determine the location and elevations of the subsurface utilities within the study corridor. The plans were prepared in Microstation and in accordance with the survey requirements of VTrans.

### Route 107 Tropical Storm Irene, Bethel and Stockbridge, VT

Glen was the Survey Manager for land surveying services related to the redesign and permitting of approximately three miles of roadway along Route 107 in Bethel and Stockbridge following the massive property destruction related to Tropical Storm Irene. He was charged with the emergency mobilization of survey staff of over 12 surveyors to support all survey needs related to the reconstruction of the impaired areas. In addition to this site, VHB provided survey support for over another dozen railroad bridges and roads throughout the State of Vermont.

## Judd Vear, LSIT

Survey Technician



### Education

BS, Survey Engineering,  
University of Maine, 2011

Judd is a Project Surveyor in VHB's South Burlington, VT office. He has a wide range of survey experience including inventory and measurement of existing utility infrastructure for many VTrans and private development projects, in-depth Right-of-Way and boundary analysis, field-to-finish production of ALTA boundary surveys, and topographic surveys ranging from solar and wind development to roadway and bridge construction. He has extensive experience with AutoCAD (Civil 3D), MicroStation (InRoads), and Leica, Trimble, and Carlson field collection and processing softwares.

*3 years with VHB and 8 years of professional experience*

### **Hartland Three Corners Intersection Project, Hartland, VT**

Survey Technician for development of existing conditions survey for the re-design of the Three Corners Intersection in Hartland. Judd's role was to develop a full existing conditions base plan, performing field survey, utilities and property research. Through coordination and plans received from private utility services, in conjunction with field survey data, an accurate representation of existing underground utilities was included on the base plan allowing for proper design engineering and budgeting.

### **Wilmington East Main Street Sidewalk Project, Wilmington, VT**

Survey Technician for development of an existing conditions survey plan for re-design of 1500' of sidewalk in downtown Wilmington. Survey included topography, Right-of-Way determination and existing utilities. Existing underground utilities were developed through coordination with municipal sanitary and water departments, combined with field survey and historic plans,

### **Warren Village Main Street Improvement Project, Warren, VT**

Lead Survey Technician for development of existing conditions survey of the full Right-of-Way corridor through Warren village in support of sidewalk and streetscaping design. Existing utilities were mapped from a combination of field survey, historic plans and even parole evidence.

### **Federal Street Multimodal Connector Project, St. Albans, VT**

Survey Technician for land surveying services related to the design and permitting of over two miles of the Federal Street project in St. Albans to facilitate improved mobility for all modes of transportation including pedestrian, bicycle, rail, transit, and motor vehicles. With a planning phase lasting more than several years, Judd has provided numerous updates to the existing conditions base map, integrating new private site plans, additional field survey, and utility field investigations throughout the project.

### **Bennington Path, Bennington, VT**

Survey Technician for the design of a pedestrian/bike path connecting downtown Bennington VT, to a park and elementary school. The path is a combination of upgraded sidewalks, intended for pedestrian use only, a 12-foot wide paved path within a railroad right-of-way, and shoulder widening of existing town roads.

## Kathryn Lee, PE

Lighting Design



### Education

BS, Civil Engineering,  
University of Central Florida,  
1998

BS, Geography,  
Pennsylvania State  
University, 1984

### Registrations/ Certifications

Professional Engineer FL,  
2005

### Affiliations/ Memberships

American Society of Civil  
Engineers

**Kathy is a Senior Project Manager with VHB's Transportation Systems Group. She specializes in the design and preparation of signalization, signing, sign panel layout and pavement marking plans. Her FDOT certification in Traffic Control Plan Design supports a strong background in work zone traffic safety. Traffic studies and analysis round out her focus on traffic operations and the transportation field. Kathy's qualifications and experience have been utilized on a multitude of public- and private-sector projects.**

*17 years with VHB and 29 years of professional experience*

### Skillset: Lighting Design

Kathy has served as Project Manager and as Project Engineer for numerous lighting design projects on both local and interstate roadways. Lighting projects have encompassed Lighting Justification Reports, the layout and design of new lighting systems, interfacing new lighting systems with existing lighting systems, photometric analysis to optimize light pole spacing and arrangement, luminaire mounting height, wattage and distribution type, and also voltage drop calculations to verify that conductors and load centers are sized appropriately. Some representative projects include Walton Road from US 1 to Lennard Road, City of Port St. Lucie, St. Lucie County, I-95 Widening from north of SR 50 to north of SR 46, Brevard County (FDOT District Five), I-4/Osceola Parkway Braided Ramp project, Osceola/Orange County (FDOT District Five), US 27/SR 50 Interchange Design Build Project, Lake County (FDOT District Five).

### Skillset: Intelligent Transportation Systems (ITS) Design

Kathy has worked extensively with local and state municipalities in order to improve the safety of the motoring public while increasing the efficiency and capacity of roadway corridors. ITS provides mechanisms to aid in the effort that make use of advanced communication and other technologies to make surface transportation safer and more efficient. VHB has been involved in numerous ITS projects and is experienced in creating and implementing these types of plans. Representative ITS projects include weigh-in-motion stations, dynamic message signs, fiber optic interconnect plans, closed circuit television systems, AVI systems, emergency vehicle management systems utilizing Opticom and highway advisory radio plan design. Representative projects include City of Orlando, Crystal Lake Drive Improvements, Greater Orlando Aviation Authority (GOAA) BP-355 Loop Road Dynamic Message Signs Design Build, Orange County, UCF Arena ITS Project, FDOT District Five, US 17-92 at SR 436 Interchange, FDOT District Five, I-95 from North of SR 50 to North SR 46.

### Skillset: Traffic Signal Systems

Kathy has completed numerous traffic signal system design, optimization and retiming projects. These projects involve development of design plans and technical specifications for traffic signal systems, data collection, development of time-of-day and day-of-week system timing plans, and implementation and fine-tuning. Some of the representative projects include SR 5 / SR 60 Signal Systems, Indian River County; Olive Road Traffic Signal System, Escambia County; and Pensacola Street Traffic Signal System, City of Tallahassee.

## Kaitlin O'Shea

Historic/Cultural Resources



### Education

MS, Historic Preservation,  
University of Vermont, 2011

BA, Historic Preservation,  
University of Mary  
Washington, 2006

### Affiliations/Memberships

UVM Historic Preservation  
Alumni Association, Vice  
President

National Trust for Historic  
Preservation

Kaitlin is a Preservation Planner with a strong background in and understanding of preservation principles and practices. Kaitlin provides expertise in regulatory process and compliance, particularly Section 106 review and Section 4(f) evaluations, as well as historic documentation, historic resource identification, and project management in the government framework. From national and statewide conference presentations to public meetings, she is skilled in stakeholder interaction and communication. Kaitlin meets the Secretary of the Interior's Professional Qualification Standards for an Architectural Historian and Historian (36 CFR 61).

*2 years with VHB and 9 years of professional experience*

### Federal Street Multimodal Connector Project, St. Albans, VT

Kaitlin is working on the preparation of the Act 250 application for the Federal Street project, as well as reviewing the development of 60% plans to determine potential implications for reevaluation the Section 106 and 4(f) determinations, and the EA.

### Mountain View Drive Sidewalk Project, Colchester, VT

As one of her first projects at VHB, Kaitlin evaluated the project corridor for historic resources and researched previous Act 250 applications for earlier determinations to resource impacts. Kaitlin is writing and compiling the Resource Identification Report on behalf of VHB for the Town of Colchester.

*Kaitlin's professional experience before joining VHB includes the following*

### Section 106 Reviews & Section 4(f) Evaluations, VTrans, Montpelier, VT

As the Historic Preservation Specialist for the Vermont Agency of Transportation (VTrans), Kaitlin reviewed all types of transportation projects: sidewalks, streetscapes, roadways, culverts, covered bridge and truss bridge rehabilitations, bridge replacements, park and rides, and more. She has completed over 650 Section 106 reviews and over 30 Section 4(f) evaluations.

### Lake Champlain Bridge Replacement Project, Addison, VT

Kaitlin began with VTrans during the 2010 Lake Champlain Bridge Replacement Project as the Historic Preservation Monitor. Tasked with ensuring the state agencies and contractors complied with the Programmatic Agreement protecting historic resources, she gained invaluable "on the ground" experience at a large-scale, fast-paced construction project.

### Historic Railroad Buildings Conditions Assessments & Survey, Vermont

While working at VTrans, Kaitlin conducted a survey of the state owned and transportation enhancement (TE) funded historic railroad buildings, documenting the architectural condition of the structures and evaluating the success of the TE grants. This 200 page report included historical context and building histories, architectural descriptions, photographic documentation, condition assessments, and recommendations for future work.

## Mark Hamelin, PLA, CLARB Certified, ASLA

Landscape Architecture



### Education

MLA, Master in Landscape Architecture, Harvard University Graduate School of Design, 1981

BS, Recreation Resource Management, University of Vermont, 1978

### Registrations

PLA - VT, NH, ME, NY PA, CO

CLARB - Council of Landscape Architectural Registration Boards - Certification #33827

### Affiliations/Memberships

American Society of Landscape Architects

American Planning Association

Mark recently joined VHB as Senior Landscape Architect/Planner in the South Burlington, VT office. He brings more than 35 years of professional landscape architecture, land planning, and urban design experience on a wide range of public and private sector projects across Vermont and throughout the country. Mark's work has been recognized by his peers with 19 professional design/planning awards. Notable accomplishments include Burlington's Waterfront Park, the recently completed Waterbury State Office Complex, and the Spruce Peak Master Plan at Stowe Mountain Resort.

*1 year with VHB and 35 years of professional experience*

*Project experience with previous employer:*

#### **Burlington Waterfront Hotel and Marina - Burlington, Vermont**

Feasibility study for Lake Champlain Transit's working waterfront. Intended as a focal point on the urban waterfront the plan incorporates a hotel, Breakwaters outdoor restaurant, marina and public waterfront access.

#### **St. Albans Main Street Streetscape - St. Albans, Vermont**

Streetscape design for the heart of downtown St. Albans. The design incorporated urban storm water techniques and outdoor gathering areas. Highly successful, the streetscape is regarded as a key to the revitalization of the downtown.

#### **Lower College Street - Burlington, Vermont**

Redesign of lower College Street to incorporate storm water gardens, transit stops, public parking and public bathroom facilities. This streetscape serves as the entrance to the Waterfront Park and Echo Center.

#### **Downtown Core Urban Design - St. Albans, Vermont**

Urban design feasibility study to incorporate a parking structure, hotel and State Office building into the St. Albans Downtown Core.

#### **Sugarbush Resort - Warren, Vermont**

Master plan and site planning for the base village at Lincoln Peak. Projects include: Clay Brook condominiums, Lincoln Peak base lodge, Farm House/School House skier service buildings, Rice Brook condominium master plan and pedestrian plazas. Restored riparian stream channels provide a central amenity for the resort.

#### **Waterbury State Office Complex Redevelopment Project - Waterbury, Vermont**

Feasibility study commissioned by the Vermont legislature to study alternate development sites, Overall Master Plan, site planning and permitting for the resurrection of the State Office Complex after destruction from tropical storm Irene.

#### **Plan BTV 'Think Tank' - Burlington, Vermont**

Organized by the Burlington Planning Department, a select team of Developers, Architects and Landscape Architects participated in a detailed review of the proposed Burlington Form Based Code for conformance with the realities of land development and Architecture.

## Mark R. Louro, PE

Rail Engineering



### Education

BS, Civil Engineering,  
Southeastern Massachusetts  
University (now University of  
Massachusetts Dartmouth),  
1987

### Registrations/ Certifications

Professional Engineer (Civil)  
MA, 1992

Professional Engineer CT,  
1997

Professional Engineer NJ,  
2014

### Affiliations/ Memberships

American Society of Civil  
Engineers

**Mark is a Senior Project Manager in VHB's Transit & Rail Division with extensive experience in Transportation Engineering and Construction. Notable projects include Downtown Burlington Transit Station, the Ruggles Station Platform Project, the Green Line light rail extension project, South Coast Rail commuter rail project, Portland North track and drainage improvements, freight railroad track extension and line improvements at Boston's Marine Industrial Park, WMATA Greenbelt route extension, and the Central Artery/Third Harbor Tunnel project. Before joining VHB, Mark was a civil engineer with the Massachusetts Highway Department.**

*18 years with VHB and 29 years of professional experience*

### **Main Street and Merchants Row Bridges, Middlebury, VT**

For the Town of Middlebury, VHB is responsible for the development of design documents and construction or the replacement two 93-year-old bridges spanning the Vermont Railway mainline track in Middlebury's downtown area. Mark is performing a study to develop alternatives for the relocation of the ACTR (Addison County Transit Resources) transfer point located on Merchants Row. The alternatives analysis will evaluate up to 10 temporary and permanent locations for the transfer point. The analysis will consider constructability, cost, property impacts, and impacts to bus operations to evaluate the alternatives.

### **MassDOT, South Coast Rail Commuter Service Extension, Southeastern Massachusetts**

For the Massachusetts Department of Transportation (MassDOT), Mark was Task manager for the design development of highway grade crossing concepts for proposed commuter services to southeastern Massachusetts along a proposed 40-mile commuter rail corridor from Boston to Fall River and New Bedford.

### **MBTA, Ruggles Station Platform Project, Boston, MA**

Mark is managing a multidisciplinary team of engineers and architects to expand Ruggles Station to include a new 800-foot-long commuter rail platform to serve Track 2. The project includes construction of the platform with two canopied access points lighting, furniture, VMS, security, plumbing, drainage and the extension of eleven catenary structures. The project also involves coordination with Northeastern University (NEU) for their proposed science and engineering building that is located on the adjacent NEU parking lot. ts.

### **CCTA, Burlington Downtown Transit, Burlington, VT**

For the Chittenden County Transit Authority (CCTA), Mark is Project Manager for the development of construction documents for the construction a new \$10 million transit station. He is managed a multidisciplinary team of civil engineers, architects, structural engineers, and MEP engineers to design a bus station that accommodatea 10 bus berths along a 250-foot canopied platform with a 2,500-square-foot two-level station building. The facility will includea a driver's lounge below street level to provide rest facilities and a break room for drivers between runs.

## Ryan Lizewski, PE

Hydrologic & Hydraulic Studies



### Education

BS, Civil and Environmental  
Engineering, Worcester  
Polytechnic Institute, 2007

### Registrations/ Certifications

Professional Engineer MA,  
2012

Ryan is an environmental engineer focusing on water resource engineering, surface hydrology, and stormwater management. He has served as a project and field engineer for a diverse set of responsibilities and tasks including hydrologic & hydraulic modeling, coordinating and conducting field programs, construction oversight, data management, and data analysis. His experience includes projects focusing on low impact development, flood mitigation, innovative stormwater designs and developing best management practices for both private and public sector clients.

*4 years with VHB and 9 years of professional experience*

### **VTrans, Preliminary Bridge Hydraulic Analysis, Vermont**

For VTrans, Ryan served as Project Engineer for the development of preliminary bridge hydraulics models using HEC-RAS software to evaluate structure sizing for subject waterway crossings in accordance with the VTrans hydraulic manual and other regulatory requirements. Georeferenced hydraulic models were created for each bridge location using the MicroStation: InRoads CAD software package to generate the geometric cross section and line string information for import into HEC-RAS based on the site survey.

### **Railway Brook Stream Restoration, Newington, NH**

As Project Engineer, Ryan is providing construction support for the restoration of Railway Brook, a highly impacted urban stream in the Great Bay coastal watershed. Ryan developed a HEC-RAS hydraulic model to predict maximum shear stress and velocities through the project reach to assist channel design and bed stability analysis.

### **Ashuelot River (West Street) Dam, Hydrologic Modeling and Wetlands Analysis, Keene, NH**

Ryan is Project Engineer assisting the City of Keene with the evaluation of the potential removal of the Ashuelot River (West Street) Dam, which has fallen into disrepair. The City and community seek to more fully understand the implications on wetlands and floodplains that would result from the possible dam removal.

### **Great Dam Removal, Exeter, NH**

Ryan is Project Engineer assisting with engineering design for the removal of the Great Dam from the Exeter River. He is assisting with geomorphic analysis, hydrological and hydraulic analysis, water supply, dam and structural engineering, and impacts to natural resources. He will also assist with preparation of bid documents and selection of a contractor to complete the dam removal.

### **Beaver Brook Flood Study, Pelham, NH**

Ryan was Project Engineer for a flood study involving a 10-mile stretch of Beaver Brook, including eight bridge structures. The study involved conducting a hydrologic evaluation based on river gage records; developing a step-backwater hydraulic model using HEC-RAS; and evaluating alternatives for flood mitigation including conveyance improvements, floodplain storage, infrastructure modifications, and regulatory controls.

## Scott Burbank, PE

Bridges and Structures



Scott is VHB's Director of Structures in Vermont, with extensive experience in planning, design and construction of both highway and railroad bridges and roadway reconstruction projects. His qualifications also include services for quality control and quality assurance, construction cost estimating, accelerated bridge construction (ABC), and structural inspections of both railroad and highway bridges.

### Education

BS, Civil Engineering,  
Worcester Polytechnic  
Institute, 1993

### Registrations/ Certifications

Professional Engineer  
(Structural I) VT, 2000

*7 years with VHB and 22 years of professional experience*

### USDA, Green Mountain National Forest IDIQ, Vermont

Scott provided structural engineering support for bridges, culverts, embankments, and other structures when the United States Department of Agriculture (USDA) Forest Service retained VHB to provide surveying and civil and structural engineering services for a multi-year Indefinite Delivery/Indefinite Quantity (IDIQ) contract to support activities in the Green Mountain and Finger Lakes National Forests in Vermont and New York. VHB's services included civil and structural engineering for bridges, culverts, embankments, roads, and other structures.

### Brattleboro Town Highway Bridge #7, Brattleboro, VT

Scott was the Project Manager for the complete replacement of Town Highway Bridge No. 7 over Halladay Brook in Brattleboro VT. This project included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating throughout the development of the project.

### Cross Street Bridge, Middlebury, VT

Scott was Project Engineer assisting with the design and construction cost estimating of the various Design-Build submittal packages for project aimed to alleviate major traffic congestion, improve safety, and provide additional pedestrian and bicycle access. Tasks included design/construction coordination and scheduling, utility company coordination, material testing coordination and monitoring, coordination of property owner and town meetings.

### Guilford Town Highway Bridge #65, Guilford, VT

Scott was the Project Manager for the complete replacement of Town Highway Bridge No. 65 over Hinesburgh Brook in Guilford, VT. This project included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating for rapid bridge construction techniques. Accelerated bridge construction elements were used to minimize the roadway closure period during construction.

### VTrans ER BRF 0162(18) and Rochester, ER STP 0162(19), VT

Scott was the Project Manager for the complete replacement of two state bridges on VT 73 over Brandon Brook and the White River. Both bridges were destroyed during Tropical Storm Irene. These projects included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating for VTrans first multiple bridge replacement projects on a single corridor within one Town.





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