RESPONSE TO REQUEST FOR QUALIFICATIONS FOR

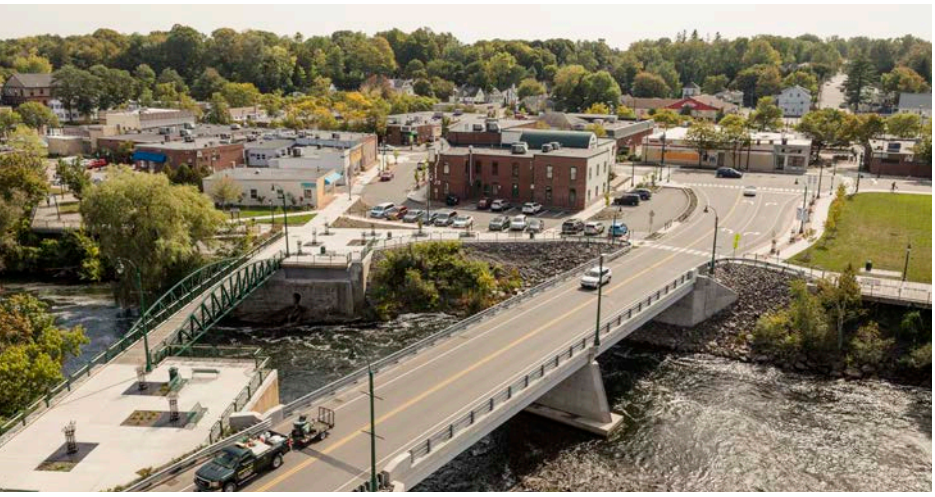
At-The-Ready Consultant Engineering Services for Municipalities

Design Services

Vermont Agency of Transportation
Municipal Assistance Bureau

March 6, 2020

Stantec has been providing an array of planning, design, engineering, construction inspection, and project management services to VTrans and the municipalities and communities of Vermont for over 65 years.



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A. COVER LETTER

Burlington Great Streets, Burlington, Vermont

A. COVER LETTER

Stantec Consulting Services Inc.
55 Green Mountain Drive
South Burlington, Vermont 05403

March 6, 2020

Nydia Lugo
Municipal Assistance Bureau
Vermont Agency of Transportation
219 North Main Street
Barre, Vermont 05641

RE: RFQ for At-The-Ready Consultant Engineering Services for Municipalities

Dear Ms. Lugo:

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind. When we take on a project, we see more than a highway, road, bridge, or pond. At Stantec, we look at every challenge as an opportunity to bring communities together. In the face of ever-increasing budget constraints and the need for an expanding range of services, having a trusted team such as Stantec makes sense for your high priority projects requiring multi-disciplined consultation. Our proposed team of engineers and environmental scientists is broadly skilled and has extensive experience with the design, project management, and construction inspection services typically required for projects administered through the VTrans Municipal Assistance Bureau (MAB).

Our staff are recognized regional leaders in transportation and stormwater projects and have worked hand-in-hand with Vermont communities for many years. We have the experience and capacity to provide the highest level of service to our communities for the following reasons:

We Know the VTrans Project Development Process: The results speak for themselves. Our team members have provided design, project management, and construction inspection services for over 40 MAB funded transportation and stormwater projects over the last 10 years. Our team knows what it takes to move a project from concept to 100% design and into construction. It is one reason why Stantec has been repeatedly selected by our existing clients.

We understand Financial Constraints Facing Vermont Municipalities: Vermonters deserve high-quality services delivered in a reasonable amount of time to avoid unnecessary schedule delays and change orders during construction. First-rate work from a firm that is experienced with state and federally funded projects can result in tens or even hundreds of thousands of dollars saved during construction. Our team has a successful record of doing this for Vermont municipalities. It is our primary goal for every project we work on.

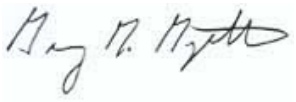
We Know State and Federal Regulations: We have knowledge of state and federal regulations. Over 95% of the work done by this team is state and federally funded, meaning these projects meet their requirements and follow their processes. Unique requirements typically include NEPA documentation, state and federal permitting and clearances, and right-of-way acquisition procedures.

We Are Committed to Vermont: Living and working in Vermont, and having worked with VTrans and many Vermont municipalities for over 65 years, we are passionate about helping our communities. We believe the best way to do this is to provide quality, innovative, and responsive service. That is our commitment.

We emphasize the depth of our in-house resources, our specific knowledge of MAB projects and processes, and our ability to respond both timely and in sufficient detail to sustain progress and maintain the project schedules. We look forward to continuing to contribute our enthusiasm and skills to improve Vermont's infrastructure and environmental footprint. Thank you for your consideration.

Sincerely,

Stantec Consulting Services Inc.



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Gary Santy, PE
Senior Principal, Transportation
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B. GENERAL FIRM INFORMATION

Winooski River Walk, Winooski, Vermont

B. GENERAL FIRM INFORMATION

Introduction to Consultant

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, construction inspectors, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe. Projects that we're proud to be a part of and stand behind.

Company Information

Projects will be completed out of our South Burlington, Vermont office as Stantec Consulting Services Inc., a division of the Stantec group of companies.

FIRM NAME

Stantec Consulting Services Inc.

BUSINESS ADDRESS/PHONE/EMAIL

55 Green Mountain Drive
South Burlington, Vermont 05403
P: (802) 864-0223 | F: (802) 864-0165
E: Greg.Goyette@stantec.com | Gary.Santy@stantec.com

YEAR FIRM WAS ESTABLISHED/ FORMER FIRM NAMES

Stantec Inc. was formed in 1954 in Canada. Stantec Consulting Services Inc., however, was originally incorporated in 1929 as Manhasset Civil Engineers and was eventually acquired by Stantec Consulting Group Inc. in 2004 (later renamed to Stantec Consulting Services Inc. that year). Stantec Consulting Services Inc. established the South Burlington, Vermont office in 2006 following the acquisition of Dufresne-Henry.

Stantec & Vermont

For 65+ years Vermont municipalities have been, and continue to be, very important clients to our team. We have a strong desire to be involved in our communities and are prepared to commit the necessary resources to help you succeed. Our deep and talented team offers Vermont municipalities the support of our many local staff who have established relationships with various local, regional, and state officials. As local and experienced staff, we can readily provide the closeness, accessibility, responsiveness, project area familiarity, and local contact to streamline the work and provide successful projects on your schedule.

Firm's Capabilities to Perform the Work

Our local team of planning, design, and engineering professionals has decades of first-hand experience in Vermont. The South Burlington office staff will lead these services. When needed, support from other regional offices can be readily solicited. These regional offices have over 2,000 staff members who can handle virtually any assignment. The result of this connected team's resources, knowledge, and experience is an unmatched commitment to meet your project's needs.

Understanding of the Work Required

Through our involvement with the MAB over the last 18 years and working with VTrans on over 15 retainer type contracts that date back to 1992, Stantec team members understand what it takes to successfully plan, design, and construct projects that receive funding through the MAB program. We have worked with MAB and municipal staff to move over 20 projects into construction over the last 10 years, and are currently working on over 15 projects that are in varying stages of project development.

A successful project is the result of identifying project issues and working together to find solutions. This includes the ability to anticipate issues and methods to expedite the project development process. Stantec team members have done this consistently for MAB projects. They understand that team work with municipal representatives and VTrans are paramount to successfully delivering projects. Our team members have a great understanding of not only how to find solutions for design and construction challenges,

Fort Ethan Allen Sidewalk, Colchester, Vermont

but also of issues that require early coordination such as utility relocations, environmental permitting, and right-of-way acquisition. The team members shown on the organization chart include specialists in ROW plan and document development, utility coordination and relocation design, and environmental permitting including stormwater, wetlands, Act 250, and local review. Stormwater permitting is a complex issue in Vermont. Team members are very knowledgeable on how requirements apply to transportation projects. We have helped VTrans and ANR develop the Transportation chapter for the recently released and revised Vermont Stormwater Management Manual and are at the forefront of innovative stormwater practices that help municipalities not only meet their regulatory obligations but also improve water quality for our communities.

Team members are also familiar with the "Municipal Assistance Bureau Local Project Guidebook for Locally Managed Projects". This document is used by Stantec as a framework for developing a detailed scope of work for each assignment and for helping municipalities navigate requirements associated with state and federally funded projects.

Past experience has also proven that having knowledge of the local area and established local relationships are a great benefit. Having worked in Vermont for over 65 years, our team has these qualities and resources. From our experience with working with the VTrans MAB program, we also understand the value of having a team with a wide range of capabilities, experience, and resources. For instance, when VTrans needed specialty public relations material for a number of concurrent construction projects in the Waterbury area, including the municipally managed roundabout at the intersection of US Route 2 and VT Route 100, Stantec's graphic artists were available to assist and quickly produce a widely used presentation that was positively received by the community.

Having worked on numerous projects administered through the Municipal Assistance Bureau, our project team understands the constraints our communities are often working with. Project funding is often based on cost estimates prepared during the scoping phase. This project funding is typically capped and any design and construction costs over the budgeted amount often become the responsibility of the municipality. Our team has had numerous successes working with Vermont communities to move these types of projects into construction and within their allotted budgets.

How to Work with Stantec

The organization chart on page 15 includes Stantec's personnel that are available to support your projects. If a municipality elects to work with Stantec on their project, they can notify Stantec's Program Manager, Greg Goyette. Greg will then discuss the project with Assignment Managers and assemble the team that has the qualifications and availability to complete the work. The Assignment Manager will then work closely with the appropriate municipal staff to develop a scope of work and fee that fits expectations and budget.

Subconsultants

Vermont Survey & Engineering (VSE) | Survey Services

FIRM NAME
Vermont Survey and Engineering, Inc.

BUSINESS ADDRESS/PHONE/EMAIL
79 River Street, Suite 201
Montpelier, Vermont 05602
P: (802) 229-9138
E: info@vermontsurvey.com

YEAR FIRM WAS ESTABLISHED/ FORMER FIRM NAMES
Vermont Survey and Engineering, Inc. (1982)

Vermont Survey and Engineering, Inc. (VSE) is a New England-based Land Surveying firm, first incorporated in 1982. VSE's client base encompasses Federal, State, and Municipal agencies as well as commercial, industrial, and residential developers. They provide survey services to engineering firms, architectural firms, environmental firms, utility companies and construction companies. Their professional staff includes land surveyors licensed in Vermont, New Hampshire, and New York. Right-of-way services primarily focus on highway design and related activities for State and Municipal agencies, including the preparation of right-of-way plans and associated title abstracting. Surveying services include geodetic control and topographic, hydrographic, boundary retracement, ALTA/ ACSM, and construction layout surveys.

Their extensive experience working on all types of VTrans projects have included projects for Highway, Bridges, Aviation, Rail, and Right-of-Way. Their services cover topographic survey, establishing, and setting control, creating right of way plans, and boundary retracement plats. VSE has provided boundary surveys for Vermont Department Buildings & General Services and right-of-way plans for the New Hampshire Department of Transportation. They have consistently delivered skilled personnel and expertise to the many VTrans projects, and are committed to continuing this relationship and quality product during this contract.

Hartgen Archeological Associates | Archeological/Historical Services

FIRM NAME
Hartgen Archeological Associates, Inc.

BUSINESS ADDRESS/PHONE/EMAIL
1744 Washington Ave.
Rensselaer, NY 12144
P: (518) 283-0534
E: tjamison@hartgen.com

YEAR FIRM WAS ESTABLISHED/ FORMER FIRM NAMES
Hartgen Archeological Associates, Inc. (1973)
Hartgen Archeological Associates, Inc., founded in 1973, has grown to become the largest privately-owned cultural resource management firm in the northeast and a recognized leader in the field. The company provides a full range of services which help clients to comply with the requirements of Section 106 of the National Historic Preservation Act, the National Environmental Policy Act, Vermont Act 250 processes and with the Vermont Agency of Transportation (VTrans) and the Federal Highway Administration (FHWA) regulations. Hartgen has extensive experience conducting cultural resource projects for federal, state, municipal, and private clients.

Hartgen has completed over 1,000 archeological studies, historic preservation reviews, and architectural studies throughout Vermont including over 430 for VTrans. Their experience in Vermont includes all phases of cultural resource management including ARAs, Phase IA, IB, II and III archeological investigations; National Register eligibility synopses, architectural history; HABS/HAER documentation; historical deed and document research; historical map research; development of archeological research designs and master plans; artifact cataloging, design and presentation of public educational signs, pamphlets, and exhibits; and writing and publication of research reports including presentation of results at scholarly and public meetings where appropriate. Our experience encompasses the range of projects typically undertaken by VTrans, such as highway, bridge, airport projects. Our clients include engineering firms, private organizations, museums, municipal state governments and federal agencies.

Hartgen is composed of a staff of over 30 well-qualified, experienced professionals, including archeologists, an architectural historian, laboratory staff, documentary researchers, CAD/GIS designers, editorial and administrative personnel, many of whom have worked together as a team for years. The staff's individual professional backgrounds and their shared experiences in the field are the foundation of Hartgen's growth and success. Their staff is well versed in cultural resource regulations including Section 106 of the National Historic Preservation Act (NHPA). Project oversight is provided by their 36 CFR 61 qualified Principal Investigators. They have staff certified in health and safety operations at hazardous materials (HAZMAT) sites, and in the Native American Graves Protection and Repatriation Act (NAGPRA). Their diligent staff, their flexible corporate organization and their ability to interact effectively with our clientele, state, and federal agencies ensure that each project proceeds through the review process successfully and that all phases of the project are completed in a timely and efficient manner.

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VERMONT
AGENCY OF TRANSPORTATION

Stantec Consulting Services Inc.
55 Green Mountain Drive
South Burlington, Vermont 05403

Organizational Chart

Program Manager

Greg Goyette, PE *	802.497.6403	greg.goyette@stantec.com

Design Services

Assignment Managers

DESIGN SERVICES

Gary Santy, PE *	802.497.6421	gary.santy@stantec.com
Greg Goyette, PE *	802.497.6403	greg.goyette@stantec.com
Greg Edwards, PE *	802.497.6398	greg.edwards@stantec.com
Mike Fowler, PE *	802.497.6395	michael.fowler@stantec.com
Israel Maynard, PE *	802.497.6415	israel.maynard@stantec.com
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Lead Engineers

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Walt Woo, PE *	781.221.1294	walt.woo@stantec.com

Subconsultant Support

SURVEY

Vermont Survey & Engineering, Inc.	802.229.9138	info@vermontsurvey.com

ARCHEOLOGY / HISTORIC

Hartgen Archeological Associates	802.387.6020	tjamison@hartgen.com

Municipal Project Management Services

Assignment Managers

MUNICIPAL PROJECT MANAGEMENT

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Greg Edwards, PE *	802.497.6398	greg.edwards@stantec.com
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Rick Bryant, PE *	413.387.4502	rick.bryant@stantec.com
Mike Fowler, PE *	802.497.6395	michael.fowler@stantec.com

Construction Inspection Services

Assignment Managers

CONSTRUCTION INSPECTION SERVICES

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Construction Inspectors

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Subconsultant Support

MATERIAL TESTING

S. W. Cole	802.391.4542	info@swcole.com

SURVEY

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Additional Technical Support / Discipline Leads

PAVEMENT DESIGN

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TRAFFIC MANAGEMENT / CONSTRUCTIBILITY

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BIKE / PEDESTRIAN / COMPLETE STREETS

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RIGHT-OF-WAY

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TRAFFIC SAFETY & OPERATIONS

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LIGHTING DESIGN

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LANDSCAPE DESIGN

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STORMWATER DESIGN / ANALYSIS

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HYDRAULICS / CULVERT DESIGN

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VISUALIZATION / CADD / BIM / 3D MODELING

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ENVIRONMENTAL (CONTAMINATED SOILS, NEPA, PERMITTING)

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UTILITIES (WATER / SEWER, TUNNELING / TRENCHLESS, RELOCATION)

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** Resume included for key staff in Section D.*

Availability Chart

The following chart details availability of key staff members to devote to municipal projects over the next 6 months and an estimate of how much time each staff member has historically worked on municipal projects. It's important to note that, no matter the firm, staff availability will likely change over the life of the prequalification due to new assignments, staff turnover, promotions, and other factors. Stantec's unique depth, breadth, and quality of design professionals in Vermont uniquely positions us to absorb these changes without sacrificing the quality of design services that our clients have come to expect from us. In addition, we have had a very low turnover rate of key staff over the last 10 years, which leads to our clients receiving quality service on a consistent basis.

6 - Month Outlook

Team Member	Project Role	Estimated Hours Available Over the Next 6 Months	% Time Typically Spent on Municipal Projects
Greg Goyette, PE	Program Manager, Assignment Manager – Design, MPM	500	50%
Gary Santy, PE	QA/QC, Assignment Manager - Design	500	20%
Dave Youlen, PE	QA/QC, Assignment Manager – Construction Inspection, Lead Engineer, Traffic Management/Constructability, Utilities	500	60%
Greg Edwards, PE	Assignment Manager – Design, MPM, Construction Inspection, Grant Writing	500	20%
Mike Fowler, PE	Assignment Manager – Design, Pavement Design, Rail	400	30%
Israel Maynard, PE	Assignment Manager – Design, Hydraulics/Culvert Design	500	30%
Marc Foisy, PE	Assignment Manager - Design	500	50%
Erik Alling, PE	Assignment Manager – Design, Bike/Ped/ Complete Streets	500	85%
Amanda Ludlow	Assignment Manager – Design, Stormwater Design/Analysis	500	50%
Thad Luther, PE	Assignment Manager – MPM, Lead Engineer, Traffic Signal Design	500	50%
Rick Bryant, PE	Assignment Manager – MPM	500	50%
John Little	Assignment Manager – Construction Inspection	500	50%
Karl Richardson, PE	Lead Engineer	500	50%
Todd Duguay, PE	Lead Engineer, Construction Inspection	500	50%
Glenn Burgmeier, PE	Lead Engineer	500	50%
Chris Gendron, PE	Lead Engineer, Stormwater Design/ Analysis	500	70%
Dave McNamara, PE	Lead Engineer	500	50%

6 - Month Outlook - Continued

Team Member	Project Role	Estimated Hours Available Over the Next 6 Months	% Time Typically Spent on Municipal Projects
Lauren Meek, PE	Lead Engineer	500	40%
Marie Sullivan, PE	Lead Engineer	500	50%
Walt Woo, PE	Lead Engineer, Traffic Signal Design	500	40%
Caela Waite	Engineer/Technical Support, Construction Inspection	500	60%
Bernie Gagnon, PE	Construction Inspection, Traffic Management/Constructability	500	50%
Doug Campbell, PE	Construction Inspection, Utilities	500	75%
Deron Barnes	Engineer/Technical Support, Construction Inspection	500	50%
Andrew McQueeney	Vermont Survey & Engineering	500	50%
Stephen Fraser, LS	Vermont Survey & Engineering	500	50%
Jason Riley	Vermont Survey & Engineering	500	50%
Elise Manning-Sterling	Hartgen Archeological Associates	150	30%
Thomas Jamison	Hartgen Archeological Associates	100	20%
Walter Wheeler	Hartgen Archeological Associates	100	20%
Alan Brown	S.W. Cole Engineering	550	10%
Scott Harmon	S.W. Cole Engineering	500	10%
Thomas Morgan, PE	S.W. Cole Engineering	500	15%

C.

DESIGN SERVICES

Manchester Roundabout, Manchester, Vermont

C. DESIGN SERVICES

Qualifications and Experience of Firm

The Stantec team has successfully moved over 20 projects through the VTrans MAB program and into construction over the last 10 years. These projects include shared-use paths, sidewalks, roundabouts, rail crossings, bridges, roadways, streetscapes, traffic signals, and stormwater treatment systems. Most of the projects involved utility relocations, right-of-way acquisitions, and environmental permitting and demonstrate the breadth and depth of our local capabilities. All of these projects were completed by closely following the framework provided by the "Municipal Assistance Bureau Local Project Guidebook for Locally Managed Projects". A listing of these projects, including construction completion year, is below. Project examples either completed through the MAB or relevant to these types of projects are included in the following pages.

- Norwich Tigertown Culvert | In Progress
- South Burlington Bartlett Brook Stormwater Treatment System Expansion | In Progress
- Essex Cul-De-Sacs Stormwater Retrofits | In Progress
- South Burlington Lindenwood Drive Stormwater Detention Pond | In Progress
- Colchester Prim Road | In Progress
- West Lakeshore Drive Intersection Realignment | In Progress
- Essex Phosphorous Control Plan | In Progress
- West Lakeshore Drive Shared-Use Path | 2019
- Lamplite Acres Stormwater Improvements | 2019
- Essex Towers Road Sidewalk | 2019
- Vergennes Gateway Sidewalk | 2018
- Colchester Fort Ethan Allen Sidewalk | 2018
- Essex Route 2A Shared-Use Path | 2015
- Waterbury Roundabout | 2015
- South Burlington US 2/I-89 Exit 14 Widening | 2015
- Waitsfield Village West Sidewalk Project | 2014
- Waitsfield Old County Road Intersection Realignment | 2014
- Waterbury Stowe Street Sidewalk | 2014
- Vergennes Train Depot Relocation | 2013
- Waterbury Farr Road Extension & Bridge Removal | 2013
- Statewide Safe Routes to School Radar Speed Feedback Signs | 2013
- Manchester Roundabouts | 2013
- Enosburg Park-and-Ride | 2012
- Swanton Rail Crossing | 2012
- Roxbury Rail Crossing | 2012
- Statewide Park-and-Ride Signage Replacement | 2012
- Colchester Campus Connector Road | 2012
- Burlington Church St./St. Paul St. Improvements | 2012
- Franklin Sidewalk | 2010
- Waterbury Park-and-Ride | 2010

Knowledge of Federal & State Requirements

Working on state and federal funded transportation projects is primarily what we do. As a result, we are very knowledgeable of current standards and policies. The following is a list of some of the Design Standards Criteria and Guidelines we regularly apply to projects:

- VTrans Municipal Assistance Bureau Local Projects Guidebook for Locally Managed Projects - August 2014 (Revised September 2017)
- VTrans Local Transportation Facilities Guide to the Right-of-Way Phase
- VTrans Local Projects Bid Documents and Appendix
- Vermont Pedestrian and Bicycle Facility Planning and Design Manual
- VTrans Procedure for "Public Interest Funding"
- VTrans Work Zone Safety and Mobility Guidance Document
- 2017 Vermont Stormwater Management Manual Rule and Design Guidance
- Americans with Disabilities Act (Uniform Federal Accessibility Standards)
- NACTO Urban Street Design Guide
- NACTO Urban Bikeway Design Guide
- AASHTO A Policy on Geometric Design of Highways and Streets
- AASHTO Standard Specifications for Highway Bridges
- VTrans Project Development Process
- VTrans Project Scoping Manual
- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.
- AASHTO Roadside Design Guide
  Highway Capacity Manual (TRB Special Report 209)
- VTrans Traffic Signal Installation Policy

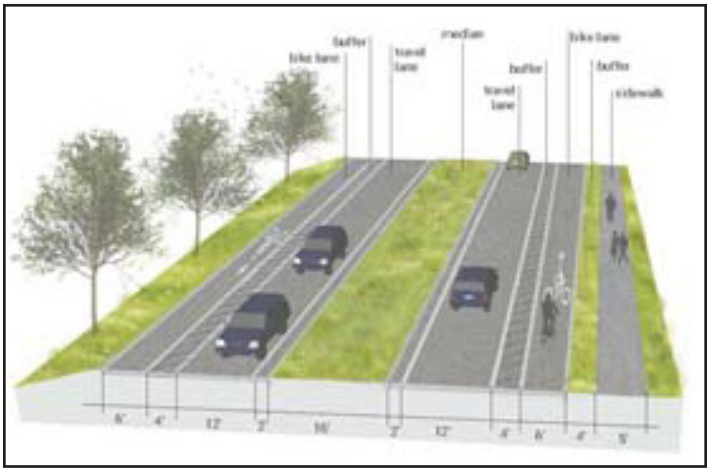
- VTrans Road Design Manual
- VTrans Structures Manual
- VTrans Level of Service Policy
- AASHTO Guide for Design of Pavement Structures
- VTrans CADD Policies and Standards
- VTrans Route Survey Manual
- VTrans Hydrologic and Hydraulic Design Guidelines and Criteria
- VTrans Hydraulic Evaluation of Bridges Waiver valuation process
- VTrans Policy on Design Exceptions
- VTrans Guardrail Policy
- FHWA Uniform Relocation Act Section 23 of CFR
- National Environmental Policy Act of 1969 (NEPA)

One of the most important aspects to assure your project is eligible for FHWA funding is that any acquisitions of right-of-way meet the federal Uniform Act regulations. There is a relatively new guide to assist with this. It is the Real Estate Acquisition Guide For Local Public Agencies (2018 Edition). This guide includes the ability to reduce the local match by using right-of-way donations by property owners and describes the use of waiver valuations to minimizing costs and time for the right-of-way acquisition process. We are very familiar with this process and have utilized these techniques on numerous VTrans and MAB projects to minimize costs and time for the right-of-way acquisition process.

Project Examples

Stantec's local experience is a perfect fit for any municipal project from planning to scoping to design. Our team has experience with survey, engineering and permitting on a long list of projects for Vermont communities. Our resume of projects includes designs that involve stormwater treatment and management, ROW plan and document development, utility relocations, traffic management during construction, categorical exclusion documentation, floodplain permitting, historic/archaeological resource assessments, and construction bid documents following the Municipal Assistance Bureau template to name a few. Our team understands federal and state requirements that need to be followed for MAB funded projects. Team members have experience with requirements such as acquiring temporary and permanent easements in accordance with the Uniform Act, applying VTrans Roadway and Structural Engineering Instructions to projects that fall within the State Highway System, and developing traffic management plans using the VTrans Work Zone Safety and Mobility Guidance Document. We recently applied the Work Zone Safety and Mobility Guidance Document to develop a traffic management plan for the construction of a new roundabout and interstate bridges in Waterbury, Vermont. The result was a traffic management plan that has resulted in minimal disruption to the traveling public and the community during construction of these major infrastructure projects.

Planning Studies



VTRANS HARTFORD US 5 CORRIDOR STUDY, HARTFORD, VERMONT

In response to numerous public concerns regarding congestion and safety issues along the 2-mile-long US Route 5 corridor in Hartford Vermont, the Vermont Agency of Transportation brought Stantec on board to look at the whole corridor and provide a cohesive plan. Stantec developed a Project Definition Report that identified issues and concerns through public input, provided a project purpose and need and developed and evaluated alternative improvement strategies leading to the selection of preferred improvements and/or alternatives. The process included working closely with a stakeholder group made up of Town staff, TRORC staff, and others, and soliciting public input on alternative solutions. We analyzed 10 intersections along the corridor including performing signal warrant analyzes and capacity analyzes for various improvements. Alternatives considered: signalizing intersections, constructing roundabouts, and converting a four-lane highway to two lanes with buffered bike lanes. The evaluation of alternatives included a benefit/ cost analysis to assist the selection of the preferred improvements. The result was a list of short -term improvements that could be readily implemented at a relatively low cost and longer term and higher cost improvements to address the safety and congestion concerns along the corridor. One of the greatest benefits was calming traffic and accommodating bicycles through providing 2 miles of buffered bike lane by simply revising pavement markings and adding signs.

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VT ROUTE 15 BICYCLE/PEDESTRIAN IMPROVEMENTS STUDY, ESSEX, VERMONT

The VT Route 15 corridor from Winooski to Essex Junction is recognized as a primary transportation corridor that lacks sufficient bicycle facilities. Much progress has been made in recent years to address this. The section of VT

Route 15 from Susie Wilson Road to West Street Extension, about ½ mile, is a missing link in this regional bicycle network. The existing roadway is a four lane section with no shoulders and a dividing median. Stantec worked with a project steering committee to facilitate a public process and develop and evaluate alternatives. The study resulted in a public supported road diet alternative. This alternative reduced the four lanes to three and provided buffered bicycle lanes. With all work within the existing right-of-way and limited environmental permitting necessary, the project can be readily funded, developed and constructed.

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Pedestrian & Bicycle Infrastructure

WEST LAKESHORE DRIVE SHARED USE PATH, COLCHESTER, VERMONT

The Town of Colchester has long recognized the value of developing a network of pedestrian and bicycle facilities to complement their transportation and recreation system. Over the years they have developed more than 5 miles of shared-use paths to promote active transportation and link their various neighborhoods to surrounding communities. The result has been strong support to expand their well-used shared use system and fill-in important links. One of the needed links was a 4,400-foot section along West Lakeshore Drive between Church Road and Prim Road.

Initially, we worked with Town staff to develop and evaluate alternatives, complete a public outreach process and gain concurrence on a preferred alternative – a 10-foot wide asphalt shared-use path along the south side of West Lake Shore Drive. We then completed the design plans, permit applications, and right-of-way plans and coordinated utility relocations. Some of the greatest constraints on the design were; the proximity of residences to West Lakeshore Drive, the existing landscaping in their front yards and the limited existing highway right-of-way width. A 10-foot shared-use path required the path be within 45 feet of residences and required obtaining permanent rights from more than 20 property owners. While our design avoided or minimized impacts, the project did include mitigation measures such as replacement landscaping.

Project features also included the construction of a grass channel for stormwater treatment, a new closed drainage system, utility relocation, driveway reconstruction, and landscaping.

CONTACT
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COLCHESTER CAMPUS CONNECTOR ROAD AND SHARED-USE PATH, COLCHESTER, VERMONT

With just one project, students at Saint Michaels in Colchester have a safer and more environmentally friendly alternative for traveling between the college's North and Main campuses and drivers along Route 15 have an easier, less congested route. All thanks to the new Campus Connector, which has made traveling in Colchester an easier proposition for the entire community.

The new roadway, designed by Stantec, is being praised by all involved, from Saint Michaels, to the Army National Guard, to Senator Leahy, to VTrans and the Town of Colchester. It provides a safer and easier route for students to move between the two campuses via a new 10' wide shared-use path and 4' wide bicycle lanes, exactly what St. Mike's had hoped for. The Town used the project to demonstrate their new period street lighting standard and have expressed how attractive they find the new road. The most innovative facet of this project is its approach to stormwater management and treatment. Stantec designed an infiltration system to address the very level site's drainage concerns. Rather than employ the typical stormwater collection and offsite disposal approach, the system treats runoff and then infiltrates it on site. The project not only met its schedule but was so far under budget—thanks, in part, to very few change orders—that the town was able to

use the remaining $400,000 to improve other town roads. Construction was completed in 2012.

CONTACT
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WATERBURY STOWE STREET SIDEWALK, WATERBURY, VERMONT

Stantec worked with the Town of Waterbury to prepare design plans and bid documents for 1,800+ feet of a 5 foot wide sidewalk along Stowe Street in Waterbury, Vermont. This project involved design and construction of ADA compliant sidewalk within the ROW limits of a Class 2 Town Highway, a gravity block retaining wall, drainage improvements and a traffic management plan. A unique aspect of the project included coordination with concurrent design and construction projects in the Waterbury area including an interstate bridge replacement project over Stowe Street. Construction was competed in 2014.

CONTACT
Alec Tuscany, Public Works Director
Town of Waterbury
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VERGENNES GATEWAY SIDEWALK, VERGENNES, VERMONT

Stantec was selected through the ATR program, by the City of Vergennes, for the design of a sidewalk at the City's northern end which was a missing link in their extensive network. The project area served as the gateway into Vergennes and marked the place where motorists transition from the highway speeds of US 7 & VT 22A to an urban area where vehicle speeds should be much slower. To help give drivers a visual cue of the changing roadway characteristics, Stantec designed curb extensions with Rectangular Rapid Flashing Beacons. The project was completed within budget and, because of a motived project team and timely submittals, construction was substantially completed just 14 months after the design contract was signed.

CONTACT
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City of Vergennes
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Intersections

WATERBURY ROUNDABOUT, WATERBURY, VERMONT

Putting the needs of the community and our client front and center, we tackled the traffic and safety issues at this existing unsignalized "T" intersection by designing a new roundabout with a number of features requested by the residents and business owners. The US Route 2 and VT Route 100 intersection, built in 1960, was experiencing increasing traffic with over 12,000 vehicles per day and 600-foot queues during peak travel hours. Further, while Route 2 is a village road with children and residents making up a large pedestrian component, Rt. 100 has higher speeds and large trucks heading to Green Mountain Coffee Roasters and affecting pedestrian safety.

Managing the traffic flow and providing a safer pedestrian environment were major goals of the town, as well as creating a northern gateway for Waterbury. We provided preliminary and final design services, permit coordination, and construction related engineering to meet our client's goals. This was not without challenges. Among the most complex was the need to provide access to businesses adjacent to the roundabout during construction. To address this, we built into the construction documents the requirement for the contractor to place signs guiding drivers to parking lots for the businesses, to provide parking attendants to help drivers find spaces, and to station flaggers at business driveways to allow traffic flow.

The roundabout operation resulted in drivers having to slow down, and splitter islands in the middle of the roads provided shorter crossings, increasing pedestrian safety. We designed an ADA compliant path to the town Recreation Center, a major destination. Landscaping, lighting, and patterned concrete give the roundabout an aesthetic significance worthy of a gateway into town. We also provided storm water management, utility coordination and updates, and traffic control during construction.

CONTACT
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Town of Waterbury
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MANCHESTER STONE ARCH BRIDGE AND ROUNDABOUTS, MANCHESTER, VERMONT

To reduce congestion and improve safety at troublesome intersections, we designed a double roundabout for this thriving southwestern VT community, a popular tourist destination. Stantec provided final design and permitting services for these modern roundabouts at the intersections of VT Route 7A with VT Routes 11 and 30. We developed conceptual plans and permitting; including a hydraulics and hydrology analysis to show no impact due to new bridge. We also developed final roadway and bridge plans, and right-of-way acquisition plans. Our design included traffic calming, sidewalk/pedestrian facilities, landscaping and decorative lighting. Among the challenges our design team faced were creating a roundabout that would be partially located on a bridge, and accommodating the constraints of building this project within an urban historic district.

CONTACT
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VT 116/NORTH STREET/SOUTH STREET IMPROVEMENTS, BRISTOL, VERMONT

Stantec provided final design services for the improvements to the VT116 / North Street / South Street intersection in the center of Bristol, Vermont. This intersection was identified as a high-crash location, and was ranked #66 statewide with 20 crashes over five years. The existing signal equipment was also outdated and in need of replacement.

Stantec worked with the Town and VTrans to design a actuated traffic signal system, improved intersection geometry with bulb-outs, decorative intersection street lighting and landscaping. This project was coordinated with the existing streetscape on Main Street and also with concurrent design for a public park adjacent to the intersection. The project improved safety for motorists, pedestrians and bicyclists and enhanced the aesthetics of downtown Bristol. Construction was completed in the summer of 2015.

CONTACT
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US2 - STAPLES PLAZA INTERSECTION, SOUTH BURLINGTON, VERMONT

For years, drivers heading to I-89 out of Burlington got trapped in a right-turn-only lane along US Route 2. With both traffic and safety concerns the City of South Burlington needed a solution. Stantec provided a full range of design services ranging from conceptual design through final design for the construction of a third eastbound lane of US Route 2, an urban arterial with over 40,000 vehicles per day, from the Sheraton Staples intersection to the I-89 southbound on-ramp. The new road shifted and widened the roadway to add a lane, avoiding the need to remove critical parking spaces for the shopping center along the corridor; reduced the chance of accidents from the right lane; reduced congestion at this intersection, as well as at the UVM jug handle; was constructed without major disruptions to ongoing traffic flow; and came in far enough under budget that the city used the savings to initiate a study into continuing Route 2 downstream. Project elements included bicycle facilities, transit facilities, street lighting, landscaping, utility relocations, stormwater treatment, interconnected and coordinated signal system, and traffic control for highway widening. Stantec also provided NEPA documentation, contract plans, construction cost estimate and permitting meeting VTrans MAB procedures. This $4 Million project as completed in 2015.

CONTACT
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Culverts

REPLACEMENT OF CULVERT #24 AND #25 ON TIGERTOWN ROAD, NORWICH, VERMONT

Culverts #25 and #29 on Tigertown road in Norwich suffered significant damage during a rain event on July 1, 2017. These locations had also been previously over topped during Tropical Storm Irene and are being replaced to sized adequately for resilience during future events. Stantec is providing engineering and permitting services for the replacement of the existing 48" corrugated steel pipe and 5'x4' corrugated metal pipe arch with 13ft x 6' concrete box culverts with wingwalls. The culverts are being realigned to provide better stream geometry to increase hydraulic performance.

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OAK CREEK VILLAGE CULVERT REPLACEMENT, SOUTH BURLINGTON, VERMONT

The City of South Burlington hired Stantec to design, permit and provide construction assistance for two large box culverts in the Oak Creek Village Neighborhood where there has been a long history of flooding issues. Avoiding and relocating several utilities added to the complexity of this project. Stantec optimized the box culvert size to provide sufficient hydraulic opening and aquatic organism passage. The project was funded through the VTrans Municipal Assistance Bureau. Stantec developed plans and contract documents in accordance with VTrans MAB requirements and designed the project to eliminate right-of-way impacts. This approach along with Stantec's experience had the benefit of accelerating the project schedule. Both culverts have been constructed within the budget available to the City.

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Stormwater

BARTLETT BROOK STORMWATER TREATMENT SYSTEM EXPANSION, SOUTH BURLINGTON, VERMONT

The existing wetland treatment area will be expanded to treat an additional 9.34 acres of impervious surface to aid in compliance with the Bartlett Brook Flow Restoration Plan. The expanded system will not only meet the flow mitigation required by the flow restoration plan but will also provide water quality treatment for the impervious surfaces routed to the system. The project includes combining the closed drainage system along Harbor View Road with the closed drainage system along U.S. Route 7 to route the flow to the expanded system. Stantec is providing engineering, permitting and Right of Way services for the project.

CONTACT
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LAMPLITE ACRES GREEN STREETS IMPROVEMENTS, WILLISTON, VERMONT

The Lamplite Acres development in Williston, Vermont was constructed in the 1960s with no storm sewer system or ditching along the roads. The sandy soils within the development allowed storm runoff to infiltrate for much of the year; however, flooding on the roads was common when the ground was frozen, during the spring melt and large rain events creating headaches for residents of the neighborhood. Stantec worked with a local steering committee to evaluate numerous alternatives and make recommendations for mitigating existing stormwater issues through low-impact development and green infrastructure improvements. Alternatives considered included roadside infiltration trenches, rain gardens, stormwater curb extensions, and pervious pavements. The recommended improvements consisted of a combination system of roadside rain gardens with a secondary underground infiltration system to handle larger storm events. Stantec prepared cost estimates and care/maintenance recommendations for the improvements. The recommended improvements were unanimously accepted by the Town.

The Town constructed improvements for one area of the neighborhood as a pilot project with their own forces using engineering plans developed by Stantec. The pilot project succeeded, and as a result, the Town pursued and received VTrans Transportation Alternatives Grant funding to construct the remaining improvements in the neighborhood. The remaining improvements, designed by Stantec, were constructed by the Town in 2019.

CONTACT
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Key Personnel

Stantec has a resource pool of highly talented and skilled people who have much to offer. We strongly believe that the assignment of a small core group where decisions are made, clearly understood, and carried out is a key element to quality service. For this reason, we have identified a group of design services Project Managers that would take the lead on an assignment depending on expertise, relationships, workload, and client needs. These Project Managers were selected based on their experience working with Vermont municipalities.

Our Project Managers have the luxury of working with a deep bench of engineering technical support staff as identified in the organizational chart from Section B. The Project Manager would select a Project Engineer from the support staff available, and these two team members would collaborate through the development process to work with the client, make decisions, and successfully deliver the project. This team would pull in other technical support staff as necessary to address challenges that require skills outside of the range of the Project Manager/Project Engineer team.

As shown in the organizational chart, our Project Managers and Engineers have expertise in many specialty services often required for a VTrans MAB funded project. Specialties include highways, bicycle/pedestrian facilities, complete streets/urban design, traffic signals, roundabouts, street lighting, stormwater systems, bridges, culverts, utility relocations, water and wastewater systems, right-of-way plan and document development, traffic management, constructability review, and park-and-rides. Stantec team members available for these assignments are primarily Vermonters based out of our South Burlington office. The following is a brief description of each key staff member and their role along with a listing of relevant MAB experience.

Assignment Managers

GREGORY GOYETTE, PE | PROGRAM MANAGER, ASSIGNMENT MANAGER: Greg will be the point person for VTrans to call upon as new assignments come up. If called, Greg will identify a Project Manager/Project Engineer team for each assignment, and work with them to develop a suitable scope and fee. He will also be available to serve as Project Manager depending on project needs and current workload. Greg has worked with the Municipal Assistance Bureau for the last 18 years, and has familiarity with many of the current project supervisors. His technical experience and proven managerial skills make him a great fit for this role.

RELEVANT PROJECTS: Essex Route 2A Shared-Use Path, Waterbury Roundabout, South Burlington US 2/I-89 Exit 14 Widening, Waitsfield Village West Sidewalk Project, Waitsfield Old County Road Intersection Re-alignment, Waterbury Stowe Street Sidewalk, Vergennes Train Depot Relocation, Waterbury Farr Road Extension and Bridge Removal, Statewide Safe Routes to School Radar Speed Feedback Signs, Manchester Roundabouts, Enosburg Park-and-Ride, Statewide Park-and-Ride Signage Replacement, Colchester Campus Connector Road, Burlington Church St./ St. Paul St. Improvements, Franklin Sidewalk, Waterbury Park-and-Ride.

ERIK ALLING, PE | ASSIGNMENT MANAGER, BIKE/PEDESTRIAN/COMPLETE STREET: Erik has worked as a project engineer for the last 7 years on numerous path, sidewalk, and complete street projects funded through the MAB. He has a thorough knowledge of VTrans Standard Construction Specifications and developing project manuals including Special Provisions using the MAB template. He has utilized his proficiency in CAD platforms to produce high quality buildable plans that are in conformance with VTrans CADD Standards.

RELEVANT PROJECTS: Colchester West Lakeshore Drive Path, Vergennes Gateway Sidewalk, Essex Towers Road Sidewalk, Colchester Fort Ethan Allen Sidewalk, Waitsfield Village West Sidewalk – Phase 1 and Old County Road Intersection Realignment, Waitsfield Village West Sidewalk – Phase 2, Essex Route 2A Shared-Use Path, Franklin School Sidewalk, Hartford Lower Sykes Mountain Avenue Sidewalk, Waterbury Stowe Street Sidewalk.

ISRAEL MAYNARD, PE |ASSIGNMENT MANAGER, HYDRAULICS/CULVERT DESIGN: Israel has worked as a project engineer for the last 13 years on numerous Roadway, Bridge, Resurfacing, Park-and-Ride and shared use path projects. He has utilized his proficiency in Highway and Stormwater design to produce high quality designs in conformance with VTrans standards that meet regulatory obligations.

RELEVANT PROJECTS: West Lakeshore Drive Path, Bartlett Brook Stormwater Treatment System, Norwich Tigertown culverts, Lindenwood Stormwater, Prim Rd Intersection, Essex Cul-de-sacs.

GARY A. SANTY, PE | QA/QC, ASSIGNMENT MANAGER: Gary will be available to provide project management services and quality assurance/quality control for projects. He has over 35 years of experience with Stantec in transportation design, traffic (vehicular, bicycle and pedestrian) management, construction engineering, public participation, environmental documentation, and permitting.

RELEVANT PROJECTS:
Widening Route 2 South Burlington, Waterbury Roundabout, East Montpelier Park & Ride, Burlington North St. Revitalization Construction, Rutland Center St Marketplace.

VT 116/North Street/South Street Improvements, Bristol, Vermont

GREG EDWARDS, PE | ASSIGNMENT MANAGER, TRAFFIC MANAGEMENT/CONSTRUCTABILITY, UTILITES: Greg has over 25 years of engineering experience, with a focus on highway and traffic engineering. Over these years, he has been involved with hundreds of transportation projects with over 50 in Vermont alone. His experience includes the planning, scoping, permitting, design, and construction of a wide range of transportation projects from the Bennington Bypass new construction to the reconstruction of Church and St. Paul Street in Burlington. Through this experience, he is very familiar with the VTrans project development process, specifications, and methods to expedite the process while meeting VTrans procedures, standards and specifications.

RELEVANT PROJECTS: Burlington Church and St. Paul Street Reconstruction, Bristol VT 116/North Street/South Street Reconstruction, South Burlington US 2 Staples Plaza Reconstruction.

MIKE FOWLER, PE | ASSIGNMENT MANAGER, PAVEMENT DESIGN, RAIL: Mike is a senior project manager and is responsible for managing projects and the preparation of preliminary, final and contract design plans for various transportation projects. This work includes field reviews, developing horizontal and vertical alignments, structural pavement design, drainage design, quantity computations and cost estimating. Spending nearly three decades at the Vermont Agency of Transportation (VTrans), Mike has engineered hundreds of highway infrastructure assets to improve mobility and connectivity for communities throughout the Green Mountain State.

RELEVANT PROJECTS: Burlington Great Streets, VTrans Guilford I-91 Welcome Center Pavement Rehabilitation, VTrans Alburgh VT 78 Rail Crossing.

AMANDA LUDLOW, PE | ASSIGNMENT MANAGER, STORMWATER DESIGN/ANALYSIS: Amanda is a Principal in Stantec's South Burlington, Vermont office. Specializing in green infrastructure practices and sustainable stormwater management design, she has more than 20 years of environmental consulting experience. Amanda has spent her career focusing on the development of innovative sustainable solutions to solve environmental problems including constructed treatment wetlands, phytoremediation, natural media filtration, green infrastructure, green and sustainable remediation, and life cycle analysis. She has applied these alternatives to a diverse range of impacted environments including groundwater and surface water contamination, stormwater runoff, landfill leachate, contaminated soils and sediments, and industrial/municipal wastewaters. Additionally, Amanda has extensive experience in the assessment, investigation and restoration of sensitive habitats from freshwater wetlands and tidal wetlands to riparian ecosystems—including sustainable shoreline stabilization design—to grassland and woodland habitats.

RELEVANT PROJECTS: MaineDOT Longfellow Bridge Stormwater Treatment, Buffalo New York Riverbank Stabilization and Stormwater Treatment.

MARC FOISY, PE | ASSIGNMENT MANAGER: Marc has 20 years of experience in Transportation Design. He is responsible for managing projects and the preparation of preliminary, final and contract design plans for various transportation projects. This work includes field reviews, design layout, drainage design, quantity computations and estimating. Marc also has extensive experience and formal training with CADD software including MicroStation and InRoads.

RELEVANT PROJECTS: Newport City Slope Stabilization, Waterbury-StoweVermont Route 100 Rehab, St. Johnsbury Park-and-Ride, Bennington Bypass.

Design Support Staff

HARRY PETROVS, LS | RIGHT-OF-WAY: Harry will be responsible for researching and documenting ROW records and preparing ROW Plans and Documents meeting VTrans requirements. Harry worked in the right-of-way section for the Agency of Transportation (VTrans) and was made the Chief of Plans and Titles Unit in 2008. Harry was assigned to the "Special Projects Unit (SPU)" responsible for oversight for development of right-of-way plans, and included preparation of documents for acquisition, negotiations for acquisitions, resolving right-of-way issues during construction.

RELEVANT PROJECTS: Essex Route 2A Path, Essex Pinecrest Drive Sidewalk, Essex Towers Road Sidewalk, Waitsfield Village West Sidewalk – Phase 2, Waterbury Main Street Reconstruction, Burlington Roundabout.

KARL RICHARDSON, PE | LEAD ENGINEER: For the last eight years, Karl has worked on numerous roadway and sidewalk projects funded through the MAB. Karl is well versed in the MAB process for the development of construction plans, estimates, specifications and project manuals. Karl was the lead engineer for complex MAB complete street projects in South Burlington on US Route 2 and the Waterbury roundabout.

RELEVANT PROJECTS: Waterbury Roundabout, South Burlington US Route 2 Widening, Hartford Upper Sykes Mountain Avenue Sidewalk, and Hartford US Route 5 Sidewalk.

TODD DUGUAY, PE | LEAD ENGINEER, CONSTRUCTION INSPECTION: Since beginning his career in 2003, Todd has designed roadways and interchanges, stormwater management and drainage systems. As a Transportation Engineer, he is responsible for the preparation of preliminary, final and contract design plans and documents for various transportation projects. This work includes field reviews, design layout, drainage design, quantity computations, estimating and specifications. Todd has extensive experience and formal training with CADD software including MicroStation and InRoads.

RELEVANT PROJECTS: Essex Route 2A Shared-Use Path, West Lakeshore Drive Shared-Use Path, Montpelier Taylor Street to Main Street Multi-use Path, Waterbury Farr Road, Butler Farms Stormwater Pond, EPA Demonstration Grant: Oak Creek Subdivision, Church Street Marketplace LTF Project, Rutland Center Street Marketplace, Waterbury Stowe Street Reconstruction, Colchester VT Route 15 & Fort Ethan Allen, Champlain Parkway, Manchester Roundabout, US2/I-89 Exit 14 Third Lane, Colchester Campus Connector Road, Waterbury Roundabout, Rutland US 7 Improvements.

CHRIS GENDRON, PE | LEAD ENGINEER, STORMWATER DESIGN/ANALYSIS: Chris has worked as a project engineer for the last 6 years on numerous stormwater, roadway, path and sidewalk projects funded through the MAB. He specializes in stormwater design and analysis. He has a thorough understanding of Vermont permitting requirements. He consistently works with utility companies on utility relocations. He is an expert user of Inroads and Microstation. He has produced high quality buildable plans that are in conformance with VTrans CADD Standards.

RELEVANT PROJECTS: South Burlington Oak Creek Village Culverts, Waterbury Roundabout, Essex Route 2A Shared-Use Path (scoping and design), Old County Road Intersection Realignment, Hartford Sidewalk Projects, Waterbury Stowe Street Sidewalk.

DOUG CAMPBELL, PE | CONSTRUCTION INSPECTION, UTILITIES: Doug has worked on numerous roadway and bridge projects funded through the MAB and VTrans during his 27 year tenure at Stantec. Doug is well versed in the MAB process for the development of construction documents including plan sets, cost estimates, specifications and project manuals. Doug has design experience in construction phase engineering services, general civil engineering services including civil/site design, process design, drainage systems and stormwater design, stormwater systems management, roadway design, and design of water distribution and sewer collection systems. Doug has been a senior project engineer in several notable MAB and VTrans projects.

RELEVANT PROJECTS: Waterbury Roundabout, Burlington Waterfront Access North, Phase II, Saint Johnsbury Replacement of Bridge No. 46 over Sleepers River, Colchester Campus Connector, Winooski Downtown Development Infrastructure Improvements, Burlington Champlain Parkway (formerly Southern Connector), Burlington Main Street Reconstruction.

DAVE YOULEN, PE | QA/QC, ASSIGNMENT MANAGER, TRAFFIC MANAGEMENT/ CONSTRUCABILITY, UTILITIES: Dave has worked as a transportation engineer for the last 18 years on numerous roadway, bridge, culvert, railroad and intersection projects, on both the construction inspection and design side, funded through the VTrans and MAB. He has a thorough knowledge of VTrans Standard Construction Specifications and developing traffic management and traffic control plans, as well as Special Provisions. He has utilized his years of experience in construction to perform plan and constructability reviews. He also has experience providing services in the Quality Assurance Unit at VTrans.

RELEVANT PROJECTS: Winooski Downtown Redevelopment project, Burlington North Street Revitalization project, Colchester Campus Connector project, Richford TH 3 bridge replacement, Fairfield TH 1 and TH 47 bridge replacements, Addison VT 17 and VT 125 Overlay and Crown Point Historic Site Restoration, Washington County Railroad Bridge 501 emergency bridge stabilization project, Winooski West Canal Street Reconstruction, New Haven US Route 7 railroad crossing project, Bennington Route 279 North bypass project, Essex Susie Wilson Road culvert project.

TOM KNIGHT, PE | RAIL, SAFETY: Tom has 17 years of structural design experience with Stantec. His structural experience includes various aspects of structural bridge design, rating, rehabilitation, inspection and construction administration for both highway and railroad structures throughout New England. Tom's structural design experience is complimented by his experience in the analysis and assessment of the structures for scour and hydraulic considerations. Tom's approach to bridge improvements includes considering traffic impacts, environmental/stream impacts, and adjacent property impacts. With a thorough understanding of the design and regulatory process, he strives to offer solutions that are cost effective, quick to construct, while minimizing impacts to resources.

VT 116/North Street/South Street Improvements, Bristol, Vermont

RELEVANT PROJECTS: Hartford STP HTFD(1) – NECR over Bridge Street, Waterbury Roundabout (Main Street over Thatcher Brook Bridge), St. Johnsbury Portland Street Bridge.

GLENN BURGMEIER, PE | LEAD ENGINEER: Glenn has worked as a project engineer for the last seven years on multiple long roadway rehabilitation projects and several park-and-ride facilities constructed by state and/or federal funding. He has knowledge of state and federal roadway design standards for roadway and parking facility geometry, signage and pavement markings, and safety measures. He has used his knowledge of lighting design standards and software to help develop multiple park-and-ride lighting layouts as well as isolated roadway lighting augmentation. He has applied his aptitude in CADD, roadway modeling, and programming to generate project documents in accordance with federal guidelines and VTrans standards with a high degree of accuracy and quality.

RELEVANT PROJECTS: East Montpelier Park-and-Ride, Colchester US 7/Exit 16 Park-and-Ride, Springfield US 5 Park-and-Ride, Bradford Park-and-Ride, numerous VTrans resurfacing projects.

SEAN NEELY, EIT | ENGINEER/TECHNICAL SUPPORT: Sean provides planning, analysis, design, CADD, and GIS support on a range of transportation projects, including bicycle and pedestrian facilities, Complete Streets, urban design, and traffic management. Sean recently completed a master's degree at the University of Vermont (UVM) in civil engineering for transportation, and a certificate of graduate studies in sustainable transportation systems and planning. He worked as a research assistant at the UVM Transportation Research Center (TRC) both before and during graduate school. Prior to working at the TRC, Sean practiced consulting for planning and engineering projects across the country. He holds a bachelor's degree from the University of Southern Maine in environmental science and policy, with a focus in community planning and geographic information systems (GIS).

RELEVANT PROJECTS: I-89 Exit 14 Alternative Transportation Crossing Study, South Burlington Garden Street, Traffic Analysis for Chester/Springfield Route 11 Detour, Route 100 Guptil Road Waterbury Traffic Signal, Riverside Avenue/Colchester Avenue Burlington Intersection Improvements, Weybridge-New Haven Bridge Detour Traffic Analysis, Pittsford-Brandon Temporary Traffic Control Plans, Williston Industrial Avenue Traffic Control Plans, Hartford Lower Sykes Mountain Avenue Sidewalk, Lamplite Acres Williston Drainage Improvements.

POLLY HARRIS | ENVIRONMENTAL: Polly offers more than 15 years of professional experience in the natural resource, floodplains and wetland science field. She is a Certified Floodplain Manager per the Association of State Floodplain Managers. She has performed resource identification, permitting and NEPA documentation for many Vermont projects. She has extensive background in environmental site evaluations, wetland and stream delineations, reporting, wetland permitting and wetland mitigation planning.

RELEVANT PROJECTS: Essex Towers Road Sidewalk, Essex Pinecrest Drive Sidewalk, South Burlington Oak Creek Butler Farms Culverts, Waitsfield Old County Road Sidewalk Project.

CAELA WAITE | ENGINEER/TECHNICAL SUPPORT, CONSTRUCTION INSPECTION: Caela has over six years of experience working on engineering projects in Maine and Vermont, including over three years of roadway reconstruction inspection. She has served as lead designer on multiple state highway resurfacing and reconstruction projects. These have included upgrading all crosswalks to meet ADA and PROWAG requirements. Her responsibilities have included plan design and review, quantity calculation and review, financial estimates and review, and assembling special provision documents. Caela is a resident of St. Albans and a member of the Vermont chapter of Women's Transportation Seminar (WTS) and the Burlington Young Professionals in Transportation.

RELEVANT PROJECTS: Burlington Mansfield Ave Side Path, Shelburne Irish Hill Road Sidewalk and Pedestrian Bridge, Hartford Bicycle and Pedestrian Safety scoping study, St. Johnsbury Bicycle and Pedestrian Safety scoping study.

Other Support Staff

In addition to the above team members, Stantec has extensive technical support staff and equipment that are provided and utilized on an as-needed basis. Within the region, we offer a complete range of surveying, CAD design, and project management staff, all of whom will be called upon, as required, to satisfactorily complete those components of the project.

D. RESUMES

Diverging Diamond Intersection, Colchester, Vermont

D. RESUMES

Key Staff Resumes

On the following pages we're included resumes for our key staff and our subconsultants key staff. Our local team of transportation planning, design, and engineering professionals has decades of first-hand experience in Vermont with design, project management and construction inspection services. Our South Burlington office staff will lead these services and when needed, support from other regional offices can be readily solicited. These regional offices have over 2,000 staff members, many with transportation engineering and traffic management expertise, and environmental specialists who can handle virtually any assignment. The result of this connected team's resources, knowledge, and experience is an unmatched commitment to meet your project's needs.

Greg Goyette, PE

Program Manager, Assignment Manager

YEARS WITH STANTEC
19

EDUCATION
M.S., Civil Engineering, Clarkson University, Potsdam, New York

B.S., Civil Engineering, Clarkson University, Potsdam, New York

REGISTRATIONS
Professional Engineer #8834, State of Vermont

Certified Professional in Erosion and Sediment Control #3116, CPESC, Inc.

MEMBERSHIPS
President (2009-2011), Vermont Society of Professional Engineers

President (2011-2012), Vermont Society of Engineers

Greg has managed and developed numerous transportation and stormwater projects for state, municipal, and private clients. He also has co-managed Burlington International Airport's Stormwater Compliance efforts over the last five years. Greg primarily focuses on urban / village roadway reconstruction projects and specializes in roundabout, bicycle / pedestrian, and low impact development (LID) stormwater designs. Greg's projects have been recognized in Vermont and New England for innovative design approaches.

RELEVANT EXPERIENCE

VTrans US 2 Main Street Reconstruction, Waterbury, Vermont

This one-mile crumbling roadway required reconstruction and the community considered this time as ideal to make transformative improvements, especially after being devastated by Tropical Storm Irene in 2011. Greg's team was called upon to work closely with VTrans staff and the Waterbury community to successfully complete the engineering for this project. Our team conducted significant public outreach to understand community needs and discuss project impacts. Multiple project stakeholders were engaged to address project logistics such as utility relocation routing, water and sewer infrastructure impacts, historic resource constraints, hazardous materials mitigation, streetscape design including pedestrian scale lighting, landscaping, wayfinding, parking and business district impacts, and traffic maintenance during construction to name a few. This community outreach effort allowed Stantec to carefully craft a set of plans and bid documents that put a high priority on minimizing the construction impact to businesses, residents, pedestrians, motorists, and the community at-large.

US 2 Intersection, Plainfield, Vermont

The intersection of US Route 2 and Main Street in Plainfield has long been a nuisance for motorists, pedestrians, and highway crews. The steep grade of Main Street, lack of sidewalks and crosswalks, and the poor intersection sight distance make navigating this intersection a challenge. Greg was the Lead Project Engineer for this project responsible for reviewing existing conditions, developing several alternatives, and presenting these alternatives to VTrans. Stantec identified numerous challenges and helped VTrans select a design solution that would minimize impact to the community during construction and provide a long-term solution. Due to these efforts, VTrans requested that Stantec move the preferred alternative into preliminary engineering.

Burlington Great Streets, Burlington, Vermont

Project Manager responsible for this redesign of two streets, Bank and Cherry, in downtown Burlington. The redesign prioritized pedestrian safety and movement and maintained the on-street parking needed for the small business. The design incorporated raised intersections, bicycle racks, parklets, seating areas outside popular business and restaurants, green stormwater infrastructure, and public art. Stantec also assisted the City in identifying areas of private parcels needed to support the construction of the plan.

Waterbury Roundabout, Waterbury, Vermont

Greg was the lead project engineer responsible for designing single lane urban roundabout to improve safety and mobility near I-89 Exit 10 interchange. The design had to carefully consider impacts to traffic during the morning and evening peak traffic periods. A construction sequencing and traffic management plan was developed that carefully considered available space for workers and equipment, safe and efficient flow of traffic, and impacts to I-89 mainline given the proximity of the Exit 10 interchange to the intersection. Traffic management practices included maintenance of existing lane configurations, temporary parking areas, temporary traffic signals, truck detour routes, and restrictions on maximum queue lengths on roadway approaches. The project was constructed on schedule, within budget, and with minimal impacts to the community, traveling public, and the contractor.

Greg Edwards,

PE, ENV SP

QA/QC, Assignment Manager, Grant Writing

YEARS WITH STANTEC
32

EDUCATION
B.S., Civil Engineering, University of Vermont, Burlington, Vermont

REGISTRATIONS
Envision™ Sustainability Professional (ENV SP), Institute for Sustainable Infrastructure

Professional Engineer #5842, State of Vermont

Professional Engineer #7247, State of Maine

Professional Engineer #6765, State of New Hampshire

MEMBERSHIPS
Past Board Member and Past President, American Council of Engineering Companies (Vermont)

Past President & Board Member, Society of Engineers, State of Vermont

Member, Institute of Transportation Engineers

Greg has over 30 years of engineering experience including the planning, design, permitting, quality control, construction and rehabilitation of transportation facilities. He is an effective project manager and excellent facilitator, promoting the expediency of successful projects. He has managed multi-disciplined teams for projects up to $60 million construction cost. Over the course of his career, Greg has managed hundreds of transportation planning, design and construction projects ranging from resurfacing, roadway, bridge, and roundabout designs to traffic studies and alternatives analyses. He and his staff have also designed a number of unique projects including a series of "park-and-ride" facilities, several recreation paths, a river restoration, and town and city Main Street reconstructions. As the leader of the firm's New England Transportation and Traffic Division, his clients include such large organizations as Burlington International Airport and the state transportation departments of Maine, New Hampshire, New York, and Vermont. He has also worked for a variety of municipalities, including the cities of Portland, Maine and Burlington and Rutland, Vermont.

RELEVANT EXPERIENCE

VTrans 1-89 Culvert Design Build, South Burlington-Georgia, Vermont

Proposal leader and assistant project manager for the replacement of six culverts under interstate 89 in South Burlington and Georgia, VT using the Design Build project delivery process. This $15 million project included Environmental Permit Applications, Geotechnical investigations, Traffic Control, Hydrology and Hydraulic analysis and report, culvert layout and design, Traffic Control, and design of a tunnel under 1-89 for installation of pre-cast concrete arches in Georgia under 35' of fill. Project involves close coordination with environmental Regulators to inform them of the project and to get their input prior to submitting Permit applications, thereby accelerating the permit process.

US 2 / I-89 Exit 14 Improvements Design, South Burlington, Vermont

Project Manager for the final design for the construction of a third eastbound lane of US Route 2, an urban arterial with over 40,000 vehicles per day, from the Sheraton Staples intersection to the I-89 southbound on-ramp. Project elements include utility relocations, stormwater treatment, interconnected and coordinated signal system, traffic control for highway widening, decorative street lighting, and landscaping. Stantec services will also provide NEPA documentation, contract plans, construction cost estimates and permitting meeting VTrans LTF procedures. Considerations included *Complete streets" approach with pedestrian, bicycle, and transit facilities.

Winooski Downtown Development Infrastructure Improvements, Winooski, Vermont

Principal-in-Charge responsible for this $14.2 million urban redevelopment project. Project elements included 9,100 linear feet (1.7 miles) of new and reconstructed roadways, over 8,900 linear feet of storm and roof drainage systems, 2,200 linear feet of new sewer mains and laterals, 4,200 linear feet of water mains and laterals, three signal systems, traffic control plan for 23,000 vehicles per day, undergrounding of the existing utilities with over 32,000 linear feet of conduit, a comprehensive stormwater management system, extensive landscaping, parks, and ornamental lighting.

VT Route 7 A/11/30 Roundabout, Manchester, Vermont

Principal-in-Charge for the final design, permitting, and contract plans for a proposed modern roundabout at the intersection of VT Route 7 A/11/ 30 and a mini-roundabout at the adjacent intersection of VT Route 7 A/30 in the village/commercial downtown area of Manchester Center, Vermont.

Burlington Great Streets, Burlington, Vermont

Greg was the Principal-in-Charge responsible for this redesign of two streets, Bank and Cherry, in downtown Burlington, Vermont. The redesign prioritized pedestrian safety and movement and maintained the on-street parking needed for the small business. The design incorporated raised intersections, bicycle racks, parklets, seating areas outside popular business and restaurants, green stormwater infrastructure, and public art.

Gary Santy, PE

QA/QC, Assignment Manager

YEARS WITH STANTEC
42

EDUCATION
A.S., Vermont Technical College, Randolph, Vermont

REGISTRATIONS
Professional Engineer #7563, State of Vermont

Professional Engineer #11152, State of New Hampshire

Professional Engineer #9419, State of Maine

MEMBERSHIPS
Past President, American Council of Engineering Companies (Vermont)

Past President, Vermont Society of Engineers

Member, New Hampshire Good Roads Association

Member, Vermont Technical College, Civil/Environmental Engineering Technology Advisory Committee

Gary has over 40 years of experience with Stantec in transportation design, traffic (vehicular, bicycle and pedestrian) management, construction engineering, public participation, environmental documentation, and permitting. He has worked closely with the Vermont Agency of Transportation on dozens of roadway projects, including a high-profile project to create a new limited access bypass (VT Route 279) of US Route 7 and VT Route 9 around Bennington, Vermont. He has provided similar design, management and construction administration services for various other projects for VTrans,New Hampshire DOT, Maine DOT and MassDOT. These projects range from highway and park-and-ride facility design to safety and intersection improvement projects and bridge replacements. As Operations Manager Gary leads the New England Transportation Business Center and supervises design teams, provides quality control and independent reviews, advises staff on technical, administrative and QA/QC procedure.

RELEVANT EXPERIENCE

VTrans - Guilford I-91 Welcome Center Pavement Rehabilitation - Guilford Rest Area IM 091-1(79), Guilford, Vermont

Principal-in-charge on the development and design of a pavement rehabilitation strategy and generate contract documents for the rehabilitation of the Guilford I-91 Welcome Center, a 114-space car parking area, 23-space truck parking area and more than 1/2 mile of circulating and access roads. Most of the rehabilitation was a cost-effective asphalt mill and overlay. Approximately 700 feet of an access road with more than 10% grades required a reclaimed stabilized base with 5 inches of new asphalt. One of the more challenging aspects of the project was the maintenance of traffic during construction. Working with the facility operators, we developed a performance specification that allowed ramp access closures during a designated 4-hour period and provided an alternative site for truck parking while the car parking was relocated to the truck parking area.

VTrans Berlin CMG PARK(46) PR - Berlin Park-and-Ride Conceptual Design, Berlin, Vermont

As the existing Park-and-Ride facility at Exit 7 experienced heavier use, consideration was placed to seek additional facility locations within the area. Exit 6 was determined to be a viable option as the State appears to have an available right-of-way to potentially site a facility. The potential site would have easy access and visibility to I-89. VTrans contracted with Stantec to provide conceptual design services to identify and evaluate alternatives for constructing a new park-and-ride facility in the area. One of the first steps was to determine the potential parking demand given its location and area traffic. Using parking demand models, we determined a 60 to 80 space facility was desirable. To meet the parking demand VTrans needed to acquire property in the Exit 6 interchange area. After we evaluated 4 alternatives, one in each quadrant of the East Rd and VT 163 intersection, and working with adjacent property owners, the preferred alternative was selected for the development of conceptual plans. The project included the accommodation of public transit, a bus shelter, bicycle rack, lighting, and other amenities.

Ferrisburgh Park-and-Ride, Ferrisburgh, Vermont

Senior project manager with responsibility for final design, contract plans and construction assistance for this BO-space lighted, paved and landscaped Park-And-Ride multi modal facility. Unique aspects of this project included a stormwater discharge permit implementing features of the proposed Vermont regulations (bioretention area). An integral part of this project is the planning and coordination with State, City, Town, and local agencies for the future relocation of the Historic Vergennes Train Station (circa 1855).

US 2 / 1-89 Exit 14 Improvements Design, South Burlington, Vermont

Senior project manager for the final design for the construction of a third eastbound lane of US Route 2, an urban arterial with over 40,000 vehicles per day, fr om the Sheraton Staples intersection to the 1-89 southbound on-ramp.

David Youlen, PE

QA/QC, Assignment Manager, Traffic Management/ Constructability, Utilities

YEARS WITH STANTEC
16

EDUCATION
B.S., Civil Engineering, Clarkson University, Potsdam, New York, 1999

REGISTRATIONS
Professional Engineer #8831, State of Vermont

David is a professional engineer and has over 20 years of experience with an emphasis on traffic management, quality control and quality assurance, construction administration and inspection. His technical background includes highway and bridge design, utility and signal design, traffic management plans, and construction. With his construction experience, he plays an important role in the quality of constructability review of projects. Prior to joining Stantec, David worked for the State of New Hampshire Department of Transportation as a Civil Engineer in the Bureau of Construction. His responsibilities have included resident inspection; daily reporting; shop drawing processing and review; change orders; payment requests; project closeouts; claims resolutions; and coordination between owner, contractor, and designer. David has completed over 10 construction inspection assignments for VTrans bridge, roadway, and paving projects under a retainer contract. He has several certifications including NETTCP (Paving Inspector, and Driven Pile Foundation), and ACI.

RELEVANT EXPERIENCE

Colchester Exit 16 Diverging Diamond Interchange Project, Colchester, Vermont
Performed a constructability review for Vermont Agency of Transportation for the Exit 16 Double Diamond Interchange construction project along Route 2/7 corridor in Colchester, Vermont. This included constructability of the project, as well as review of notes, traffic management and identifying potential conflicts and plan issues in constructing the project. The existing interchange is a grade separated tight diamond interchange with Interstate 89 crossing over US Routes 2/7 via two bridges and was redesigned as a Diverging Diamond Interchange as well as incorporating other improvements such as the construction of dedicated pedestrian and shared pedestrian/bicycle facilities.

Williston Road/Industrial Avenue Intersection, Williston, Vermont
Senior Transportation Engineer for the development of traffic management strategies and traffic control plans. Responsibilities included investigating various traffic management alternatives, developing and presenting traffic management alternatives to the client, and the development of traffic control plans for this project in a high traffic volume area where abutters are predominantly commercial properties.

VTrans - Guilford I-91 Welcome Center Pavement Rehabilitation - Guilford Rest Area IM 091-1(79), Guilford, Vermont
Senior Engineer for the development and design of a pavement rehabilitation strategy and generate contract documents for the rehabilitation of the Guilford I-91 Welcome Center, a 114-space car parking area, 23-space truck parking area and more than 1/2 mile of circulating and access roads. One of the more challenging aspects of the project was the maintenance of traffic during construction. Working with the facility operators, we developed a performance specification that allowed ramp access closures during a designated 4-hour period and provided an alternative site for truck parking while the car parking was relocated to the truck parking area.

US Route 2, Main Street Project, Waterbury, Vermont
Transportation engineer responsible for Constructability and Traffic Management for the development of final and contract plans and documents. Responsibilities include constructability plan review, erosion prevention and sediment control design, quality control plan reviews and quantity calculations and review for this $20+ million construction of US Route 2 through Downtown Waterbury. This 1 mile long, 2-lane roadway included full depth of urban street reconstruction and street scape work, new water and sewer mains and services, new stormwater systems, and the undergrounding of utilities. Services included design for highway, stormwater treatment, traffic signals, right-of-way, utilities and lighting.

Mike Fowler, PE

Assignment Manager, Pavement Design, Rail

YEARS WITH STANTEC
2

EDUCATION
A.S., Civil Engineering Technology, Vermont Technical College, Randolph Center, Vermont, 1989

B.S., Civil Engineering, University of Vermont, Burlington, Vermont, 1995

REGISTRATIONS
Professional Engineer #018-0007892, State of Vermont

Mike is a senior project manager and is responsible for managing projects and the preparation of preliminary, final and contract design plans for various transportation projects. This work includes field reviews, developing horizontal and vertical alignment, structural pavement design, drainage design, quantity computations and cost estimating. He has a good working knowledge of CADD software including MicroStation and InRoads, as well as extensive experience with project scheduling and cost estimation software.

Spending nearly three decades at the Vermont Agency of Transportation (VTrans), Mike has engineered hundreds of highway infrastructure assets to improve mobility and connectivity for communities throughout the Green Mountain State. For the last 13 years, he utilized modern asset management techniques and principles to determine project selection and scheduling for the VTrans' 3-year paving program. In that capacity, he was responsible for performing, guiding, and approving all designs involving various treatments. He also had to plan—and prepare—budgets for the paving program, helping to manage over $500 million in value from start to finish.

RELEVANT EXPERIENCE

VTrans - Guilford I-91 Welcome Center Pavement Rehabilitation - Guilford Rest Area IM 091-1(79) | Guilford, Vermont, United States
Project Manager for the development and design of a pavement rehabilitation strategy and generate contract documents for the rehabilitation of the Guilford I-91 Welcome Center, a 114-space car parking area, 23-space truck parking area and more than 1/2 mile of circulating and access roads. Most of the rehabilitation was a cost-effective asphalt mill and overlay. Approximately 700 feet of an access road with more than 10% grades required a reclaimed stabilized base with 5 inches of new asphalt. One of the more challenging aspects of the project was the maintenance of traffic during construction. Working with the facility operators, we developed a performance specification that allowed ramp access closures during a designated 4-hour period and provided an alternative site for truck parking while the car parking was relocated to the truck parking area.

Waterbury VT 100 Water Main | Waterbury, Vermont | 2017–2018
Project manager for the design of a 3600 ft. extension to the municipal water distribution line along VT route 100. Project demands significant coordination among numerous State agencies and multiple property owners. The length of the project falls also within the limits of a major VTrans roadway rehabilitation adding further complexity. Potential alignments for the watermain are complicated by the broad existence of bedrock, a leachfield sewer system in the path, Class II wetlands through much of the corridor, and petroleum underground storage tanks in an area adjacent to the VT route 100 highway ROW. Permits are required from the Vermont Agency of Transportation, the Vermont Agency of Natural Resources, and the U.S. Army Corps of Engineers. Project is planned for construction in the Fall of 2018 and is currently on schedule and within budget.

Williston STP BP17(12) | Williston, Vermont | 2018–Present
Project Manager for design and construction of approximately 1700 ft. of new sidewalk and grass strip buffer. In the interest of pedestrian safety and mobility, the Town of Williston, with funding through the Vermont Agency of Transportation (VTrans) Bicycle and Pedestrian Program, is pursuing the installation of new concrete sidewalk segments along Blair Park Road. This road serves numerous commercial and residential facilities, along with the Vermont Technical College campus and student living center. The sidewalk project will close existing gaps and provide a continuous safe walkway for pedestrians circling Blair Park by creating a more complete sidewalk network. It will also connect to bus stops along Route 2 and 2A for commuters living and working in the area. Enhanced crosswalks connecting senior living residents will be included as well as traffic calming measures to further improve safety.

Israel Maynard,

PE

Assignment Manager, Hydraulics/Culvert Design

YEARS WITH STANTEC
14

EDUCATION
B.S., Civil Engineering, University of Vermont, Burlington, Vermont

REGISTRATIONS
Professional Engineer #69573, State of Vermont

MEMBERSHIPS
Member, Chi Epsilon National Civil Engineering Honor Society

Israel has managed several transportation and stormwater projects for state and municipal clients. He also has 14 years of experience designing projects in both the traditional design-bid-build delivery as well as alternative delivery including Design-Build and Public Private Partnership(P3). Israel primarily focuses on highway design and stormwater projects.

RELEVANT EXPERIENCE

West Lakeshore Road/Prim Road Intersection | Colchester, Vermont | 2019
Project Manager for this intersection realignment project that involves adding two turning lanes and a signal to the intersection of West Lakeshore Drive and Prim Road. The re-alignment of the intersection requires a new closed drainage system, and bio-retention stormwater treatment area. The new roadway also features new sidewalk, and shared use paths. The project will allow for more efficient travel for people traveling from Malletts bay area to Downtown Burlington as well as improve safety at this busy intersection.

VTrans Manchester US 7 Exit 4 Park and Ride | Manchester, Vermont, United States
Senior Engineer for the scoping of a Park and Ride lot on US Route 7 at Exit 4 in Manchester, Vermont. VTrans hired Stantec to assist with identifying and evaluating solutions to these issues. It was quickly recognized the real value of the existing facility was its location. It was within 1300 feet of Exit 4 and the parcel was of adequate size to accommodate more than 40 vehicles with the ability to add another 25 in the future if needed. It was also determined an active, paved, well lighted and well-maintained facility would address the user and security concerns. Therefore, our solution focused on improving the existing facility and not the researching of numerous more costly alternative sites. Additional features to promote its use are a bus turnaround and bus shelter, ADA accessibility, bike racks, and Level 1 electrical charging stations. LED lighting is proposed for improved security. The result was a cost-effective solution that can be readily permitted and developed once available construction funds are secured.

VTrans Thetford Park and Ride Design - Thetford CMG PARK(43) | Thetford, Vermont
Senior engineer for the evaluation of the current park and ride lot and relocating it to a safer and more visible location along I-91 in Thetford, Vermont. This evaluation included improving the existing site and screening five new sites adjacent to Exit 14. The solution was to construct a new facility in the large open in-field of the Exit 14 diamond interchange. This area was owned by VTrans, there were no environmental resource issues, it had relatively low development costs, and it offered visibility from I-91, adjacent VT 131, and the interchange ramps. Our services included advancing the design and permitting of this facility through contract plans and providing engineering support services during construction. Features of the new 50 car space facility include ADA accessibility, a bus shelter, bike racks, Level 1 electrical charging stations and LED lighting.

Waterbury Roundabout | Waterbury, Vermont | 2014
Responsible drainage design for the US Route 2 and VT Route 100 intersection. The proposed improvement will be a single lane roundabout. Services provided included preliminary and final design through contract plans and bid services. This project included an extensive public participation and training program on the education of roundabouts.

Colchester Campus Connector | Staff Engineer
Staff Engineer responsible for CAD work, alignment design, drainage, and stormwater design for this roadway design project. The new roadway linked two facilities bypassing traffic on VT Route 15, provided a safer route for pedestrians and bicyclists, and created a gateway to Camp Johnson and St. Michael's College.

Marc Foisy, PE

Assignment Manager

YEARS WITH STANTEC
24

EDUCATION
A.S., Architectural Engineering and Building Technology, Vermont Technical College, Randolph, Vermont, 1992

B.S., Civil Engineering, Norwich University, Northfield, Vermont, 1996

REGISTRATIONS
Professional Engineer #8436, State of Vermont

Marc has 25 years of experience in Transportation Design. He is responsible for managing projects and the preparation of preliminary, final and contract design plans for various transportation projects. This work includes field reviews, design layout, drainage design, quantity computations and estimating. Marc has extensive experience and formal training with CADD software including MicroStation and InRoads.

RELEVANT EXPERIENCE

VTrans VT Route 191 Slope Repair | Newport City, Vermont
As Project Manager Marc was responsible for the development of Contract Plans, estimate, special provisions, and bid documents. He was responsible for designing access to this remote area, site grading, and providing the electrical infra-structure to power the wells and SCADA monitoring system.

St. Johnsbury Park and Ride | St. Johnsbury, Vermont
Project Manager with responsibility for preliminary and final design, contract plans and construction assistance for this 50± space lighted, paved and landscaped Park-and-Ride facility. Unique aspects of this project included analysis and design for future expansion capabilities. The scoping process included public meeting, conceptual plan development, and environmental resource documentation effort to obtain a categorical exclusion.

Braintree ER STP 0187(12), VT Route 12A | Braintree, Vermont
Project Manager for this Tropical Storm Irene Emergency Relief Project. Scope of work included the complete replacement of Bridge Number 7, replacement of the approach slab to Bridge Number 6, and restoration of the side slope between VT Route 12A and the Third Branch of the White River. Due to the poor condition of Bridge Number 7 and the fear of an imminent failure, this project was fast tracked in design to get it out to bid prior to the spring run-off season. Project Manager duties included planning and meeting with VTrans and other stake holders to meet the projects demanding schedule, also included were property owner meetings and a fast tracked ROW process, and checking and coordination of the design for roadway and bridge pieces. Deliverables included plans and special provisions from Conceptual Plans to Contract plans, for this nearly $2 million construction project.

VTrans Waterbury-Stowe VT Route 100 | Waterbury/Stowe, VT
Project Manager responsible for preliminary, final, contract plans and construction support on VT Route 100. The scope of work included the complete removal of the existing concrete roadway, approximately eight inches below the bituminous roadway surface. The scope also included horizontal and vertical alignment improvements, superelevation improvements, shoulder widening and a complete digital 3D model of the proposed surface utilizing InRoads design software. Additional features of the design included upgrades to existing traffic signals at multiples intersections, a new traffic signal at Guptil Road in Waterbury, new drainage cross culverts, the study and implementation of new left-turn lanes along VT Route 100, a new bike route along portions of the project in Waterbury and Stowe, a few hundred feet of waterline replacement in Waterbury, signs, and guardrail. Also included in this project were multiple public meetings with both the towns of Waterbury and Stowe. There was continued contact with both towns during design to adequately meet their specific needs.

VTrans Bradford Park-and-Ride | Bradford, Vermont
Project manager responsible for scoping, final design, contract plans and construction assistance for this 81-space commuter Park-And-Ride facility on VT Route 25 in Bradford VT. Unique aspects of this project include LED lighting of the entire site, and providing 10 Electric Vehicle Level 1 charging outlets. Stantec worked with VTrans during the design phase to provide updated structural details for the bus shelter which will be used on other projects throughout the State.

Thad Luther, PE

Assignment Manager, Traffic Signal Design

YEARS WITH STANTEC
20

EDUCATION
Florida Advanced Work Zone Traffic Control Course, ATSSA, Brandon, Florida, 2008

A.S., Civil Engineering, Vermont Technical College, Randolph, Vermont, 1994
BS - Civil Engineering, University of Vermont, Burlington, Vermont, 1997

REGISTRATIONS
Professional Engineer #8281, State of Vermont, 7/31/2010

Thad has served as a project engineer and manager for a diverse variety of transportation related projects for over 21 years. His roadway experience includes traffic engineering, signal design, highway geometrics and aviation services. His roadway experience includes updating existing intersections, final design of limited access facilities, award winning rural highway upgrades and completion of planning studies for future roadway expansions. He is also experienced with neighborhood enhancement projects that utilize context sensitive design to satisfy multiple stakeholders. Elements of these enhancement projects include roundabouts, traffic calming, sidewalks, and new drainage facilities. Thad successfully combines technical know-how with the ability to facilitate communication between clients, co-workers and the public to complete projects.

RELEVANT EXPERIENCE

VTrans Colchester-Essex Shared Use Path | Colchester-Essex, Vermont
Project manager for the design and engineering of a shared use path along VT 15 in Colchester-Essex, Vermont. Responsibilities included developing design criteria, designing horizontal and vertical alignments, and leading effort to bring project through construction.

VTrans US 7/VT Circulator | Winooski, Vermont
Project manager responsible for developing this VTrans Safety Improvement project from conceptual plans through construction. Project included public participation, safety improvements, pedestrian facility upgrades and lighting. Construction is anticipated to begin in 2016.

VTrans VT 289/VT 2A Interchange Improvements | Colchester-Essex, Vermont
Project manager responsible for overseeing design of this signal equipment upgrade project. Project included evaluation of the existing signal system and integration of the upgraded signal equipment. This project is the first phase of a 2 phase project. Second phase involved capacity increases via lane additions so this signal upgrade project accounted for future roadway widening. The client desired to implement adaptive traffic control (ATC) into the signal system. Stantec evaluated various systems and selected the Rhythm Engineering's InSync System. This was the first ATC system installed in the State of Vermont.

VTrans - Bristol 116 Intersection Upgrade | Vermont, United States
Project manager responsible for design services for the improvements to the VT116 / North Street / South Street intersection in the center of Bristol, Vermont. Stantec worked with the Town and VTrans to design a actuated traffic signal system, improved intersection geometry with bulb-outs, decorative intersection street lighting and landscaping. The project improved safety for motorists, pedestrians and bicyclists and enhanced the aesthetics of downtown Bristol.

Town of Middlebury - U.S. Route 7 Signalization | Vermont
Traffic Engineer for a corridor signal study and design involving the upgrade of six signalized intersections. Services included corridor traffic capacity analysis, geometric and signal improvement recommendations, corsin simulation, signal timing, phasing and coordination, public participation process, signal designs, and right-of-way services.

VTrans Exit 16 Diverging Diamond Visualization | Colchester, Vermont
Project Manager responsible for providing realistic renderings for public hearings. overseeing the creation of the renderings developed as a realistic 3D model. This model was used to create the needed renderings and create multiple drive-through and flyover videos. Also creating a video game-like driving simulator.

Rick Bryant, PE

Assignment Manager

YEARS WITH STANTEC
8

EDUCATION
B.S., Civil Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1979

B.S., Management, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1979

M.S., Civil Engineering, University of California at Berkeley, Berkeley, California, 1980

REGISTRATIONS
Professional Engineer #36532, Commonwealth of Massachusetts

Professional Engineer #9004, State of Vermont

MEMBERSHIPS
Instructor for PE Refresher Course, Boston Society of Civil Engineers Section

Member, Institute of Transportation Engineers

Rick is a Senior Associate with more than 35 years of consulting experience in New England. He is a transportation planner and traffic operations specialist with an extensive background in planning, design and permitting of public-sector projects. Richard has developed broad knowledge of state and local permitting regulations and has established strong working relationships with state highway and environmental permitting agencies. He is also an experienced public speaker who can effectively present transportation plans and projects at public hearings and other forums

RELEVANT EXPERIENCE

Proposed Park and Ride Facility | Williston, Vermont
Project Manager for a proposed 150-space park and ride facility to be constructed as part of a mixed-use development located on VT 2A south of I-89 in Williston. A traffic impact study was prepared to consider the combined impact of the park and ride lot, a proposed service station/convenience store, and 200-room hotel. Adjustments were made for pass-by and shared trips. A comprehensive site access plan was developed working with VTrans.

CCRPC US Route 7/Harbor Road/Falls Road Scoping Study | Shelburne, Vermont
Senior Traffic Engineer for the scoping study of a congested urban arterial intersection within the historic village core of Shellproof, Vermont. Services consisted of analyzing existing traffic conditions, identifying existing issues, developing a project purpose and need, identifying creative solutions and evaluating them, and conducting a public consensus building process. Considerations included promoting pedestrian and bicycle use and improving mobility on the urban arterial while respecting the historic and mixed use nature of the area. The resulting alternative includes a modern roundabout, creation of grid street network, and signalization improvements.

VT 22A Truck Route Study | Vergennes, Vermont
Project Manager for a regional transportation study to address the persistent flow of large trucks generating noise, emissions and vibrations that negatively impact historic downtown Vergennes. During the course of nine months, Stantec prepared a planning study on behalf of the Addison County Regional Planning Commission and VTrans to develop and evaluate alternative plans to mitigate the impact of the truck traffic. Alternative solutions ranged from traffic calming measures along the existing truck route, construction of a bypass, and rerouting trucks to an existing alternative route, VT 17. Stantec guided the evaluation of operational, safety and economic impacts of each alternative and helped estimate project implementation costs. The study findings were shared with community members through a series of public meetings to build a consensus of public opinion. Our economic analysis highlighted the benefits of the alternatives and led to strong public support of a new 2-mile highway around the historic downtown.

Pearl Street Corridor Study | Burlington, Vermont
Conducting a roadway operations and design study for an urban street in downtown Burlington, Vermont. Modifications to existing lane use and parking conditions are being evaluated with the goal of adding bike lanes to the roadway. Impacts to traffic operations are being considered. Alternatives will be vetted in a public forum.

VTrans Left Turn Lane Policy | Montpelier, Vermont
Conducted a review of VTrans current practices relative to the evaluation of left turn lanes on two-lane rural highways and made recommendations to update and enhance their policy. The compiled alternative left turn lane warrant criteria were applied to eight Vermont intersections to compare outcomes.

Karl Richardson,

PE

Lead Engineer

YEARS WITH STANTEC
11

EDUCATION
A.A., Civil Engineering,
Vermont Technical College,
Randolph, Vermont, 1991

REGISTRATIONS
Professional Engineer
#59609, VT

Karl has over 24 years of experience in civil engineering on a wide variety of private and public projects in the areas of transportation and land development. He has prepared designs, improvement plans, final maps, and transportation improvements for state agencies, municipalities, schools, and private developments. Karl is passionate about utilizing technology to create successful designs. This includes using his proficiency in CADD platforms to produce high quality buildable plans. His expertise includes highway design, bicycle/pedestrian design, drainage design, stormwater treatment and permitting and his is sought after by many internal teams and clients.

RELEVANT EXPERIENCE

VTrans - Waterbury Main Street Reconstruction - Waterbury F EGC F 013-4(13) | Waterbury Village Historic District, Vermont, United States
Senior Project Engineer for the reconstruction of Main Street in Waterbury, Vermont. Stantec provided preliminary and final engineering services, as well as right-of-way plan development for the reconstruction of this one mile of roadway. The location of the new water and sewer mains were thoughtfully sited so that the existing mains could remain active while the new mains were constructed. Stantec's efforts allowed the contractor to methodically construct the project in segments with enough room to maneuver their equipment safely. Stantec developed visualizations in the form of maps, photo simulations, and storyboards to keep the community informed throughout the project. These visualizations greatly supported the Town's and VTrans' public relations efforts during construction.

US Route 2/VT Route 100 Roundabout | Waterbury, Vermont
Preparing final contract plans and permits for the replacement of a stop-controlled T-intersection with a roundabout that will serve as the gateway to downtown Waterbury. Stantec worked effectively with the client, adjacent property owners, and a nationally recognized expert on roundabout design to develop a project that results in a context-sensitive, safe and efficient intersection design. New drive access and parking layouts for a gas station, post office, and restaurant were designed to ensure that a positive impact to these neighboring businesses will occur as a result of the project.

VTrans I-89 Exit 12 Signal Upgrades | Williston, Vermont
Project Engineer responsible for the shared-use path design portion of the improvements at the Exit 12 interchange in Williston, Vermont. Improvements consisted of constructing a new southbound auxiliary lane on VT 2A from Marshall Avenue to the I-89 Exit 12 northbound on-ramp, optimize signal timings and extend the existing shared-use path on the east side of VT 2A from the State Police Barracks to Hurricane Lane.

US 2/I-89 Exit 14 Roadway Improvements | South Burlington, Vermont
Project Engineer responsible for the final design of a third eastbound lane of US Route 2, from the Sheraton / Staples intersection to the I-89 southbound on-ramp. Project specifics include full depth widening, traffic signals, street lighting, landscaping, utility relocation, and stormwater treatment. Plan development and permitting for this urban principal arterial adhere to VTrans LTF procedures and included a construction general permit to address erosion protection and sediment control.

Hartford US Route 5/I-91 Interchange Bicycle and Pedestrian Scoping Study | Hartford, Vermont
Project Engineer for this project that involved investigating alternatives to transform this segment of US Route 5 from a transportation facility that gives priority to motor vehicle speed and mobility to one that accommodates all users including bicyclists, pedestrians and motor vehicles.

Todd Duguay, PE

Lead Engineer, Construction Inspection

YEARS WITH STANTEC
13

EDUCATION
B.S., Civil Engineering, University of Hartford, West Hartford, Connecticut, 2003

REGISTRATIONS
Professional Engineer #59592, State of Vermont,

MEMBERSHIPS
Member, Vermont Society of Engineers

Member, American Society of Civil Engineers

Since beginning his career in 2003, Todd has designed roadways and interchanges, stormwater management and drainage systems. As a Senior Transportation Engineer, he is responsible for the preparation of preliminary, final and contract design plans and documents for various transportation projects. This work includes field reviews, design layout, drainage design, quantity computations, estimating and specifications. Todd has extensive experience and formal training with CADD software including MicroStation, InRoads, and Civil 3D. His proficiency with software and his knowledge of various client's standards, make him a great asset to any team. He has also worked as a construction inspector on both highway and aviation projects.

RELEVANT EXPERIENCE

VTrans Winooski Circulator Improvements - VTrans Winooski HES 5100(13) | Winooski, Vermont, United States
Project Engineer responsible for roadway, curbing and raised island layout and grading and design of the drainage improvements due to the roadway reconstruction. Stantec provided engineering and design services to VTrans to address safety concerns at Vermont's #1 ranked High Crash Location, the Winooski Circulator. Stantec evaluated the safety improvements identified by the Chittenden County Regional Planning Commission (CCRPC) and the City of Winooski. We analyzed additional improvements utilizing VISSIM, recommended design modifications. and developed final construction plans. The selected improvements included, improving visibility between pedestrians and drivers, reducing weaving within the Circulator, relocating signalized pedestrian crossings to a safer location with refuge islands, and improving bicycle facilities.

VTrans Newport STP 1343(22) | Newport, Vermont
Senior Engineer responsible for permitting, preliminary design of horizontal and vertical alignment, cross sectional design, drainage system design and guardrail design on this roadway reconstruction and slope stabilization project along VT Route 191 in Newport City, Vermont. Stantec developed the Contract Plans, estimate, special provisions, and bid documents and was responsible for designing access to this remote area, site grading, and providing the electrical infra-structure to power the wells and SCADA monitoring system. Additionally, we addressed the sagging mainline profile and designed the reconstruction of VT Route 191. A large culvert was also replaced with a new 42 inch pipe approximately 35 feet below the surface of the roadway.

Manchester Roundabout | Manchester, Vermont
Project Engineer responsible for taking the project from the Preliminary Design through Construction of the project. Work included responding to client comments, revising the signing design to complying with the latest version of the MUTCD, revising the quantity computations to comply with the current version of the VTrans Construction Specifications. Completing Contract Plans and Construction documents. Assisted project manager during construction engineering services phase of the project with any roadway or drainage questions or issues.

Waterbury Roundabout | Waterbury, Vermont
Staff Engineer responsible for complete horizontal and vertical design of Routes 100 and 2, and a newly designed parking lot for the US Route 2 and VT Route 100 intersection. Other responsibilities included cross sectional design, drainage design, construction phasing, a complete quantity computation and estimate as well as building InRoads templates and roadway model for this intricate roundabout design. The proposed improvement will be a single lane roundabout. Services provided included preliminary and final design through contract plans and bid services. This project included an extensive public participation and training program on the education of roundabouts.

Glenn Burgmeier

PE

Lead Engineer

YEARS WITH STANTEC
12

EDUCATION
A.S. in Architectural and Building Technology, Vermont Technical College, Randolph, Vermont, 1995

B.S. in Civil Engineering, University of Vermont, Burlington, Vermont, 2008

REGISTRATIONS
Professional Engineer #018.0092702, State of Vermont

MEMBERSHIPS
Member, Chi Epsilon National Civil Engineering Honor Society

Member, American Society of Civil Engineers
Member, Tau Beta Pi Engineering Honor Society

Since joining Stantec in December 2008, Glenn has provided design and CADD support on a variety of transportation design projects. Glenn's primary responsibilities include assisting in the design and plan preparation for various transportation projects. He has experience working in Microstation, In-Roads, AutoCAD, Synchro and SimTraffic. Throughout his career, Glenn has also provided electrical design as well as assisting in the development of Electrical, mechanical, and plumbing construction documents for numerous residential, commercial and industrial projects in the New England area.

RELEVANT EXPERIENCE

Waterbury-Stowe STP 2945(1) | Waterbury-Stowe, Vermont
Staff Engineer aided in site survey, development of project plans, three dimensional modeling in Microstation and inroads formats using the current VTrans CADD guidelines, superelevation calculations and diagrams, superelevation modeling per AASHTO, ditching design, underdrain design and earthworks quantity takeoffs. VTrans required 2'-0" maximum deviation from existing roadway alignment, and included stringent side slope requirements in environmentally sensitive areas.

Burlington Great Streets | Burlington, Vermont
Staff Engineer responsible for sign and pavement marking design, project phasing plan development, aided in project plan development, quantity takeoff and estimate for this redesign of two streets, Bank and Cherry, in downtown Burlington. The redesign prioritized pedestrian safety and movement and maintained the on-street parking needed for the small business. The design incorporated raised intersections, bicycle racks, parklets, seating areas outside popular business and restaurants, green stormwater infrastructure, and public art. Stantec also assisted the City in identifying areas of private parcels needed to support the construction of the plan. Cost: $20 Million (Construction).

VTrans Thetford VT 132 | Thetford, Vermont
Staff Engineer responsible for roadway design and modeling per AASHTO including alignment options, profiling, InRoads modeling, guardrail, culvert and underdrain, and pavement markings and quantity takeoff calculations.

Colchester Park and Ride Design | Colchester, Vermont
Staff Engineer providing external lighting design, modeling for calculations for park and ride lot per VTrans and local ordinance. Assisted with lighting and electrical plan assets, survey, drainage and ditching design, and more, coordinating with VTrans and the Town of Colchester.

US 2/I-89 Exit 14 Improvements Design | South Burlington, Vermont
Staff Engineer responsible for providing design and drafting assistance on the construction of a third eastbound lane of US Route 2 in South Burlington, Vermont. Project elements include decorative street lighting, landscaping, utility relocations, stormwater treatment, interconnected and coordinated signal system, and traffic control for highway widening. Stantec services will also provide NEPA documentation, contract plans, construction cost estimate and permitting meeting VTrans LTF procedures. Considerations included "Complete streets" approach with pedestrian bicycle ad transit facilities.

US Route 7, VT Route 279 Bennington Bypass | Bennington, Vermont
Staff Engineer responsible for overhead and ground mounted Type B large sign and sign post design per the MUTCD. This portion of the project required correspondence with local towns and coordination with other components of this legacy project.

Erik Alling, PE

Assignment Manager, Bike/ Pedestrian/Complete Streets

YEARS WITH STANTEC
12

EDUCATION
B.S., Civil Engineering, University of Vermont, Burlington, Vermont, 2008

REGISTRATIONS
Professional Engineer #89153, State of Vermont

MEMBERSHIPS
Board of Directors, Vermont Society of Engineers

Board of Directors, Past-President - Vermont Section, American Society of Civil Engineers

Mr. Alling has designed and developed numerous transportation projects for state and municipal clients. Erik primarily focuses on bicycle/pedestrian and complete streets projects and projects administered through the VTrans Municipal Assistance Bureau program. Erik's interest in bicycle/pedestrian projects has him on a trajectory to be a regional expert.

RELEVANT EXPERIENCE

VTrans Hartford US 5 Corridor Study | Hartford, Vermont, United States
Senior Engineer responsible for conceptual design of bicycle and pedestrian safety improvements for 2-mile corridor study that developed a Project Definition Report that identified issues and concerns through public input, provided a project purpose and need and developed and evaluated alternative improvement strategies leading to the selection of preferred improvements and/or alternatives. The process included working closely with a stakeholder group made up of Town staff, TRORC staff, and others, and soliciting public input on alternative solutions. We analyzed 10 intersections along the corridor including performing signal warrant analyzes and capacity analyzes for various improvements. Alternatives considered: signalizing intersections, constructing roundabouts, and converting a four-lane highway to two lanes with buffered bike lanes. The evaluation of alternatives included a benefit/ cost analysis to assist the selection of the preferred improvements. The result was a list of short -term improvements that could be readily implemented at a relatively low cost and longer term and higher cost improvements to address the safety and congestion concerns along the corridor. One of the greatest benefits was calming traffic and accommodating bicycles through providing 2 miles of buffered bike lane by simply revising pavement markings and adding signs.

US 2 / I-89 Exit 14 Improvements Design | South Burlington, Vermont
Staff Engineer responsible for traffic control design, plan development, signage design, plan review/comment response, and quantity calculation/development of estimate for the construction of a third eastbound lane of US Route 2, an urban arterial with over 40,000 vehicles per day. Project elements included utility relocations, stormwater treatment, interconnected and coordinated signal system, traffic control for highway widening, decorative street lighting, and landscaping.

Prim Road Intersection | Colchester, Vermont
Lead Project Engineer responsible for horizontal and vertical alignment, traffic signal layout, bike and pedestrian facility design, EPSC design, quantity calculations and estimate for this intersection design project.

Lamplite Acres Drainage Improvements | Williston, Vermont
Project Engineer responsible for finalizing design plans, specifications and estimate and submitting contract documents in preparation for project advertisement for green infrastructure improvements in the Lamplite Acres neighborhood.

US Route 2 Reconstruction | Danville, Vermont
Staff Engineer responsible for plan review, comment response, signage design and quantity calculations for this $7.0 million, 0.8-mile of two-lane rural arterial through the Town center. Project included total roadway reconstruction with context sensitive design, drainage design/stormwater management, traffic calming, lighting, signing, pavement markings, and coordination with the Vermont Arts Council to design and implement aesthetic treatments and enhancements as identified by the Town.

Campus Connector Road | Colchester, Vermont
Staff Engineer for local a roadway project serving as connector road between student housing and Saint Michael's College in Colchester, Vermont. Responsibilities include creating quantity book backup while checking quantities, quantity revisions, and assisting in the design of the roadway and signal/lighting plans.

Chris Gendron,

PE

Lead Engineer, Stormwater Design/Analysis

YEARS WITH STANTEC
10

EDUCATION
Bachelor of Science, Civil Engineering, Norwich University, Vermont, 2010

REGISTRATIONS
Professional Engineer #104146, State of Vermont

MEMBERSHIPS
President, American Society of Civil Engineers

Since joining Stantec in June 2010, Chris has provided design and project management on a variety of projects across various disciplines. Chris's primary responsibilities include generation of conceptual, preliminary, final and contract plans for various projects from planning, permitting and construction. This includes park and rides, roundabouts, roadways (urban and rural), closed drainage, stormwater treatment, culverts, temporary traffic control, intersections, signals, shared use paths, sidewalks, utilities (water, sewer, gas, electric, communications). Chris is proficient in MicroStation, Inroads, GeoPak, Storm Sanitary, Guidsign, HydroCadd, Estimator and Excel. He has experience with AutoCad, Synchro and SimTraffic.

RELEVANT EXPERIENCE

CCRPC VT 15 Athens Drive to VT 289 Pedestrian and Bicycle Scoping Study | Essex, Vermont, United States
Project engineer on the scoping study of a 0.7-mile section of VT Route 15. This section of VT 15 has remained largely unimproved since its reconstruction in 1934 as the surrounding land and area has seen significant development. Some pedestrian and bicycle facilities have been constructed with this development but they remain unconnected in this section of VT 15. Short term and long term improvements to calm traffic and to better connect and accommodate pedestrian and bicycle movements will be considered. Services will include traffic and safety analysis, alternatives development and evaluation, facilitation and coordination of public input process and project advisory committee.

VTrans - Waterbury Main Street Reconstruction - Waterbury F EGC F 013-4(13) | Waterbury Village Historic District, Vermont, United States
Drainage stormwater engineer responsible for plan development and design for the reconstruction of Main Street in Waterbury, Vermont. Stantec provided preliminary and final engineering services, as well as right-of-way plan development for the reconstruction of this one mile of roadway in the historic village of Waterbury. The location of the new water and sewer mains were thoughtfully sited so that the existing mains could remain active while the new mains were constructed. By carefully considering the location of the new water and sewer infrastructure, Stantec's efforts allowed the contractor to methodically construct the project in segments with enough room to maneuver their equipment safely. Stantec developed visualizations in the form of maps, photo simulations, and storyboards to keep the community informed throughout the project. These visualizations greatly supported the Town's and VTrans' public relations efforts during construction. This project is currently in construction and is expected to be completed in the Spring of 2021.

Danville Route 2 Roadway Reconstruction | Danville, Vermont
Responsible for construction support on wet and dry utility revisions and drainage modifications. Chris created a subsurface using borings provided by contractor to re-evaluate drainage and utility design. He created 3D models of drainage and utility features to evaluate conflicts.

Safe Routes to School Waitsfield Intersection Realignment | Waitsfield, Vermont
Responsible for the majority of project design. The scope of work includes safety improvements for the intersection of Old County Road and VT Route 100 in Waitsfield, VT. The project includes realigning Old County Road to intersect perpendicular to VT Route 100, installing a crosswalk across VT Route 100, cold planning, sidewalk, subbase, paving, signage, pavement markings, drainage enhancement and above ground utility modifications.

Bennington Bypass | Bennington, Vermont
Responsible for assisting in a revision to a drainage design involving the removal of stone check dams and the construction of a sand filter system. Involved in updating cross sections, drafting details and drafting the drainage features on the plans.

David McNamara, PE

Lead Engineer

YEARS WITH STANTEC
21

EDUCATION
B.S., Civil Engineering, University of New Hampshire, Durham, New Hampshire, 1999

REGISTRATIONS
Professional Engineer #11241, State of New Hampshire, First Issued 2004

Dave McNamara is a civil engineer with considerable experience on roadway design, reconstruction, and site development projects.

RELEVANT EXPERIENCE

Slayton Hill Road | Lebanon, New Hampshire
Project Manager for emergency roadway reconstruction project in Lebanon. David managed and design and construction phases of the repairs to a 2-mile section of rural roadway that had been heavily damaged by back to back rain events in 2013. Design elements included roadway reconstruction, drainage and resiliency upgrades, and two retaining walls, as well as permitting. The design process included significant public involvement, with David leading 3 Public Informational Meetings, as well as 8 site walks and 4 days of individual abutter meetings.

Mechanic Street | Lebanon, New Hampshire
Project Manager for the Engineering Study phase of the corridor project involving roadway and accessibility improvements to 1.5 miles of two-lane urban roadway. David managed the conceptual design and environmental documentation of the planned corridor improvements, utilizing Complete Streets methodology. Design efforts include typical section studies of the corridor, as well as major reconstruction of two intersections.

I-89, Exit 20 | Lebanon, New Hampshire
Project Engineer on the reconstruction of I-89 bridges over NH Route 12A to accommodate widening of Route 12A from six lanes to seven, with an optional eight. Involves ramp and highway design, bridge design, roadway widening, signal design, and construction sequencing to maintain high volumes of traffic. Dave led the final phases of the roadway design efforts, including traffic control phasing and coordination with the design of the five new bridges.

NH Route 101A | Amherst, New Hampshire
Project Manager for the final design of improvements to the NH Route 101 and NH Route 101A EB off-ramp. David led the design that included the construction of a new slip ramp for eastbound traffic, ledge removal, and drainage design. The project was fast tracked to meet funding deadlines. Construction was completed in 2018.

Broad Street Parkway | Nashua, New Hampshire
Project Engineer for design of new two-mile-long parkway involving two bridges over the Pan Am railroad and a bridge over the Nashua River. David was responsible for roadway design, as well as coordinating numerous design elements, including, new bridge construction, traffic signalization, high retaining walls, bio retention stormwater treatment, lighting, utility relocations, geotechnical investigations, and environmental permitting.

Mascoma River Greenway | Lebanon, New Hampshire
Project Manager for the Central Segment of the City of Lebanon's planned Mascoma River Greenway. The project, managed by David, is a 2-mile section of new rail trail, including improvements to 4 bridges. David is responsible for the design of all elements, as well as permitting efforts required to construct the trail. He is currently managing the construction phase of the project.

Dulac Street Roadway Reconstruction | Lebanon, New Hampshire
David was the Project Manager for the Dulac Street Roadway Reconstruction project in Lebanon, NH. In response to damage along the roadway and abutting properties, this project will reconstruct the roadway to enhance the resiliency of the corridor and protect the City and residents from future runoff events. David led the extensive public process which resulted in unique traffic calming and drainage modifications to the roadway. He also managed the construction phase portion of the contract, which was completed on time and under budget.

Lauren Meek, PE

Lead Engineer

YEARS WITH STANTEC
5

EDUCATION
B.S., Civil Engineering, Auburn University, Auburn, Alabama, 1999

REGISTRATIONS
State of Maine
Professional Engineer
#10679

Lauren has over nineteen years of experience in transportation engineering. She has extensive experience and knowledge of design standards working with the Maine Department of Transportation and the Maine Turnpike Authority. Her design experience has also included work for the Cities of Portland, Lewiston, and Waterville and the Town of Scarborough. Projects have included design of roadway and intersection layout, bike and pedestrian facilities, bridge approaches, toll plaza, traffic, rail and planning. Design assignments have included Inroads modeling; design of signing, striping, drainage and guardrail; and utility coordination along with plan production. Lauren has managed several projects with elements of highway and bridge design, right-of-way acquisitions, utility design and coordination, tolling, permitting and required coordination between multiple agencies.

RELEVANT EXPERIENCE

Maine Turnpike Authority Exit 44 SB On Ramp and NB Off Ramp Projects, Scarborough, Maine
Project manager and lead highway designer for the reconfiguration of the Maine Turnpike Exit 44 Interchange at the beginning of I-295. Design modified a one lane taper entrance ramp to a two lane parallel on ramp and modified a two lane exit ramp with a "decision" lane for the through lane to a two lane parallel exit ramp. Plans included signing and striping with consideration of interim phasing, lighting design and maintenance of traffic plans. Additional effort included construction cost estimate, permitting for Army Corps and MaineDEP, and construction services.

Maine Turnpike Authority, Exit 103 Barrier Open Road Tolling Conversion, West Gardiner, Maine
Project Manager and Lead Highway Engineer for planning and design services for converting a conventional barrier plaza with seven cash lanes to a $24 million ORT plaza with two ORT and three cash lanes in each direction. Tasks include: developing an Alternatives Analysis for permitting; sizing plaza with consideration for adjacent interchange; siting plaza to balance minimizing impacts to natural resources, constructability issues, and traffic operations with adjacent interchange; managing several disciplines (highway, structural, traffic, environmental, geotechnical, and building services); coordination with the client, architect, and tolling consultant; roadway and plaza geometric design; and the development of construction staging while maintaining operations of existing plaza 750 feet from proposed.

MaineDOT, Route 1 Improvements | Frenchville/Fort Kent, Maine
Highway Engineer for developing HVAC submittal for more than four miles of Route 1. Performed review of existing deficiencies of the horizontal and vertical alignments and cross slopes to help determine locations of various pavement treatments: 1.) full depth reconstruction, 2) reclaim, or 3) mill and overlay. Developed necessary calculations for HVAC submittal such as superelevation, horizontal and vertical sight distance, and intersection sight distance. Developed typical sections and InRoads model for the corridor.

Maine Turnpike Authority, Exit 36/Route 112 Area Transportation Study | Saco, Maine
Lead Highway Engineer for providing peer review and alternatives development for a joint City of Saco, MTA and MaineDOT project. Development of six alternatives considered existing connections and deficiencies, improving access to the Turnpike with new ramps, safety improvements on MTA facilities through geometric modifications and introduction of a collector-distributor roadway on the mainline, increasing capacity on local roads, location of new toll facilities to maintain toll revenue collection system, and viability of funding sources.

Marie Sullivan, PE

Lead Engineer

YEARS WITH STANTEC
11

EDUCATION
B.S., Civil Engineering, University of Massachusetts - Lowell, Lowell, Massachusetts, 1994

REGISTRATIONS
Professional Engineer #41299, Commonwealth of Massachusetts, First Issued 1999

MEMBERSHIPS
Finance Committee Co-chair (2016 Professional Development Co-chair (2003/2004), Boston Chapter, Women's Transportation Seminar

UMass Lowell Civil Engineering Industrial Advisory Board Member (2014-present)

Member, American Public Works Association

Member, Massachusetts Highway Association

Marie Sullivan has over 25 years of professional experience managing and working on a variety of civil engineering projects. Her experience ranges from urban roadway design and secondary roadway reconstruction projects to traffic safety improvement projects, bridge rehabilitation/replacement projects, and highway design projects. Her experience includes working extensively with the Massachusetts Department of Transportation – Highway Division and many municipalities in Massachusetts.

RELEVANT EXPERIENCE

Highland Avenue/Needham Street Corridor | Needham/Newton, Massachusetts

Project Manager for this 7,000 foot long corridor project. Key design elements include roadway widening for turn lanes and bike lanes, modifications to bridge over the Charles River to allow an additional lane of traffic on the existing bridge and cantilevered sidewalks on each side of the existing bridge to accommodate pedestrians, utility relocations, environmental permitting, traffic signal installation. The upgrade will accommodate present and projected development along the corridor while minimizing takings and adverse environmental impacts.

I-95/I-93/University Avenue Interchanges and I-95 Widening

Project Manager for final design and permitting of alignment of the major connection between I-95 and I-93 in Canton, Dedham, Norwood, and Westwood, MA. The project includes twelve highway bridges, 1 pedestrian bridge, 1 pedestrian tunnel, 9 culverts, new ramp systems at the I-95/I-93 interchange and the Route 128/University Avenue interchange, 10,000 feet of retaining walls, about 2.5 miles of lane and shoulder widening along I-95 from Route 128 to Neponset Street, and reconstruction of a 50 acre parcel for a multi-use trail system, wetland replication, flood compensation, and creation of rare species habitat. Responsible for managing a staff of over 40 people, 9 subconsultants, and financials for this $200 Million project.

I-95 / Dedham Street Interchange | Canton/Norwood/Westwood, Massachusetts

Project Manager for this roadway reconstruction project. The Dedham Street corridor is being widened from two to four lanes, provides 5 foot wide bike lanes and a new sidewalk through an environmentally sensitive area. Design elements include 3 bridges (one over the Neponset River, one over the MBTA railroad, and one over I-95), a new off ramp from I-95 NB to Dedham Street, 3 signalized intersections, 18 new retaining walls, a new street lighting system, utility relocations from overhead to underground.

Logan Terminal B to C Roadways Project | Boston, Massachusetts

Marie Sullivan currently serves as Project Engineer on Massport's Logan Terminal B to C Roadways Project – Logan International Airport. Stantec is responsible for the design of a multi-level roadway network, between Terminals B and C, including underpasses, at-grade roadways, retained fill roadways and elevated structures, all within a highly confined space that contains numerous physical constraints and maintaining all access/egress to airport terminals. Work includes reconfiguring inbound and outbound roadways for both Terminal B and Terminal C as well as associated terminal ramps as well as complex utility relocations including drainage, sewer, water, gas, lighting, electrical and communications. Detailed construction phasing plans will be prepared to ensure that access and egress to all airport facilities are maintained and that traffic operations remain uninterrupted all times. Complicating design and construction is the need to closely coordinate with several on-going adjacent contracts including the installation of a new Canopy at Terminal C. The roadway structures include several bridges, viaducts, retained fills, and depressed roadway boat sections along curved and skewed over/under pass alignments throughout the corridor. The bridge and viaducts include multi-span curved steel structures, fracture critical integral pier caps, straddle bents, and prefabricated bridge units to provide for accelerated construction. The majority of the structures are supported on deep foundations on drilled shafts and drilled micropiles.

Walt Woo, PE, PTOE

Lead Engineer, Traffic Signal Design

YEARS WITH STANTEC
10

EDUCATION
M.Eng., Civil Engineering, McGill University, Montreal, Québec, 2001

B.Eng., Civil Engineering, McGill University, Montreal, Québec, 1996

REGISTRATIONS
Professional Engineer #46083 (Civil), Commonwealth of Massachusetts

Professional Engineer #13572, State of Maine

Certified Professional Traffic Operations Engineer, Transportation Professional Certification Board Inc.

MEMBERSHIPS
Member, Institute of Transportation Engineers

Walt has extensive practical experience as a transportation engineer, having participated in the analysis and design of dozens of signalized intersections on municipal and state roadways. He also possesses strong skills and experience in other aspects of transportation engineering, including traffic signing, pavement markings, traffic management and highway design. He also has extensive experience in traffic capacity analysis and traffic simulation modeling and has prepared numerous transportation planning studies that evaluated future traffic operations based upon anticipated future land use and travel patterns, among many factors.

RELEVANT EXPERIENCE

Route 1 South Infrastructure Project | Falmouth, Maine
Responsible for traffic engineering design on a mile-long segment of U.S. Route 1 in Falmouth, Maine. Project consists of streetscape improvements to enhance the road and pedestrian environment and includes landscaping, lighting, and sidewalk improvements, in addition to utility relocation. The project includes the reconstruction of the traffic signal system at three intersections.

Massachusetts Avenue Reconstruction | Arlington, Massachusetts
Responsible for traffic engineering design on mile-long corridor improvement project, including traffic signal, signs and pavement marking design. This Complete Streets project includes the addition of bicycle lanes and sidewalk improvements along this arterial roadway. In conjunction with these multi-modal improvements, the four signalized intersections within the corridor are to be reconstructed and the traffic signal timing reconfigured to optimize traffic flow based on reconstructed roadway geometry.

Safety Improvements at Two Intersections | Lowell, Massachusetts
Project Manager for the design of safety improvements to the intersection of Varnum Avenue/Riverside Street at Mammoth Rd/School Street and to the intersection of VFW Highway at Aiken Street. The project includes the replacement of the traffic signal system at both intersections, full-depth roadway reconstruction and improvements to pedestrian curb ramps. Additional improvements are also to be implemented based on the recommendations of a Road Safety Audit.

NH Route 101A Improvements | Milford-Merrimack, New Hampshire
Responsible for traffic engineering design for improvements to heavily traveled Route 101A corridor between Merrimack and Milford, NH. Proposed improvements include the addition of travel lanes along Route 101A and the reconstruction of three signalized intersections. Reconstructed signals will have to be integrated into existing coordinated signal subsystems. Traffic signal timing improvements will also be made in order to account for future traffic demand on the busy Route 101A commuter and commercial corridor.

Lincoln Street Improvements | Worcester, Massachusetts
Senior Traffic Engineer contributing to the design of highway and traffic improvements to Lincoln Street in the City of Worcester, MA. Oversight of overall traffic engineering design components, including pavement markings, signs, traffic signals and maintenance of traffic during construction. Developed the design of the geometric layout of the proposed roundabout on Lincoln Street. The Project included the design of a closed-loop traffic signal system along the corridor with coordinated traffic signal timing.

Bernie Gagnon,

PE

Construction Inspection, Traffic Management/ Constructability

YEARS WITH STANTEC
6

EDUCATION
M.S., Engineering Management, University of Alaska, Anchorage, Alaska, 1993

B.S., Civil Engineering, University of Vermont, Burlington, Vermont, 1979

M.S. Environmental Quality Engineering, University of Alaska, Anchorage, Alaska, 1984

REGISTRATIONS
Professional Engineer, State of Vermont

MEMBERSHIPS
Member (Past President of Local Chapter), American Society of Civil Engineers

Member, Massachusetts Highway Association

* denotes projects completed with other firms

Bernie is an experienced engineer with over 30 years of engineering experience in project design, preparation and review of contract documents, bid solicitation, contract administration experience in the areas of contaminated site cleanup, road design, water supply, wastewater treatment, stormwater, and site design for residential and commercial developments. His expertise in contracting and in the solicitation, evaluation, and selection of design and construction contractors. He has experience in construction phase services including resident engineering, shop drawing review, response to requests for information, and on site construction inspection and documentation on Federal, State, and Local projects.

RELEVANT EXPERIENCE

Montpelier-Berlin Shared Use Path | Montpelier, Vermont
Resident engineer responsible for observation of construction for compliance with plans and specifications; distribution and tracking of shop drawing submittals and requests for information; change orders; measurement and independent verification of all contractor submitted quantities; and approval of all contractor payment requests. The project is reported and recorded with the APPIA project management program for infrastructure construction projects. The Montpelier-Berlin Shared Use Path Project is a VTrans funded project consisting of construction of a 1.93 mile long multi-use path. Work to be performed under this contract includes relocation of approximately 900 feet of active rail line; construction of a new concrete box culvert; relocation of a City owned watermain; relocation of a privately owned sewer line and construction of a new sewage lift station; construction of new unit block retaining walls; grading; drainage; subbase; paving; landscaping; and signage.

South Catherine Street Reconstruction | Plattsburgh, New York
On-site resident engineer for $4.3 million dollar road reconstruction project in Plattsburgh, NY. Project involved the complete reconstruction of approximately one mile of two lane highway including abandonment of existing water main and construction of new water main; abandonment of existing sewer main and construction of new sewer main; construction of new stormwater treatment infrastructure; new concrete curb and sidewalk; paving; and site landscaping. Responsible for review and approval of all shop drawing submittals; change orders; and approval of all contractor payment requests. Supervised three construction inspectors and approved daily reports and all project quantities. All work was reported and recorded with the APPIA project management program for infrastructure construction projects.

Burlington International Airport- Construct, Mark, and Light Parallel Taxiway "G/K", Phase I | South Burlington, Vermont
Resident Engineer responsible for construction phase services for this $2.6 million project for construction of a new taxiway. Project included 1,500' long x 75' wide new bituminous concrete paved taxiway with 30' shoulders on each side; FAA compliant edge lighting, signage, and pavement markings; new stormwater drainage collection system; grading, topsoil, and hydroseeding. Responsible for review and approval of shop drawing submittals; all change orders; and approval of all contractor payment requests. All work was reported and recorded with the APPIA project management program for infrastructure construction projects.

John Little

Assignment Manger

YEARS WITH STANTEC
39

EDUCATION
A.S., Vermont Technical College, Randolph, Vermont, 1980

REGISTRATIONS
Licensed Class B Designer (formerly known as a Certified Site Technician) #222, State of Vermont

Certified Professional in Erosion and Sediment Control #2642, CPESC, Inc.

MEMBERSHIPS
HAZWOPER 24-hour Certification, Occupational Safety & Health Administration

Member, International Erosion Control Association

John has over 39 years of transportation design, construction services, and survey experience. As the program manager for the Construction Division, he is responsible for contract administration, allocation of staff and resources, subconsultant coordination, client satisfaction and quality assurance.

As a Project Manager on design projects, he is responsible for overseeing the preliminary and final designs as well as preparation of final contract plans including design layout, intersection design, horizontal and vertical alignment computations, drainage design and layout, as well as quantity computation estimating and maintaining a smooth operation between design and CADD personnel. He has obtained his Certified Professional in Erosion and Sediment Control (CPESC) certification.

As the Program Manager for the resurfacing program, he is responsible for the day-to-day management, allocation of staff and resources, subconsultant coordination, client satisfaction and quality assurance.

RELEVANT EXPERIENCE

Montpelier-Berlin Shared Use Path | Montpelier, Vermont
Project Manager responsible for observation of construction for compliance with plans and specifications; distribution and tracking of shop drawing submittals and requests for information; change orders; measurement and independent verification of all contractor submitted quantities; and approval of all contractor payment requests. The project is reported and recorded with the APPIA project management program for infrastructure construction projects. The Montpelier-Berlin Shared Use Path Project is a VTrans funded project consisting of construction of a 1.93 mile long multi-use path. Work to be performed under this contract includes relocation of approximately 900 feet of active rail line; construction of a new concrete box culvert; relocation of a City owned watermain; relocation of a privately owned sewer line and construction of a new sewage lift station; construction of new unit block retaining walls; grading; drainage; subbase; paving; landscaping; and signage.

Williamstown STP WALK(18) | Williamstown, Vermont
Project Manager for the construction observation of the VT Route 14 sidewalk and pedestrian bridge construction. Responsibilities included project coordination, pay requisition review, processing change orders, and running project meetings.

Waterfront Access North Phase II | Burlington, Vermont
Project Manager for this $5.1 M project which consisted of providing construction services for one of the City of Burlington's highest profile projects. The project included extending Lake Street north along the west side of the Genesee & Wyoming Railroad, the construction of two Gravel Wetland Stormwater Treatment Facilities, a concrete Skate Park and covered Pavilion, Realignment of the Burlington Bikeway Multi-use Path, new Street Lighting, tracking multiple levels of Contaminated Soil, Underground Utilities, Landscaping and other incidental items. Responsibilities included overseeing staffing and resources, tracking the payment of items through 23 different funding sources, attending biweekly project team meetings, invoicing and coordination between the City, State, FHWA, the design team and Stantec.

Lamoille Valley Rail Trail | Morrisville to Cambridge, Vermont
Resident Engineer / Construction Administrator for this $1.5 Million rail to trail conversion project which consists of the reconstruction of 17 miles of trail from Morrisville to Cambridge along the abandoned Lamoille Valley Railroad line. This project also includes, drainage improvements, the rehabilitation of all bridges including superstructure and substructure, cattlepass replacement or rehabilitation, and culvert construction, rehabilitation or replacement. Some of the more complex features included the permitting, the sensitivity to adjacent landowners, and the coordination and documentation of town and volunteer donated work.

Caela Waite

Construction Inspection, Engineer/Technical Support

YEARS WITH STANTEC
4

EDUCATION
B.S., Civil Engineering,
Norwich University,
Northfield, Vermont, 2016

REGISTRATIONS
Certified Hot Mix Asphalt Paving Inspector, NorthEast Transportation Training and Certification Program

MEMBERSHIPS
Member, Women's Transportation Seminar

Member, Burlington Young Professionals in Transportation

Caela has over seven years of experience working on engineering projects in Maine and Vermont, including over three years of roadway reconstruction inspection. She is a Certified Hot Mix Asphalt Paving Inspector, from the Northeast Transportation Training and Certification Program. Her construction inspection experience includes construction oversight of paving crews, sidewalk and safety improvement projects. Caela has also served as lead designer on multiple state highway resurfacing and reconstruction projects. These have included upgrading all crosswalks to meet ADA and PROWAG requirements. She has worked with diverse multidisciplinary teams on projects ranging from field inventory data collection and management, to developing plans, cost estimates, and special provision documents. Her responsibilities have included plan design and review, quantity calculation and review, financial estimates and review, and assembling special provision documents.

RELEVANT EXPERIENCE

Mansfield Avenue Shared Use Path and Traffic Calming| Burlington, Vermont
Project engineer was responsible for the horizontal alignment, vertical alignment, and cross section development for the new sidepath, design of traffic calming alternatives, plan development, quantities, estimate, and bid documents. This street is an important link in a major east-west bicycle corridor (North Street and Colchester Avenue), linking Burlington's waterfront, and northern neighborhoods to UVM, it's Medical Center; Winooski and beyond. It also hosts the Mater Christi School, with ages preschool to eighth grade. Although Mansfield Avenue has a conventional bike lane in one direction and shared-use lane in the other direction, its importance, and high use suggested making the street safer for all users by considering the addition of a low-stress shared use path and numerous traffic calming features.

Burlington STP BP13(6) | Burlington, Vermont
Resident engineer for this pedestrian safety improvements project. Responsibilities included the observation of construction for compliance with plans and specifications, distribution and tracking of shop drawing submittals and requests for information, development and independent cost analysis of change orders, measurement and independent verification of all contractor submitted quantities and approval of all contractor payment requests, including certified payroll compliance.

The project consisted of the construction of three new raised intersections at locations where many children and other pedestrians frequently cross busy city streets to access a local school, a popular park and other destinations. These crossings needed to be compliant with the Americans with Disabilities Act (ADA), a key component when providing safe pedestrian access. Along with the raised intersections, the project included the revision of the existing drainage features, new sidewalk, new curb, revised signing and pavement markings, traffic control and the efforts needed for the project to stay in compliance with local and state permits.

VTrans - Guilford I-91 Welcome Center Pavement Rehabilitation - Guilford Rest Area IM 091-1(79) | Guilford, Vermont
Project engineer responsible for the development and design of a pavement rehabilitation strategy and generate contract documents for the rehabilitation of the Guilford I-91 Welcome Center, a 114-space car parking area, 23-space truck parking area and more than 1/2 mile of circulating and access roads. Most of the rehabilitation was a cost-effective asphalt mill and overlay. Approximately 700 feet of an access road with more than 10% grades required a reclaimed stabilized base with 5 inches of new asphalt. One of the more challenging aspects of the project was the maintenance of traffic during construction. Working with the facility operators, we developed a performance specification that allowed ramp access closures during a designated 4-hour period and provided an alternative site for truck parking while the car parking was relocated to the truck parking area.

Deron Barnes

Construction Inspection, Engineer/Technical Support

YEARS WITH STANTEC
27

EDUCATION
A.S., Vermont Technical College, Randolph Center, Vermont, 1990

Deron has 25 years of experience as a technician with emphasis on highway design, computer-aided drafting, assisting in the surveying, design and construction inspection of highways, utilities and site work. His duties include geometric and drainage design, signing and pavement marking designs, use of computer aided drafting software including AutoCAD and MicroStation for the development of plans, and use of computer software for the takeoff of quantity and development of construction estimates.

Construction assignments duties include inspection of the installation of storm drainage, water systems, sewer systems and new construction and reconstruction of roadways. His responsibilities have included resident inspection, daily reporting, shop drawing processing and review, change orders, payment requests, project closeouts, claims resolutions and coordination between owner, contractor and designer.

RELEVANT EXPERIENCE

BTV Taxiway G Phase 1B | Burlington, Vermont
Provided construction inspection services for Phase 1A & 1B of the relocation of Taxiway "G", a full length taxiway parallel to the primary runway. This included covering several construction crews on any given day, observing, reporting, measuring and reconciling quantities, tracking work done on a time & material basis, communicating issues to resident engineers, and documenting daily project events.

Winooski Downtown Development Infrastructure Improvements | Winooski, Vermont
Inspector for this $14.2 million urban redevelopment project. Project elements included 9,100 linear feet (1.7 miles) of new and reconstructed roadways, 16,500 linear feet of concrete and brick sidewalks, 16,500 linear feet of granite curb, over 13,000 linear feet of storm and roof drainage systems, 3,200 linear feet of new sewer mains and laterals, 4,200 linear feet of water mains and laterals, three signal systems, traffic control plan for 23,000 vehicles per day, undergrounding of the existing utilities with over 15 miles of conduit, a comprehensive stormwater management system, extensive landscaping, parks and ornamental lighting.

South Hero Island Line Trail Improvements | South Hero, Vermont
Construction Inspector for this $989,000 rail trail improvement project. This project included the widening of this shared use path, construction of emergency vehicle turnaround accommodations, and the replacement of existing ferry docks with new docks, gangways and wave attenuators. Responsibilities included daily observation of construction activities, documentation of labor and equipment, verification of quantities, photo documentation of all activities, and attending project team meetings.

US Route 2 Reconstruction | Danville, Vermont
Design Technician responsible for providing support to the design team for this $4.5 million, 0.8-mile two-lane rural arterial road through the town center. Was also involved in the development of Right-of-Way Plans.

VTrans U.S. Route 7 Bypass | Bennington, Vermont
Design Technician responsible for CAD and quantity work on this $43 million construction of new U.S. Route 7 circumventing Bennington. This 3.85 mile long, two-lane limited access highway included two interchanges (a systems interchange and Vermont's first single point diamond interchange), eight new structures, considerations for future four-lane construction, utility relocations, and one mile of urban street reconstruction. Services include conceptual, preliminary, and final design for highway, structure, stormwater treatment, traffic signals, right-of-way, utilities and lighting.

Justin Laperle

Construction Inspection, Engineer/Technical Support

YEARS WITH STANTEC
2

EDUCATION
B.S., Norwich University, Northfield, Vermont, 2018

REGISTRATIONS
Engineering Intern #017.0134145, State of Vermont

MEMBERSHIPS
Member, American Society of Civil Engineers

Member, Tau Beta Pi Engineering Honor Society

Member, Chi Epsilon National Civil Engineering Honor Society

* denotes projects completed with other firms

Since graduating Norwich University in 2018 Justin has worked for Stantec as a designer and inspector on projects including roadway, pedestrian paths, culverts and stormwater. His recent experience Inspection experience includes work on the 1.93 mile Montpelier-Berlin Shared Use Path and inspection services for retrofit of two engineered Wetland Treatment Systems at the Lanxess Manufacturing Plant in El Dorado, Arkansas. This project consisted of excavation of the existing systems, construction of the clay berms, installing distribution piping, effluent control structures, and filling the treatment cells with stone, pea gravel and compost media mixture.

RELEVANT EXPERIENCE

VTrans Montpelier Runaround Track | Montpelier, Vermont
Staff engineer responsible for hydraulic analysis on the redevelopment of over a mile of abandoned railbed on the Washington County Railroad line and use it as the new main track. Stantec was selected to develop the design and contract documents associated with rehabilitation of the old railbed that included new ballast, ties, rail, drainage and structure improvements and a new highway-rail crossing. Our services also included assessment of natural resources, identification of permitting, analysis of alternative alignments, and cost estimating.

I-89 Exit 12 Shared Use Path | Williston, Vermont
Phase 1 of the proposed interchange improvements at exit 12 of Interstate 89 in Williston, Vermont involves the extension of the existing shared use path through the interchange to a new park-and-ride facility. Mr. LaPerle was responsible for developing alignment alternatives and InRoads models to determine the impacts. This information will be used to decide which side of Route 2A the shared use path should be constructed.

Norwich University Steel Bridge Competition* | Norwich, Vermont
Helped his team of five other seniors at Norwich University design and construct a steel bridge that was taken to compete in the New England Regional Student Steel Bridge Competition. Design was completed using Risa 2D. Construction was done at Jeffords Steel in Plattsburg, NY where the team learned how to weld, 85% of the bridge fabrication was done at Jeffords. Aside from the competition the team developed reports and presented the design.

Waterbury Stowe Street Bridge Study* | Waterbuty, Vermont
Assisted senior engineers in field work and developing a technical report for the functionality of the Stowe Street Bridge in Waterbury, VT. Field work included site visits and traffic counts.

VT22A Vergennes Truck Route Study*
Assisted senior engineers in developing a report that analyzes alternatives for managing truck traffic through the city of Vergennes Vermont. The alternatives include constructing a bypass around the city and directing heavy truck traffic traveling North on VT 22A to VT Route 17 where they would intersect US Route 7 to continue North.
West Lakeshore Road/Prim Road Intersection* | Colchester, Vermont
Design and CADD support for this intersection realignment project that involves adding two turning lanes and a signal to the intersection of West Lakeshore Drive and Prim Road. The re-alignment of the intersection requires a new closed drainage system, and bio-retention stormwater treatment area. The new roadway also features a new signalized intersection, lighting, sidewalk, and shared use paths. The project will allow for more efficient travel for people traveling from Malletts bay area to Downtown Burlington as well as improve safety at this busy intersection.

Doug Campbell,

PE

Construction Inspection, Utilities

YEARS WITH STANTEC
31

EDUCATION
B.S., Civil Engineering, University of Vermont, Burlington, Vermont, 1994

REGISTRATIONS
Professional Engineer #7421, State of Vermont

MEMBERSHIPS
HAZWOPER 40 Hour Certification, Occupational Safety & Health Administration
Confined Space Entry Certification, Occupational Safety & Health Administration

Member, American Society of Civil Engineers

Doug has over 27 years of design experience in construction phase engineering services, general civil engineering including civil/site design, process design, drainage systems and stormwater design, stormwater systems management, roadway design, and design of water distribution and sewer collection systems, and computer modeling of watershed and river characteristics.

RELEVANT EXPERIENCE

Burlington Calahan Park Athletic Field Reconstruction | Burlington, Vermont
Project Engineer responsible for resident construction phase services for this $115,000 project for reconstruction of an existing soccer field located at Calahan Park including stripping, stock piling and testing the existing athletic field topsoil; amendment of the existing topsoil with imported organic matter, replacement of approximately 385 LF of existing 15" brick sanitary sewer with new 18" PVC sanitary sewer pipe and two precast concrete sanitary sewer manholes due to unknown field conditions; spreading and re-grading the amended topsoil to new finish grade contours; installation of a new irrigation system; temporary and permanent erosion prevention and sediment control measures; site restoration including placement of topsoil and establishment of growth to athletic field standards.

Burlington Leddy Park Softball Field Reconstruction | Burlington, Vermont
Project Engineer responsible for resident construction phase services for this $163,000 project for reconstruction of the existing softball field located at Leddy Park including stripping and stock piling the existing athletic field topsoil; importation of approximately 3,500 cubic yards of washed screened sand; spreading, compacting, and re-grading the stockpiled topsoil to new finish grade contours; installation of new subsurface 6" PVC perforated underdrain piping; performing layout for the new softball field geometrics including fencing, bases, pitching mound, and coaching boxes; installation of new 4' and 6' high chain link fencing, access gates, and 16' high backstop; installation of new temporary and permanent erosion prevention and sediment control measures; site restoration including placement of topsoil, infield mix and conditioner, and establishment of growth to athletic field standards.

VTrans - Waterbury Main Street Reconstruction - Waterbury F EGC F 013-4(13) | Waterbury Village Historic District, Vermont
Water/Wastewater Engineer on the reconstruction of Main Street in Waterbury, Vermont. Stantec provided preliminary and final engineering services, as well as right-of-way plan development for the reconstruction of this one mile of roadway in the historic village of Waterbury. The location of the new water and sewer mains were thoughtfully sited so that the existing mains could remain active while the new mains were constructed. By carefully considering the location of the new water and sewer infrastructure, Stantec's efforts allowed the contractor to methodically construct the project in segments with enough room to maneuver their equipment safely. This project is currently in construction and is expected to be completed in the Spring of 2021.

Winooski Downtown Development Infrastructure Improvements | Winooski, Vermont
Served as the Lead Inspector for this $14.2 million urban redevelopment project. Project elements included 9,100 linear feet (1.7 miles) of new and reconstructed roadways, 16,500 linear feet of concrete and brick sidewalks, 16,500 linear feet of granite curb, over 13,000 linear feet of storm and roof drainage systems, 3,200 linear feet of new sewer mains and laterals, 4,200 linear feet of water mains and laterals, three signal systems, traffic control plan for 23,000 vehicles per day, undergrounding of the existing utilities with over 15 miles of conduit, a comprehensive stormwater management system, extensive landscaping, parks and ornamental lighting.

Amanda Ludlow

Assignment Manger, Stormwater Design/Analysis

YEARS WITH STANTEC
1

EDUCATION
Winter Vegetation Identification, Rutgers University, Cook College, New Brunswick, New Jersey, 2000

Hydric Soils, Rutgers University, Cook College, New Brunswick, New Jersey, 2000

Methodology for Delineating Wetlands, Rutgers University, Cook College, New Brunswick, New Jersey, 2000

B.S., Bioengineering, Syracuse University, Syracuse, New York, 1994

M.S., Marine Biology, Boston University, Woods Hole & Boston, Massachusetts, 1995

M.S., Civil and Environmental Engineering, Utah State University, Logan, Utah, 2003

Amanda is a Principal in Stantec's South Burlington, VT, office. Specializing in green infrastructure practices and sustainable stormwater management design, she has more than 20 years of environmental consulting experience and currently serves as a technical expert in the South Burlington office.

Amanda has spent her career focusing on the development of innovative sustainable solutions to solve environmental problems including constructed treatment wetlands, phytoremediation, natural media filtration, sustainable stormwater management and life cycle analysis. She has applied these alternatives to a diverse range of impacted environments including groundwater and surface water contamination, stormwater runoff, landfill leachate, contaminated soils and sediments, and industrial/municipal wastewaters.

Additionally, Amanda has extensive experience in the assessment, investigation and restoration of sensitive habitats from freshwater wetlands and tidal wetlands to riparian ecosystems—including sustainable shoreline stabilization design—to grassland and woodland habitats.

RELEVANT EXPERIENCE

Riverbank Stabilization and Stormwater Treatment Wetland* | Buffalo, New York
Amanda served as the Principal for the design and reconstruction of an eroding riverbank along a former municipal landfill located on an active petroleum distribution terminal. Design elements included various self-sustaining bio-engineering techniques including soil choking and live staking mixed with hard armoring, as well as restoration of the landfill surface with native woody and emergent vegetation. The design also included a stormwater wetland for the treatment of runoff generated from the capping and closure of the landfill. The wetland design included installation of numerous cascading pools and shallow marshes to capture and detain runoff to minimize erosive forces prior to discharge into the Buffalo River.

MDOT Longfellow Bridge Stormwater Treatment* | Boston & Cambridge , Massachusetts
Principal for the design and construction inspection of two stormwater treatment wetlands (subsurface flow gravel wetlands) for the Longfellow Bridge Rehabilitation project. Completed an evaluation of the initial stormwater design to verify the aesthetic goals and design objectives, as well as the applicability of using the proposed plant species for stormwater treatment, verifying that the design objectives for phosphorus removal would be met. Provided recommendations for design alterations to improve the function and long-term performance of the wetlands. Prepared separate final construction documents, including the final planting plans as well as detailed planting specifications. Cost: $85,000 (Fee).

Wetland Remediation & Restoration, Liberty Industrial Finishing Superfund Site* | Farmingdale, New York
Amanda was the Engineer and wetland specialist for the design and permitting of a Superfund sediment remediation plan for impacts to a 3.2-acre pond. Remediation included the removal of impacted sediment from the pond, followed by the installation of replacement wetland substrate and restoration with native emergent wetland plantings. The ultimate goal of the mitigation plan was to maintain the primary function of the pond as a storm water detention unit, and replace the former pond marsh with a structurally complex emergent low marsh surrounded by a shrub/forested adjacent area.

VERMONT SURVEY and ENGINEERING, INC.

SURVEYORS and CIVIL ENGINEERS

79 RIVER STREET, SUITE 201 • MONTPELIER, VERMONT 05602
(802) 229-9138 • FAX (802) 229-9130 • E-mail: Info@VermontSurvey.com

Stephen Fraser, LS – Principal/Project Manager

AOT Manager IV

VT LS #527
NH LS #971
NY LS #050855

Number of years with firm: 14

Mr. Fraser has been involved with engineering and surveying since 1971. Before joining Vermont Survey and Engineering, Inc. in 2005, he was employed for twenty-five years by the City of Barre as a mapping and surveying specialist. During this period, his responsibilities included maintaining water, sewer, and surface utility maps; GIS mapping using ArcInfo 8.0.3; project design and deed research; municipal surveying and construction layout; assisting all departments with their mapping needs; assisting the public regarding all aspects of property ownership; and E 911 liaison.

Since joining Vermont Survey, Mr. Fraser has served as Project Manager for survey and right-of-way efforts associated with a twenty-five mile power transmission project in western Vermont, which includes plat preparation and title research on approximately 150 properties. He is also Manager-In-Charge of deed research, property surveys, and plat preparation and is an accomplished AutoCAD operator.

Mr. Fraser has been involved with the following VTrans projects:

Bennington Bypass North NH F 019-1(5)
Bennington AV-FY 15-010
Brandon NH 019-3(496)
Burlington MEGC M 5000(1)
CULV032-CULV033 Statewide
East Montpelier-Marshfield-Plainfield HPRC(1)
Essex-Westford HPRC(2)
Hartford STP 0113(59)S
Hartford STP BIKE(62)
Hartford STP EH09(15)
Hartford STP EH10(18)
Middlebury AIR 04-3181
Morristown STP HES 030-2(28)
South-Hero STP HES 028-1(22)
South Hero STP SHST(1)
Williston STP HES 5500(12)

Professional Affiliations/Education

A.A.S. Civil Engineering Technology (Surveying Major) – VT Technical College
Vermont Society of Land Surveyors
New Hampshire Land Surveyors Association
New York State Association of Professional Land Surveyors

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Andrew McQueeney – Principal/Project Manager
AOT Manager IV

Number of years with firm: 29

Mr. McQueeney has been involved with engineering and surveying since 1985. Before joining Vermont Survey and Engineering, Inc. in 1991, he was employed by McDonald-Sharpe Surveyors and Engineers of Old Saybrook, CT. As CADD Manager, he is responsible for developing AutoCAD, MicroStation and InRoads deliverables as well as overseeing CADD work of others. He has been using AutoCAD software since 1991 and Bentley Systems and Intergraph software since 1998. A Principal of the company since 2009, Mr. McQueeney now coordinates the activities of the field crews and office staff, and acts as Project Manager for the majority of VTrans projects that VSE is involved with.

Mr. McQueeney has been VSE Project Manager for the following VTrans projects:

Structures Projects

Bennington ER BHF 010-1(45)
Bethel BHF 0241(38)
Cavendish ER BRF 0146(13)
Corinth BRO 1447(29)
CULV032-CULV033 Statewide
Fairfield BRO 1448(38)
Hyde Park STP CULV(26)
Lincoln FAS 0188(TH1)
Lunenburg NH CULV(27)
New Haven FAS 0183(TH2)
North Hero-Grand Isle BHF 028-1(26)
Plymouth ER BRS 0149(5)
Rockingham BRF 0126(12)
Ryegate IM CULV(28)
Waterbury IM 089-2(43)
Woodstock BHO 1444(52)

Roadway Projects

Andover-Chester STP 016-1(28) SC
Bakersfield STP SCRP(11)
Brandon-Rochester ER STP 0162(21)
Guilford-Rockingham IM SIGN(44)
Marlboro-Brattleboro NH 010-1(46) SC
Milton IM 089-3(66)
Morristown STP HES 030-2(28)
Randolph-Northfield STP 0187(10) SC
Rutland-Killington NH 020-2(36)
South-Hero STP HES 028-1(22)
St. Johnsbury-Lyndon IM 091-3(50)
Stockbridge-Bethel STP 2910(1)
Waterbury FEGC F 013-4(13)
Williston STP HES 5500(12)
Windsor IM 091-1(64)
Woodstock STP 0241(40)

Professional Affiliations/Education
A.A.S. Surveying and Forestry - Paul Smith's College

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Jason Riley, LS – CADD Operator/ROW Agent — VT LS #59686

AOT Technician VI

Number of years with firm: 16

Mr. Riley has been involved in the surveying field for the past 14 years. During this time his duties have ranged from Rodman to Party Chief to CADD draftsman. He has experience in highway construction layout, 3-dimensional topographic surveying, boundary survey, and as-built surveys. Mr. Riley's responsibilities have also included deed research and plat preparation, construction quantity calculation, and oversight/training of other draftsmen. A Vermont Licensed Land Surveyor since 2012, Mr. Riley's capabilities and responsibilities continue to grow at VSE.

Mr. Riley has been involved with the following VTrans projects:

Structures Projects

Bennington ER BHF 010-1(45)
Bethel BHF 0241(38)
Cavendish ER BRF 0146(13)
Corinth BRO 1447(29)
CULV032-CULV033 Statewide
Fairfield BRO 1448(38)
Hyde Park STP CULV(26)
Lincoln FAS 0188(TH1)
Lunenburg NH CULV(27)
New Haven FAS 0183(TH2)
North Hero-Grand Isle BHF 028-1(26)
Plymouth ER BRS 0149(5)
Rockingham BRF 0126(12)
Ryegate IM CULV(28)
Waterbury IM 089-2(43)
Woodstock BHO 1444(52)

Roadway Projects

Andover-Chester STP 016-1(28) SC
Bakersfield STP SCRP(11)
Brandon-Rochester ER STP 0162(21)
Guilford-Rockingham IM SIGN(44)
Marlboro-Brattleboro NH 010-1(46) SC
Milton IM 089-3(66)
Morristown STP HES 030-2(28)
Randolph-Northfield STP 0187(10) SC
Rutland-Killington NH 020-2(36)
South-Hero STP HES 028-1(22)
St. Johnsbury-Lyndon IM 091-3(50)
Stockbridge-Bethel STP 2910(1)
Waterbury FEGC F 013-4(13)
Williston STP HES 5500(12)
Windsor IM 091-1(64)
Woodstock STP 0241(40)

Professional Affiliations/Education
A.A.S. Surveying and Forestry - Paul Smith's College
Vermont Society of Land Surveyors

HARTGEN archeological associates inc

ELISE MANNING-STERLING, M.A.
Principal Investigator
Years with Hartgen: 25

EDUCATION:

The College of William and Mary
Masters of Arts, Historical Archeology, 1994

State University of New York at Binghamton
Bachelor of Arts, Anthropology, 1983

EXPERIENCE:

Phase I archeological survey — 2011 — Lebanon Airport Improvements, Lebanon, Grafton County, New Hampshire
Conducted Phase IA research and Phase IB testing for the proposed runway improvement project at Lebanon Airport in Lebanon, New Hampshire.

Phase II archeological site evaluation — 2011-12 — Swanzey 15697, Swanzey Factory Road, Swanzey, Cheshire County, NH
Conducted Phase IB and II archeological field investigations on two historic sites (one dating to the early 19th century, and one dating to the mid-18th century) as part of the initial planning process for the construction of a traffic circle.

Phase III archeological data recovery — 1996-2006 — Fort Ticonderoga, Town of Ticonderoga, Essex County, New York
Directed intensive archeological data recovery investigation at the 18th-century Fort Ticonderoga site in Ticonderoga, New York. Revealed 18th-century occupation deposits, ground surfaces, middens, masonry walls, an elaborate drainage system, and other structural features that broadened the knowledge of the 1755 Lake Champlain landscape, the original fort configuration, and 18th-century military construction techniques.

Archeological reconnaissance survey — 2014 — Middlebury State Airport, Middlebury, VT
Conducted historic research and archeological reconnaissance survey for five archeologically sensitive areas within the airport property.

Literature/Archival research — 2008 — Samuel Harrison House Project, Town of Pittsfield, Berkshire County, MA
Prepared a historical context report for the National Register of Historic Places-listed Reverend Samuel Harrison house and conducted Phase IB excavations to provide the background necessary for a comprehensive interpretation of the site.

Cultural landscape studies — 2004 — Rogers Island Cultural Historic Park Management Plan, Fort Edward, Washington County, NY
Prepared a Cultural Resources Management Plan for a proposed Cultural Historic Park at Rogers Island. Recorded the 18th-century military structures on Rogers Island based on historical research and previous archeological excavations on the island.

EXPERIENCE WITH OTHER FIRMS:

1999 — Archeologist, Principal Investigator URS Greiner Woodward-Clyde, Inc.
Supervised archeological investigations, laboratory analysis and report production

1998 — Archeologist, University of Kansas, U.S. Fish and Wildlife, Museum of Natural History Paris
Survey and excavation of precontact Aleut sites on Attu Island in the Aleutian Island chain

1996 — Archeologist, Smithsonian Institute, Aleutian Islands, Alaska
Excavation of precontact and contact period Aleut village and midden site located on Agattu Island in the Aleutian Islands.

1994 — Archeological Faunal Analyst Department of Archeological Research, Colonial Williamsburg
Faunal Analysis of 17th, 18th, and 19th-century assemblages.

PUBLICATIONS:

2010 — Ticonderoga: French Fort Construction on the Eighteenth-Century Frontier. In *Soldiers, Cities, and Landscapes, Papers in Honor of Charles L. Fisher.* Edited by Penelope Ballard Drooker and John P. Hart. New York State Museum.

2000 — Antietam: The Cultural Impact of Battle on an Agrarian Landscape. In *Archaeological Perspectives on the America Civil War.* Edited by Clarence R. Geier and Stephen R. Potter. University Press of Florida

1999 — *Battle on an Agrarian Landscape.* URS Greiner, Inc. Draft report. Submitted to National Capital Area National Park Service.

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Years with Hartgen: 25

EDUCATION:

The State University of New York at Albany
Ph.D., Anthropology, 1993

The State University of New York at Albany
Master of Arts, Anthropology, 1986

Hamilton College, Clinton, NY,
Bachelor of Arts, Anthropology, 1980

QUALIFICATIONS:

36 CFR Part 61 Qualified Archeologist

SPECIAL TRAINING:

Best Practices in Working with American Indian Tribes
Workshop on effective consultation and interaction with and what issues to expect when working with American Indian Tribes. Presented by FHWA, sponsored by VAOT, Montpelier, December 2004

Developing a Vermont Archeological Predictive Model Workshop
Workshop on GIS in archeological compliance in Vermont, sponsored by the VAOT, VDHP, Montpelier, February 1999.

NAGPRA's Evolving Legacy Seminar
Training in Native American Graves Protection and Repatriation Act compliance, sponsored by the University of Nevada at Reno, Philadelphia, December 1998.

Section 106
Trained in Section 106 - National Historic Preservation Act, the Advisory Council on Historic Preservation and the University of Vermont at Burlington, April 1997.

PROFESSIONAL EXPERIENCE:

August 1997 - Present **Project Manager and Office Director**
Hartgen Archeological Associates, Inc.
Management of branch office in Putney, Vermont. Directs research for cultural resources surveys throughout New England. Coordinates projects with hiring of field crew and completion of fieldwork, laboratory analysis, and reports. Recent contracts have included many VTrans projects for airports, bike paths, bridges, highway reconstruction, park and ride lots and repaving.

June 1994 - August 1997 **Project Director**
Hartgen Archeological Associates, Inc.
Directed archeological research for cultural resources surveys throughout New York State and in Vermont and New Jersey. This work included all phases of archeological research from Phase I literature reviews and surveys to Phase III site mitigations. Prepared reports reviewed by NYSOPRHP, NYSDOT, VDHP and FERC. Special tasks included transit survey and CAD mapping. Training in historic preservation law, collections curation and management, and underwater resource protection.

HARTGEN archeological associates inc

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Years with Hartgen: 21

EDUCATION:

Rensselaer Polytechnic Institute

Bachelor of Architecture May 1987

Bachelor of Science, Building Science, May 1986

QUALIFICATIONS:

36 CFR Part 61 Qualified Architectural Historian

SPECIAL TRAINING:

Section 106

Trained in Section 106 - National Historic Preservation Act

Digital Recording Strategies for Historic Structures Seminar
Brooklyn Polytechnic, Brooklyn, NY, June 2002

Evaluating Significance of Historic and Archeological Resources Workshop
Vermont College, Montpelier, VT, May 2001

PROFESSIONAL EXPERIENCE:

June 1999 – Present **Senior Architectural Historian**
Hartgen Archeological Associates, Inc.
Oversee and prepare architectural resource surveys, including pre-assessments, literature reviews and historical documentation; field reconnaissance; report and proposal preparation. Responsible for preparing documents to be reviewed by NYSDOT, NYSOPRHP, VAOT, VDHP, NHDES, USACOE, and other agencies in accordance with SEQR, Section 106, NEPA and other regulations.

November 1992 – June 1999 **Architectural History Consultant**
Provided consulting services for private and public clients including architectural firms, municipalities, museums and historical societies. Clients included the Metropolitan Museum of Art, the Albany Institute of History and Art, the New York Public Library and John G. Waite Associates. Projects included surveys, historic structure reports, national register listings, and preservation consultations.

PRINCIPAL PUBLICATIONS:

In preparation *Building Albany: Studies in the Vernacular Architecture of the Upper Hudson and Lower Mohawk Valleys*. Albany, NY: SUNY Press.

2010 "*Once adorned with quaint Dutch tiles*...: A Preliminary Analysis of Delft Tiles Found in Archaeological Contexts and Historical Collections in the Upper Hudson Valley," in Penelope Ballard Drooker and John P. Hart, eds., *Soldiers, Cities and Landscapes: Papers in Honor of Charles L. Fisher. New York State Museum Bulletin 513*, 107-150. Albany, NY: New York State Museum.

2009 *Albany Architects*. Diana S. Waite, editor. Albany, NY: Mt Ida Press/ Historic Albany Foundation. Contributed two biographical essays.

2005 *The Encyclopedia of New York State*, Peter Eisenstadt, editor. Syracuse, NY: Syracuse University Press. Author of several architectural entries.

2000 *The Marble House in Second Street: Biography of a Town House and its Occupants, 1825-2000*. Troy, NY: Rensselaer County Historical Society.

1993 *A Neat Plain Modern Stile: The Architecture of Philip Hooker and His Contemporaries, 1796-1836*. Amherst, MA: University of Massachusetts Press.