## Letter of Interest

for

Statewide On-Call Preliminary Engineering Prequalified List of Consultants for Locally Administered Local Public Agency (LPA) Qualifications-Based Selection Contracts

February 1, 2024



Submitted to: Mr. Tobey L. Reynolds, P.E. Director of Project Development Consultant Committee Chairman NH Department of Transportation 7 Hazen Drive, P.O. Box 483 Concord, NH 03302-0483

Submitted by:



1 Sundial Avenue, Suite 510N Manchester, NH 03103



BEFORE

# Introduction Letter







35 Bow Street Portsmouth New Hampshire 03801-3819

P: 603|431|6196 www.cmaengineers.com

CMA

February 1, 2022

Mr. Tobey L. Reynolds, P.E. Director of Project Development Consultant Committee Chairman NH Department of Transportation P.O. Box 483, 7 Hazen Drive Concord, NH 03302-0483

### RE: Letter of Interest: On-Call Preliminary Engineering Prequalified List of Consultants for Locally Administered Local Public Agency (LPA) Qualifications-Based Selection Contracts

Dear Mr. Reynolds:

Over the past decade, CMA Engineers has purposefully and carefully developed a sector within the company that is focused on the design and construction of locally administered projects in coordination with NHDOT. We have assembled a skilled team of LPA certified engineering staff who have planned, developed, designed, permitted, advertised, and bid projects throughout NH. CMA Engineers brings the responsiveness and commitment that clients desire and deserve, regardless of the project size, complexity, or physical location. We are immediately available to respond and are confident that our qualified team can provide prompt, responsive service.

CMA Engineers is a civil, structural, and environmental consulting engineering firm with offices in Portsmouth, NH; Manchester, NH; and Portland, ME. The firm has represented over 100 New Hampshire municipalities on a wide variety of project types since 1988 and is currently supporting the Department and numerous municipalities using NHDOT's various funding programs. CMA Engineers has a breadth of LPA experience that has developed through many different sources: Transportation Enhancement (TE); Highway Safety Improvement Program (HSIP); Safe Routes to School (SRTS); Congestion Mitigation and Air Quality (CMAQ); Transportation Alternatives Program (TAP); and State Bridge Aid (SBA).

Through our design experience, we have developed seasoned staff that have knowledge and experience to handle the core design elements associated with locally administered LPA projects:

- Highway Design
- Bridge Design
- LPA Experience
- Permitting and Environmental Research
- Public Involvement Process

This submittal presents and describes the experience, capabilities and advantages that CMA Engineers provides for this assignment. We are eager to assist and look forward to the opportunity to discuss further.

Very truly yours, CMA ENGINEERS. INC.

Jason J. Beaudet, P.E. Project Manager

Philys a. Corbett

Philip Corbet, P.E. Chief Civil Engineer

# Project Understanding and Approach





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### PROJECT UNDERSTANDING

CMA Engineers has a comprehensive understanding of how to successfully manage and design LPA projects; we have developed an approach that allows us to not only get projects designed effectively but also get them constructed. When a municipality elects to design a project as a Local Public Agency, they must observe the requirements established in the LPA Manual. Under these guidelines, the project is broken out into three phases, Engineering Study, Preliminary Design, and Final Design. Each phase has been developed to bring about critical outcomes to ensure the best and most appropriate design perseveres. CMA Engineers focuses efforts on the following deliverables in each of the phases below:

<u>Engineering Study</u> – This phase evaluates if the project at hand is feasible to build given existing constraints. To evaluate constraints, efforts are focused on data collection: public input, existing physical conditions, environmental/cultural/historic sensitivity, and engineering analysis. Public involvement is critical in this phase, with two required public meetings. Based on this information, we develop and evaluate alternatives, and prepare an Engineering Study Report that identifies the Proposed Action that should move forward.

<u>Preliminary Design</u> – This phase takes a plan concept and develops it into an engineered design. Elements that were touched upon in the Engineering Study are progressed to produce a full detailed design plan set and project estimate. Concurrently, the permitting efforts are begun, and the environmental document is prepared, finalized, and approved with the attainment of NEPA complete status, which is required to progress to Final design. Finally, initial ROW analysis is performed to determine impacts and help aid in the design as appropriate.

<u>Final Design</u> – Comments received from NHDOT related to the preliminary design submittal are reviewed and addressed. The ROW process can officially begin, and any easements needed are attained. Contract documents for the project are also developed. Any permits needed are completed. Once all project elements are complete, the project will be given authorization to advertise, and bidding of the project can commence. After bids are opened, they will be analyzed and a recommendation to award will be drafted, if appropriate. The Final Design phase ends when authorization to award is received from NHDOT.

For a Statewide On-Call application, a firm will need to provide design on a variety of project types requiring their staff to have diverse experience and knowledge to be able to effectively and efficiently design the project. Similarly, a firm needs the ability, willingness, and experience to oversee projects throughout the state. On occasion, projects will present unique and specific design elements that require the skills of a specialist, often outside the engineering field, such as archaeological or historical experts. Firms will need to determine when these services are needed, the level of involvement required, and the most appropriate project team to select for the given situation.

CMA Engineers has a clear and thorough understanding of the project needs during the design phase, which enables us to develop a strong and effective project approach, ensuring the project's success.

#### **PROJECT APPROACH**

The CMA Engineers' project approach outlined below is predicated on a typical LPA project that requires standard design elements. The team has the technical expertise and experience to complete all aspects of the project to meet routine project objectives. CMA Engineers has the abilities and established subconsultant relationships to undertake unique project elements, if a project requires them. Elements of our approach includes:

### Highway Design

Our team has extensive experience with highway and roadway design throughout NH and beyond. We have provided management/engineering for numerous NH communities on dozens of NHDOT-sponsored LPA projects over the last decade. Our highway design work has included but is • Diverse Project Types

- Robust Engineering Experience
- Proven Project Team

not limited to: roadway reconstruction/rehabilitation; intersection improvements/realignments; utility coordination; traffic control development; sidewalk and pedestrian crossings; stormwater management and drainage design; ADA compliance audits/upgrades; and multi-use path/recreation trail construction/rehabilitation. Through our work with the Department, CMA Engineers has built an excellent working knowledge of NHDOT/LPA design manuals and documents, which is evident in our reports, studies, plans, contract documents/specifications,



and estimates. Members of our team have experience with the development and production of NHDOT Right-of-Way plans suitable for recording at the Registries. Additionally, we have successfully developed and executed a ROW program that meets the needs of the LPA program and the Bureau of ROW. For this assignment, CMA Engineers has teamed with Doucet Survey, LLC for survey and ROW related needs; T.Y. Lin International Group for traffic and signal analysis; and S.W. Cole Engineering, Inc. for geotechnical needs. All firms have previously assisted us on LPA projects.

### Bridge Design

Municipal and state bridge projects are a significant part of CMA Engineers' practice. These projects include evaluation of structure alternatives, design of single and multi-span structures, bridges integrated with roadway and drainage projects, pedestrian bridges, and renovation of historic bridges. Our staff has the capabilities to perform

hydrologic and hydraulic analysis and studies for projects. Additionally, CMA Engineers performs bridge inspections and load ratings as a standalone service, or as part of design projects. CMA Engineers brings experience with a variety of bridge projects both as independent projects (State Bridge Aid) and as part of larger transportation projects involving vehicular and pedestrian corridors. This experience has resulted in the development of strong and experienced interdisciplinary teams within CMA Engineers.

## LPA Experience

CMA Engineers has a breadth of LPA experience. These LPA projects have been the perfect platform to allow CMA Engineers to combine our affinity for these types of projects and our alliances with the NHDOT and municipalities in NH. We champion these projects and take pride in their success. Our current staff includes 18 individuals who are LPA certified, providing us the depth and breadth to

administer projects successfully. Our long tenure providing support to the Bureau of Planning and Community Assistance has built design expertise and efficient navigation of the LPA process. Within the Department, we have built excellent and long-standing working relationships with the various project managers who oversee the LPA projects. These relationships, combined with our extensive LPA experience, position CMA Engineers for success with LPA projects.

## Permitting and Environmental Research

Our team has provided permitting and environmental research for many projects, including permitting for wetland, shoreland, Alteration of Terrain, and environmental coordination related to natural, cultural, and historic resources. CMA Engineers routinely performs all research and

permit preparation needed in-house with individuals familiar with the project and often contributing to other elements of the project's design. We are well versed in the efforts required and have been successful in attaining NEPA complete status on LPA projects.

### Public Involvement Process

We have a strong history of public involvement efforts, which is evident in our LPA history. Public involvement is critical in all projects, but in our experience, it has proven to be essential for a successful project. Our abilities and communications are consistent with the NHDOT's Context

Sensitive Solutions process. Our materials, delivery and documentation have proven effective across the spectrum of projects with which we have been involved and have been readily received by audiences, most specifically related to locally administered projects.

## CLOSING

The CMA Engineers' team has a strong and thorough understanding of designing LPA projects. We bring to the projects a complete multi-disciplinary team with NHDOT/LPA experience and the capability to serve clients successfully, while maintaining the overall goals of designing a constructible, compliant, and documented project.

• LPA Program Company Sector

Hydrology/Hydraulics

- 18 LPA Certified Staff
- Established Bureau of Planning & Community Assistance Relationships

Diverse Bridge Design Experience

Inspections and Load Ratings

- Multiple Permitting Option Capabilities
- NEPA Process Experience

• Dynamic Presentations

• Easily Discernable Concepts



SCHOOL

# Organizational Chart



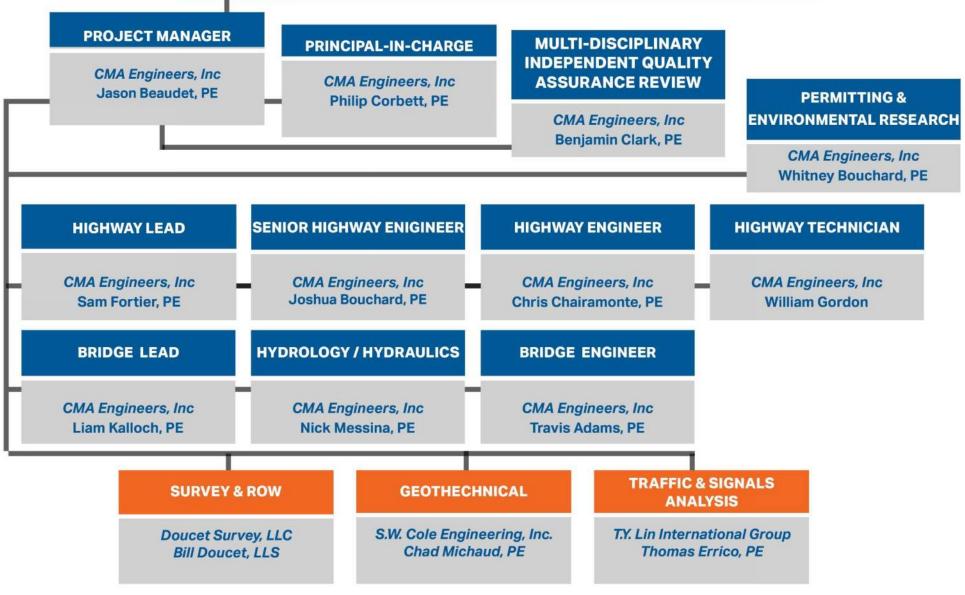
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# **New Hampshire Department of Transportation**





# Project Team





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## Project Team

CMA Engineers has assembled a project team with extensive experience in the design and permitting for locally administered LPA projects for numerous communities throughout New Hampshire. The team members are based on a typical LPA project that requires standard design and permitting elements. If required, CMA Engineers has the abilities and established subconsultant relationships to assess specific project elements. The team has significant experience with projects utilizing NHDOT's municipally managed process according to the NHDOT LPA Manual and is thoroughly familiar with the program requirements.

Our proposed Project Manager, Jason Beaudet, PE has a particularly strong background in LPA project design/management, is head of our NHDOT LPA Program sector for both design and construction and has wellestablished NHDOT relationships. In addition to our experienced staff, we are enlisting the services of Doucet Survey, LLC (Doucet) for survey/ROW related needs; T.Y. Lin International Group (TYLI) for traffic and signal analysis; and S.W. Cole Engineering, Inc. (SW Cole) for geotechnical needs. CMA Engineers has a very successful and long-standing partnership with Doucet, TYLI, and SW Cole on LPA projects.

The members of the project team are as indicated in the classification table below and select team member resumes are included in the appendix.

Highway and Bridge Design Engineering Services in Support of LPA Projects		YEARS OF EXPERIENCE	YEARS WITH FIRM	LPA CERTIFIED	PROJECT MANAGEMENT	HIGHWAY DESIGN	BRIDGE DESIGN	STRUCTURAL ENGINEER	ALTERNATIVE PROCUREMENT METHODS	CORRIDOR STUDY PLANNING	BRIDGE INSPECTION	BRIDGE LOAD RATING	нуркогосу	ENVIRONMENTAL	TRAFFIC ANALYSIS	GEOTECHNICAL ENGINEER	SURVEYOR	PUBLIC INVOLVEMENT	NH LICENSED PROFESSIONAL ENGINEER
Key Personnel	Project Role															T.I			
Jason Beaudet, PE	Project Manager	19	9	1	~	1								1	1			1	1
Philip Corbett, PE	Principal-In-Charge	23	14	~	~	~			1	~			~	~	~			~	~
Benjamin Clark, PE	Multi-Disp. Ind. QA Review	21	1		~	~				~	1		~	~	~			1	~
Sam Fortier, PE	Highway Lead	13	7	1	~	1							1	1				1	1
Joshua Bouchard, PE	Senior Highway Engineer	21	18	1	~	1							~	~				1	~
Chris Chairamonte, PE	Highway Engineer	6	1	1		~							~	~	~				1
William Gordon	Highway Technician	14	4	1		~													
Liam Kalloch, PE	Bridge Lead	10	10	~	~	~	1	*			~	1						~	1
Nick Messina, PE	Hydrology / Hydraulics	4	4	1	~								1	1					~
Travis Adams, PE	Bridge Engineer	8	8	1			~	1			1	1							1
Whitney Bouchard, PE	Permitting & Env. Research	9	9	1	1	~								1					1
Sub-Consultants																			
Doucet Survey - Bill Doucet, LLS	Survey & ROW	38	30														1	1	
S.W.Cole Engineering - Chad Michaud, PE	Geotechnical	25	24		~											~		1	1
TYLIN International - Thomas Errico, PE	Traffic & Signal Analysis	36	25	*	1	1			1	1					1			1	~

**Project Manager:** Jason Beaudet, PE is LPA certified and brings extensive knowledge of the development, design, management, and construction administration of transportation projects of all sizes throughout New England. Jay is head of our NHDOT LPA Program sector for both design and construction, serving as the engineer of record and will be the primary contact for the project.

**Principal-In-Charge:** *Philip Corbett, PE* is LPA certified and has a strong background in municipal engineering, roadway design, pedestrian improvements, traffic analysis, site design, and drainage projects. Mr. Corbett has completed the design and construction administration of numerous LPA funded projects and also served in the principal and senior project review role as well over the years. Mr. Corbett serves as Chief Civil Engineer for the firm.



**Multi-Disciplinary Independent Quality Assurance Review:** *Benjamin Clark, PE* is a Senior Project Manager for CMA Engineers with over 20 years of design and management experience. Ben has a wide range of experience including residential, commercial, military, and municipal resident engineering services. His background includes management and providing technical expertise for large-scale, complex domestic and international multidisciplinary infrastructure projects in support of the Department of Defense.

**Highway Lead:** Sam Fortier, PE is LPA certified and specializes in the design of roadway and transportation projects. Sam has developed the knowledge necessary to design projects related to urban and rural roadway design, complete streets design, multi-use path design, pedestrian and bicycle facilities, and traffic control. He has served as the lead engineer on numerous LPA projects.

**Senior Highway Engineer:** Joshua Bouchard, PE is LPA certified and specializes in highway design with experience in roadway design and modeling, water/sewer/utility design, hydrologic/hydraulic analysis, environmental permitting, stormwater/drainage design, utility coordination, and contract plans and documents. Josh has completed the design and construction administration of State/Federally funded projects, including LPA projects.

**Highway Engineer:** *Chris Chairamonte, PE* is LPA certified and specializes in design of commercial/industrial sites, roadway, and transportation projects. Chris has experience in design projects related to urban and rural roadway design, recreational bicycle paths, roadways with bicycle and pedestrian accommodations, and interstate projects.

**Highway Technician:** *William Gordon* is LPA certified and specializes in the design, detailing, 3D modeling, and plan production of roadway, intersection, bridge, utility, multi-use path design, and pedestrian and bicycle projects. Bill has expertise in the use of AutoCad/Civil 3D, MicroStation/InRoads, ArcMap, and Storm & Sanitary.

**Bridge Lead:** *Liam Kalloch, PE* is LPA certified and has experience designing/managing project teams for the development of bridge design and construction projects. He specializes in the design, analysis, rating, and detailing of a wide range of municipal and DOT owned bridges, including NHDOT SBA projects. He has experience with a wide variety of bridge types and sizes, with interdisciplinary experience in roadway design related to bridge approaches.

Hydrology/Hydraulics: Nick Messina, PE is LPA certified and specializes in general engineering, design, and hydraulic evaluations. He has been involved in design and evaluations for several culvert projects in environmentally sensitive locations, as well as stormwater management designs.

**Bridge Engineer:** *Travis Adams, PE* is LPA certified and specializes in the design, analysis, and rating of municipal, DOT, and privately owned bridges and large culverts. He has worked on bridge projects in several New England states, including NHDOT SBA projects. His load rating experience includes a wide variety of bridge types and ages, including many types of buried structures.

**Permitting & Environmental Research:** *Whitney Bouchard, PE* is LPA certified and specializes in permitting and historical/cultural/environmental research and coordination, including numerous LPA projects. She has an excellent working knowledge of NEPA requirements and the process.

**Survey & ROW (Doucet Survey, LLC):** *Bill Doucet, LLS* is the chief operating officer of Doucet Survey, LLC. Doucet Survey has been providing surveying services in the region for over 20 years. Mr. Doucet supervises all phases of boundary, topographic, control and construction surveys, in addition to ROW efforts.

**Geotechnical (SW Cole):** *Chad Michaud, PE* is SW Cole's chief operating officer and senior geotechnical engineer. As Senior Geotechnical Engineer, Chad's responsibilities are to manage projects, service clients, provide contract development, coordination of subcontractors and subconsultants, and oversee a staff of geotechnical engineers providing coordination of subsurface investigations and geotechnical design and specifications. He is known for his extensive experience with municipal and local public agency (LPA) funded bridge projects.

**Traffic & Signal Analysis (T.Y. Lin International Group):** *Thomas Errico, PE* is the New England Traffic Engineering Director with TYLI. His experience includes traffic engineering access management, corridor studies, design of traffic signals, traffic operations studies, pedestrian studies, parking studies, safety evaluations, and traffic impact studies. Tom has experience with "Complete Streets" development.



# References

NUSE





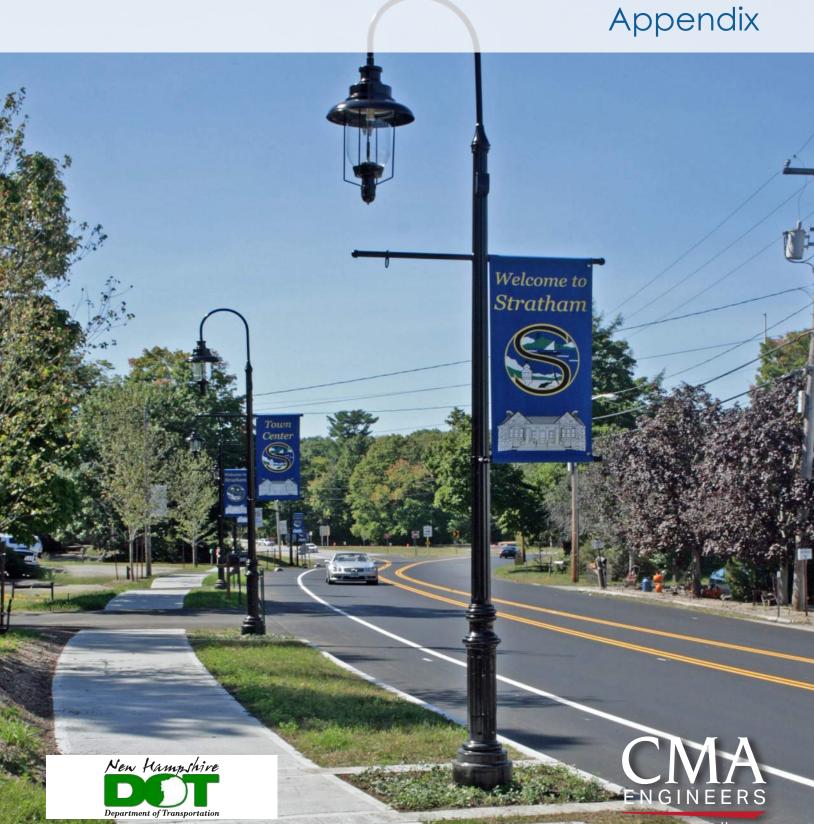
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## **Project References**

CMA Engineers is pleased to provide the following references who are familiar with our Project Team's experience and performance related to design and permitting from working with members of the CMA Engineers' team on similar projects.

Reference	Associated Projects
Thomas Jameson, PE Project Manager NHDOT Bureau of Planning & Community Assistance <i>thomas.e.jameson@dot.nh.gov</i> (603) 271-3462	Stratham 27771: Town Center Project Hooksett 20259: College Park Drive Salem 40432: Phase II Bike-Ped Corridor Claremont 40435: East St. & Rail Trail Manchester 41361: Rockingham Rail Trail Somersworth 41363: High Street Sidewalk Durham (UNH) 41369: Main St. Sidewalk Nashua 41742: Heritage Rail Trail East New Castle 42517: Wentworth Road Pedestrian Imp. Manchester 29811: South Manchester Rail Trail
Owen Friend-Gray, PE Deputy Public Works Director City of Manchester <i>ofriend@manchesternh.gov</i> (603) 792-5302	Manchester 41361: Rockingham Rail Trail Manchester 29811: South Manchester Rail Trail
Peter Rice, PE Director of Public Works City of Portsmouth <i>phrice@cityofportsmouth.com</i> (603) 427-1530	Portsmouth 41725: Elwyn Road Side Path Portsmouth 42350: Longmeadow Road Extension Portsmouth 14417: South Entrance Multi-Use Path Union Street and Willard Avenue Sagamore Avenue State Street





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# Resumes





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#### Jason J. Beaudet, PE Project Manager

#### EXPERTISE

- Pedestrian and Bicycle Facility Design
- Highway/Roadway Design
- Traffic Control
- NHDOT LPA Project Administration
- Federal Compliance
- AutoCad/Civil 3D
- MicroStation/InRoads 3D Modeling

EDUCATION

- M.S., Transportation Engineering (2008), University of Mass., Lowell
- B.S., Civil and Environmental Engineering (2004), University of Mass., Lowell

PROFESSIONAL REGISTRATIONS/CERTS. Professional Engineer:

- New Hampshire
  - Maine
  - Vermont
  - Massachusetts
  - Massachuset

Certifications:

- NHDOT LPA Certified
- NHDOT OFC Certified
- MaineDOT LPA Certified
- EXPERIENCE

## Consulting 19 years

**PROFESSIONAL AFFILIATIONS** 

• National Society of Professional Engineers (NSPE) 2010 - Present

EXPERTISE

- Site & Roadway Design
- Stormwater Management
- Utility Design
- Traffic Analysis

EDUCATION

- BS Civil Engineering (1999)
- University of Colorado, Boulder
  MS Civil Engineering (2005)
- University of Washington, Seattle

PROFESSIONAL REGISTRATIONS/CERTS.

- Professional Engineer:
  - New Hampshire
  - Maine
  - Florida
  - Colorado

Certifications:

- NHDOT LPA Certified
- NHDOT OFC Certified
- MaineDOT LPA Certified

EXPERIENCE

• Consulting 23 years

**PROFESSIONAL AFFILIATIONS** 

- American Council of Engineering Companies of New Hampshire NH Board Member
- Institute of Transportation Engineers-NH Vice President, NH Chapter

Mr. Beaudet is a project manager/senior project engineer with extensive knowledge and over 19 years' experience with the development, design, management, bidding and construction oversight of projects throughout New England. He leads the company's LPA sector. Jason expertise includes roadway reconstruction/rehabilitation, highway design, intersections, recreational trail design, multi-use path design, pedestrian & bicycle facilities, complete streets design, ADA compliance, utility coordination, ROW procurement, roadway design, highway design, traffic control, and the public involvement process. He has extensive knowledge related to the NHDOT LPA process and understands the critical steps and procedures that need to be completed.

- Elwyn Road Side Path Project, Portsmouth NH (LPA)
- Wentworth Road Pedestrian Improvement Project, New Castle NH (LPA)
- Main Street Sidewalk and Roadway Reconstruction Project, Colebrook NH (LPA)
- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- Bicycle-Pedestrian Corridor Phase VI, Salem NH (LPA)
- Rockingham Rail Trail Extension, Manchester NH (LPA)
- Main Street South Sidewalk Project, Durham NH (LPA)
- High Street, Campus Connector Trail & Memorial Dr. Project, Somersworth NH (LPA)
- Sidewalk Connectivity Project, Littleton NH (LPA)
- Bicycle-Pedestrian Corridor Phase II, Salem NH (LPA)
- NHDOT Rehabilitation of US Route 3 over NHRR Laconia, NH
- Sidewalk & Rail Trail Improvement Project, Claremont NH (LPA)
- Gosling Road Pedestrian, Bicycle and Related Improvements, Portsmouth NH
- Union Avenue Improvement Project, Laconia NH
- Kingston Road TAP Project, Exeter NH (LPA)
- Salmon Falls Road Improvements HSIP Project, Rochester NH (LPA)
- Cambridge Turnpike Improvement Project, Concord MA
- Town Center Improvement Project, Stratham NH (LPA)
- Loudon Road (NH Route 9) Concord, NH (LPA)
- East Concord Village Roundabout, Concord NH

#### Philip A. Corbett, PE Principal/Project Manager

Mr. Corbett has 23 years of experience in civil and transportation engineering. His background includes traffic analysis, planning and designing utilities, roadways, site design and stormwater management for commercial and residential facilities on several project assignments. Mr. Corbett is proficient in the use of AutoCAD, HydroCAD, and StormCAD.

- Elwyn Road Side Path Project, Portsmouth NH (LPA)
- Wentworth Road Pedestrian Improvement Project, New Castle NH (LPA)
- Sidewalk Connectivity Project, Littleton NH (LPA)
- College Park Drive Project, Hooksett NH (LPA)
- Pedestrian Improvement Project, New Castle NH (LPA)
- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- Sidewalk Connectivity Project, Littleton NH (LPA)
- Colebrook Elementary School SRTS Project, Colebrook NH (LPA)
- Henry Wilson & Farmington High School (SRTS), Farmington NH (LPA)
- Salmon Falls Road Improvements HSIP Project, Rochester NH (LPA)
- Cambridge Turnpike Improvement Project, Concord MA
- Agamenticus Road, Ogunquit ME
- Madbury Road Improvements, Durham NH
- Union Street and Willard Avenue Area Reconstruction, Portsmouth NH
- Main Street South Sidewalk Project, Durham NH
- Portsmouth Athletic Fields, Portsmouth NH
- Portsmouth Regional Stormwater Facilities, Portsmouth NH
- Franklin Street Improvement Project, Laconia NH
- Union Avenue Improvements Project, Laconia NH
- Gosling Road Pedestrian, Bicycle and Related Improvements, Portsmouth NH
- Appleton Street Drainage Improvements, Laconia NH
- Lincoln Street Complete Streets Improvement Project, Exeter NH
- Sagamore Avenue Reconstruction, Portsmouth NH

#### Liam B. Kalloch, PE Project Engineer

#### EXPERTISE

- Structural Engineering
- Bridge Engineering
- Foundation Design

EDUCATION

- University of New Hampshire, B.S. Civil Engineering, 2012
- University of New Hampshire, M.S. Civil Engineering 2013

#### **PROFESSIONAL REGISTRATIONS/CERTS.**

- **Professional Engineer:** 
  - New Hampshire
  - Maine
  - Massachusetts

#### **Certifications:**

- NHDOT LPA Certified
- NHDOT OFC Certified

#### EXPERIENCE

- Consulting 10 years
- **PROFESSIONAL AFFILIATIONS** 
  - American Society of Civil Engineers

# Mr. Kalloch is a project engineer with 10 years of experience, with substantial engineering expertise involving the design of bridge projects throughout Maine, New Hampshire and Massachusetts. Mr. Kalloch joined CMA Engineers, Inc. in September 2013 and has since developed a robust understanding of analysis and design of bridge structures, conceptual planning, construction administration, and the preparation of plans, calculations, specifications, and bid documents for construction.

- NHDOT Rehabilitation of US Route 3 over NHRR, Laconia NH
- Court and Linden Street Bridges, Exeter NH
- Cambridge Turnpike Improvement Project, Concord MA
- MaineDOT Bridge Engineering Services, Statewide ME
- Nute Road Bridge, Madbury NH (LPA)
- Freshet Road Bridge, Madbury NH (LPA)
- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- High Street, Campus Connector Trail & Memorial Drive Project, Somersworth NH (LPA)
- Main Street South Sidewalk Project, Durham NH (LPA)
- Sidewalk Connectivity Project, Littleton NH (LPA)
- MaineDOT Parsons Road Slope Stabilization, Presque Isle ME
- MaineDOT Large Culvert Replacement, Patten ME
- MaineDOT Large Culvert Replacement, Smyrna ME
- MaineDOT Large Culvert Replacement, Oakfield ME
- Freedom Culvert, Freedom NH
- River Road Bridge, Ogunquit NH
- Merriland River Bridge, Wells ME
- New Durham Culverts, New Durham NH
- Drake's Island Bridge, Wells ME
- Pelletier's Crossing Bridge, St. George ME
- Prestressed Concrete Pedestrian Bridge Repairs, Manchester-by-the-Sea MA

#### Samual T. Fortier, PE Project Engineer

#### EXPERTISE

- Highway/Roadway Design
- Pedestrian and Bicycle Facility Design
- Traffic Control
- Stormwater
- Civil 3D
- MicroStation/InRoads 3D Modeling

#### EDUCATION

• B.S., Civil Engineering (2010), University of New Hampshire

PROFESSIONAL REGISTRATIONS/CERTS. Professional Engineer:

• New Hampshire

#### **Certifications:**

- NHDOT LPA Certified
- NHDOT OFC Certified

#### EXPERIENCE

#### Consulting 13 years

- **PROFESSIONAL AFFILIATIONS** 
  - National Society of Professional Engineers (NSPE) 2010 -Present NH President 2018-2020 NH Vice President 2017-2018 NH State Director 2016–2017

Sam Fortier is a project engineer with 13 years of experience specializing in the design of roadway and transportation projects. Sam has developed the knowledge necessary to design projects related to urban and rural roadway design, complete streets design, multi-use path design, pedestrian and bicycle facilities, and traffic control. In addition to the design work, Sam has the knowledge to model projects in both AutoCad Civil 3D and Bentley InRoads, allowing issues to be found and resolved prior to construction.

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- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- College Park Drive Project, Hooksett NH (LPA)
- Bicycle-Pedestrian Corridor Phase VI, Salem NH (LPA)
- Rockingham Rail Trail Extension, Manchester NH (LPA)
- Main Street South Sidewalk Project, Durham NH (LPA)
- Sidewalk Connectivity Project, Littleton NH (LPA)
- Bicycle-Pedestrian Corridor Phase II, Salem NH (LPA)
- High Street, Campus Connector Trail & Memorial Dr. Project, Somersworth NH (LPA)
- Main Street Sidewalk and Roadway Reconstruction Project, Colebrook NH (LPA)
- NHDOT Rehabilitation of US Route 3 over NHRR, Laconia, NH
- Sidewalk & Rail Trail Improvement Project, Claremont NH (LPA)
- Wentworth Road Pedestrian Improvement Project, New Castle NH (LPA)
- Union Avenue Improvement Project, Laconia NH
- Kingston Road TAP Project, Exeter NH (LPA)
- Agamenticus Road, Ogunquit ME
- Madbury Road Improvements, Durham NH
- Durand Road Engineering and Construction, Randolph NH
- Union Street and Willard Avenue Area Reconstruction, Portsmouth NH
- High Street West Sidewalk, Somersworth NH
- Cambridge Turnpike Improvement Project, Concord, MA
- Paugus Street, Laconia NH
- Lincoln Street Complete Streets Improvement Project, Exeter NH

#### Joshua W. Bouchard, PE **Project Engineer**

#### **EXPERTISE**

- Highway/Roadway Design
- Utility Coordination
- Project & Client Management
- Public Facilitation
- NHDOT LPA Project Administration
- AutoCAD Civil 3D

**EDUCATION** 

• BS Civil Engineering (2002) -

**University of New Hampshire PROFESSIONAL REGISTRATIONS/CERTS.** 

- **Professional Engineer:** 
  - New Hampshire
  - Maine
  - Massachusetts
- **Certifications:** 
  - NHDOT LPA Certified
  - NHDOT OFC Certified

**EXPERIENCE** 

Consulting 21 years

**PROFESSIONAL AFFILIATIONS** 

- National Society of Professional Engineers
- American Society of Civil Engineers
- Order of the Engineer

#### Mr. Bouchard is a civil engineer with 21 years' experience. He joined CMA Engineers, Inc. in July 2005 as a Project Engineer. Project experience includes planning, design, and construction administration of projects in the municipal and private sectors. As a Project Engineer, Mr. Bouchard is responsible for working in project teams for completion of projects from initial conceptual planning to design, permitting, bidding and construction of projects.

- Town Drainage Improvements, Freedom NH
- Freshet Road Bridge, Madbury NH (LPA)
- Nute Road Bridge Replacement, Madbury NH (LPA)
- Main Street Sidewalk and Roadway Reconstruction Project, Colebrook NH (LPA)
- Colebrook Elementary School SRTS Project, Colebrook NH (LPA)
- Philbrick's Pond Culvert Inlet Improvements, North Hampton NH
- Onway Lake Culvert Replacement, Raymond NH
- North Road Culvert Replacement, Kingston NH
- Town Drainage Improvements, New Durham NH
- Town Improvements, Ogunquit ME
- Burnham Lane Drainage Improvements, Manchester-by-the-Sea MA
- Cooper Hill Road Improvements, Nottingham NH
- Ledge Farm Road Improvements, Nottingham NH
- Mountain Green South Pump Station Replacement, Concord NH
- Water and Sewer Improvements, Colebrook NH
- Water and Sewer Improvements, Northumberland NH
- Water Meter Replacements, Colebrook NH
- Water Meter Replacements, Bethlehem Village District NH
- Pine Street Pump Station Replacement, Manchester-by-the-Sea MA
- Portsmouth Athletic Fields, Portsmouth NH
- Sagamore Avenue Reconstruction, Portsmouth NH
- Hall Street Wastewater Facility Pump Replacement, Concord NH

#### Travis M. Adams, PE **Project Engineer**

Mr. Adams is an experienced project level engineer who has developed substantial engineering expertise involving the design of bridge projects throughout Maine, New Hampshire and Massachusetts. Mr. Kalloch joined CMA Engineers, Inc. in September 2013 and has since developed a robust understanding of analysis and design of bridge structures, conceptual planning, construction administration, and the preparation of plans, calculations, specifications, and bid documents for construction.

- NHDOT Rehabilitation of US Route 3 over NHRR, Laconia NH
- Court and Linden Street Bridges, Exeter NH
- Nute Road Bridge, Madbury NH (LPA)
- Freshet Road Bridge, Madbury NH (LPA)
- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- Sidewalk Connectivity Project, Littleton NH (LPA)
- High Street, Campus Connector Trail & Memorial Drive Project, Somersworth NH (LPA)
- Cambridge Turnpike Improvement Project, Concord MA
- Maine DOT Bridge Engineering Services, Statewide ME
- Concrete Pedestrian Bridge Evaluation, Milford NH
- MaineDOT Parsons Road Slope Stabilization, Presque Isle ME
- MaineDOT Large Culvert Replacement, Patten ME
- MaineDOT Large Culvert Replacement, Smyrna ME
- MaineDOT Large Culvert Replacement, Oakfield ME
- Freedom Culvert, Freedom NH
- River Road Bridge, Ogunquit NH
- Drake's Island Bridge, Wells ME
- Merriland River Bridge, Wells ME
- New Durham Culverts, New Durham NH
- Pelletier's Crossing Bridge, St. George ME
- Prestressed Concrete Pedestrian Bridge Repairs, Manchester-by-the-Sea, MA

#### EXPERTISE

- Structural Engineering
- Bridge Engineering
- Bridge Inspection
- **Foundation Design**
- Bridge Load Rating
- Resident Engineering

#### **EDUCATION**

B.S., Civil Engineering (2014), • **University of New Hampshire** 

**PROFESSIONAL REGISTRATIONS/CERTS. Professional Engineer:** 

- Maine
  - New Hampshire

#### **Certifications:**

- MaineDOT LPA Certified
- NHDOT LPA Certified (1879)
- OSHA 10 (36-005326811)

#### **EXPERIENCE**

Consulting 8 years

**PROFESSIONAL AFFILIATIONS** 

American Society of Civil Engineers

#### Whitney A. Bouchard, PE Project Engineer

Nick Messina, PE Project Engineer

#### **EXPERTISE**

- Environmental Engineering
- Water and Wastewater Design
- Permitting

EDUCATION

- BS Civil Engineering (2013) University of Maine, Orono
- MS Environmental Engineering (2015) University of New Hampshire

PROFESSIONAL REGISTRATIONS/CERTS. Professional Engineer:

- New Hampshire
- Certifications:
- NHDOT LPA Certified

#### EXPERIENCE

- Consulting 9 years
- PROFESSIONAL AFFILIATIONS
  - American Society of Civil Engineers (ASCE)
  - New England Water Works Association (NEWWA)

Ms. Chamberlain has 9 years of experience in civil and environmental engineering projects. Her background includes planning, permitting, funding agency applications, design, bidding, construction administration, and resident engineering services for water distribution systems, sewer collection systems, drinking water treatment facilities, and sidewalk projects.

- Pedestrian Improvement Project, New Castle NH (LPA)
- Elwyn Road Side Path Project, Portsmouth NH (LPA)
- Main Street South Sidewalk Project, Durham NH (LPA)
- High Street, Campus Connector Trail & Memorial Drive Project, Somersworth NH (LPA)
- Bicycle-Pedestrian Corridor Phase VI, Salem NH (LPA)
- Main Street South Sidewalk Project, Durham NH (LPA)
- Rockingham Rail Trail Extension, Manchester NH (LPA)
- Bicycle-Pedestrian Corridor Phase II, Salem NH (LPA)
- East Concord Village Roundabout, Concord NH
- Main Street Sidewalk and Roadway Reconstruction Project Colebrook NH (LPA)
- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- Sidewalk & Rail Trail Improvement Project, Claremont NH (LPA)
- Kingston Road TAP Project, Exeter NH (LPA)
- Madbury Road Improvements, Durham NH
- Union Street and Willard Avenue Area Reconstruction, Portsmouth NH
- Frost Cooperative, Derry NH
- Forest Park Cooperative, Jaffrey NH
- Woody Hollow Cooperative, Boscawen NH
- Icey Hill Cooperative, Exeter, NH
- Water and Sewer Utility Improvements, Colebrook NH
- Water and Sewer Utility Improvements, Northumberland NH

#### EXPERTISE

- Stormwater management
- BMP design
- Drainage
- Watershed modeling
- Culvert design

#### EDUCATION

- BS Civil and Environmental Engineering (2018) - University of Maine
- MS Civil and Environmental Engineering (2019) - University of Maine

PROFESSIONAL REGISTRATIONS/CERTS.

- Engineer in Training:
- New Hampshire

#### **Certifications:**

NHDOT LPA Certified

#### EXPERIENCE

Consulting 4 years

#### PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers (ASCE)
  - Water Environment Federation (WEF)

Nick Messina joined CMA Engineers, Inc. in January 2020 as a Project Engineer. Following the completion of his Master's degree at the University of Maine, he started with CMA Engineers. Mr. Messina is currently an engineer-in training under ME state licensing and he has gained experience with permitting and design for a variety of civil engineering, solid waste, and solar development projects. Mr. Messina is proficient in the use of Autodesk Civil 3D, Autodesk Storm and Sanitary Analysis, and HydroCAD. Mr. Messina is involved with national, professional organizations. He is a member of ASCE's Committee on Adaptation to a Changing Climate Executive Committee, ASCE's Hydroclimatology and Engineering Adaptation Task Committee, and WEF's Watershed Management Committee.

- Nashua Heritage Rail Trail East, Nashua NH (LPA)
- Main Street Sidewalk and Roadway Reconstruction Project Colebrook NH (LPA)
- Kingston Road TAP Project, Exeter NH (LPA)
- Main Street Sidewalk and Roadway Reconstruction Project, Colebrook NH (LPA)
- Evaluation of Tidal Culverts, Rye and Stratham NH
- Union Avenue Improvement Project, Laconia NH
- Union Street and Willard Avenue Area Reconstruction, Portsmouth NH
- Robinson Road and Pine Ledge Drive Improvements Wells, ME
- Agamenticus Road Improvements, Ogunquit ME
- Main Beach and Beach Street Revetment Repair Ogunquit, ME
- River Road Culvert, Ogunquit ME
- Franklin Street Improvements, Laconia NH
- Wellfleet Culvert Replacements, Wellfleet MA
- Durand Road Engineering and Construction, Randolph NH
- Cambridge Turnpike Improvement Project, Concord MA
- Portsmouth Athletic Fields, Portsmouth NH
- Agamenticus Road, Ogunquit ME
- Swamp John Road, Wells, ME

#### EDUCATION

- University of New Hampshire, B.S.F. **Forest Management**
- Over 350 hours of survey specific courses
- **PROFESSIONAL CERTIFICATIONS** 
  - New Hampshire Licensed Land Surveyor #824
  - Maine Professional Land Surveyor #2263
  - **Massachusetts Professional Land** Surveyor #45709

**EXPERIENCE** 

### 38 years

#### **PROFESSIONAL AFFILIATIONS**

- American Congress on Surveying and Mapping
- National Society of Professional Surveyors (Governor 04 - 07)
- New Hampshire Land Surveyors Association (Director 04 - 07)

- Society of American Foresters
  Maine Society of Land Surveyors
  Massachusetts Association of Land

#### **EXPERTISE**

- Geotechnical Investigations
- Construction Monitoring and QA/ QC Testing
- Slope Stability Analyses

#### EDUCATION

- **B.S., Civil Engineering**
- University of Maine PROFESSIONAL REGISTRATIONS/CERTS.

- Professional Engineer: New Hampshire Maine

  - Massachusetts
  - Connecticut
  - Rhode Island
  - Vermont
  - New York

### EXPERIENCE

- 25 years **PROFESSIONAL AFFILIATIONS** 

  - ACEC
  - **GBA Professional Firms Practicing** in the Geosciences

#### EDUCATION

- M.S., Civil Engineering,
- Northeastern University 1996
- B.S., Civil Engineering
- Northeastern University 1985 **PROFESSIONAL REGISTRATIONS/CERTS.**
- Professional Engineer:
  - New Hampshire
  - Maine
  - Vermont
  - Massachusetts
- **Certifications:** 
  - Certified Maine DOT Locally Administered Project Manager
  - Traffic Signal Design Technician Level II, IMSA Certified Public Safety Technician
  - Traffic Signal Field Technician Level II, **IMSA Certified Public Safety Technician**
- **EXPERIENCE** 
  - 36 years

#### Bill Doucet, LLS Chief Executive Officer Doucet Survey, LLC

Mr. Doucet has been working in land surveying since 1981 completing over 4000 projects. He supervises all phases of boundary, topographic, control and construction surveys. The majority of his experience is in highly detailed existing conditions surveys where a vast amount of data is collected and compiled into a comprehensive digital CAD file to be used by Civil Engineers for design. Work products include preparation of Boundary Site Plans, Highway Right of Way Plans, As-Built Surveys, ALTA Title Surveys, Topographic Plans, Hydrographic Plans, Subdivision Plans and Standard Boundary Surveys. Mr. Doucet has been working with CAD systems since 1987, which allows for seamless transfer of data to clients for use in engineering analysis and design. His Civic duties include participation with the Economic Advisory Committee - Master Plan Committee, former Chair of the Newmarket Conservation Commission. Community Development Committee and member of the Newmarket Business Association. Mr. Doucet has experience presenting a range of projects to municipal boards throughout the area.

- Bicycle-Pedestrian Corridor Phase VI, Salem NH (LPA)
- Rockingham Rail Trail Extension, Manchester NH (LPA)
- Main Street South Sidewalk Project, Durham NH (LPA)
- High Street, Campus Connector Trail & Memorial Dr. Project, Somersworth NH (LPA)
- Elwyn Road Side Path Project, Portsmouth NH (LPA)
- Wentworth Road Pedestrian Improvement Project, New Castle NH (LPA)
- Bicycle-Pedestrian Corridor Phase VI, Salem NH (LPA)

#### Chad Michaud, P.E. Chief Operating Officer, Senior Geotechnical Engineer S.W.Cole Engineering, Inc.

Mr. Michaud has extensive experience with municipal and local public agency (LPA) funded bridge projects. Chad has worked on dozens of bridge replacements and rehabilitations in the state of New Hampshire, as well as across New England. Chad has significant experience providing geotechnical evaluation and global stability analyses for segmental mechanically stabilized earth (MSE) retaining walls and earth embankment slopes. Chad has been involved with many projects requiring a review failures and the development of alternatives for reconstruction. of slone Chad has experience with field testing and evaluation of various stormwater infiltration testing techniques such as double-ring infiltrometer, Guelph permeameter, and borehole falling head methods.

- North Main Street Waterline Project, Simons Lane to Bay Road, Newmarket, NH
- Village at Kearsarge Water and Sewer Project, North Conway, NH
- River District Revitalization and Road Reconstruction, Littleton, NH
- Hutchins Street Reconstruction, Berlin, NH
- Route 16 Reconstruction, Berlin, NH
- Burke Street Reconstruction, Nashua, NH
- Upper Bay Road, Post-Construction Pavement Explorations, Sanbornton, NH
- Contract 8, Road and utility Reconstruction Lebanon, NH

#### Thomas Errico, PE Senior Traffic Engineer **TYLIN International**

Thomas Errico joined as a Senior Associate and New England Traffic Engineering Director. Tom has served as Project Manager/Lead Traffic Engineer for a variety of design and study projects for municipal and state agency clients throughout New England. Tom's background in traffic engineering includes access management, corridor studies, traffic operations studies, pedestrian studies, parking studies, safety evaluations, and traffic impact studies. He has significant experience in designing traffic signals, developing and maintaining traffic plans, and determining intersection and roadway design requirements for highway projects, including auxiliary lanes, bicycle and pedestrian facilities, signing, and traffic control. Relevant experience includes:

- Route 302 Preliminary Design Project, Town of Windham, Maine
- On-Call Traffic Engineering Services, City of Auburn, Maine
- On-Call Traffic Engineering Services, City of Portland, Maine
- City of Portsmouth On-Call Traffic Engineering Services, Portsmouth, NH
- Route 103 Complete Streets Intersection Improvement Project, Kittery, ME MaineDOT
- Route 1 Multi-Use Path / Road Diet Project, Yarmouth, Maine Town of Yarmouth
- Bicycle-Pedestrian Corridor Phase VI, Salem NH (LPA)

# **Applicable Work Experience**

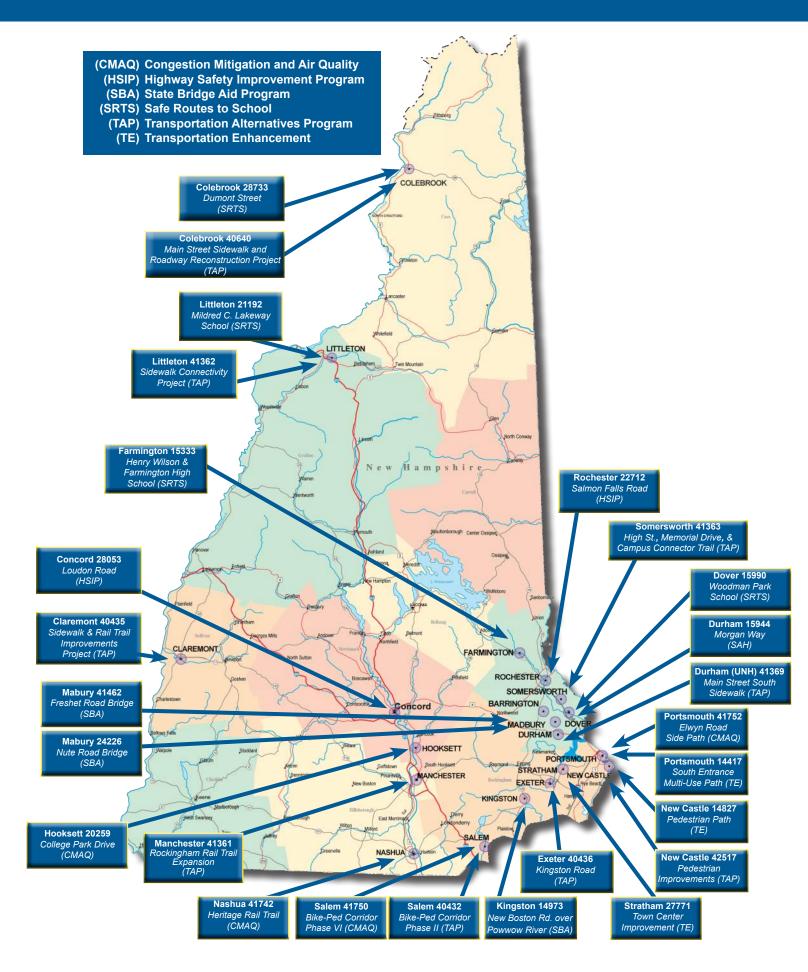
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# NHDOT Locally Administered Design Projects







## **Rockingham Rail Trail TAP Project** Manchester, NH

CMA Engineers was retained by the City of Manchester, New Hampshire to complete the design and construction administration of this Federally-Funded Transportation Alternatives Program (TAP) project. The project was for a pedestrian/bicycle trail along the abandoned railroad bed from Mammoth Road to Lake Shore Road. The trail project improved connectivity between the east side of the City and the Rockingham Trail.

Associated efforts involved design of ADA compliant bicycle and pedestrian facilities, coordination with the NHDOT, utility and abutter coordination, public involvement, completing the permitting/ NEPA process, and conformance to the NHDOT Local Public Agency (LPA) requirements associated with the Federal funding.

Project construction was substantially complete in fall 2020 and final completion was completed spring 2021.



## Main Street Sidewalk and Roadway Reconstruction Project Colebrook, NH

CMA Engineers is completing the planning and design of a "complete streets" revitalization project in Colebrook, NH. Following a related major water and sewer replacement project, the Town is proceeding with a combined Transportation Alternatives Program (TAP) and NHDOT 10-year plan project that will replace and enhance sidewalks in the downtown village and reconstruct Main Street (US Route 3). The restoration of sidewalks and roadway will improve safety of pedestrian crossings, improve parking, promote multi-modal use, all enhancing the business and institutional functioning of the community. This comprehensive project will continue the transformation this small but vital North Country community with rehabilitated critical multi-modal transportation infrastructure.

**Engineering Services: NHDOT/TAP Project Engineering Study Preliminary Design Final Design Bid Document Preparation Construction Administration Resident Inspection Services** 

Period of Service: 2018 - 2021

**Key Personnel:** William A. Straub PE Principal

> Jason Beaudet, PE Project Manager

Philip Corbett, PE Project Review

Sam Fortier, PE **Project Engineer** 

Whitney Bouchard, PE Permitting & Historical Research

Jody Bray Strickland, PE **Resident Engineer** 

**Project Construction Cost:** \$820,000

**Project Contact: Owen Friend-Gray P.E. Deputy Public Works Director City of Manchester** (603) 792-5302

**Engineer Study Preliminary Design Final Design Bid Document Preparation** Period of Service: 2019 - Present

**NHDOT/TAP Project** 

Key Personnel: William A. Straub, PE Principal

> Jason Beaudet, PE **Project Manager**

Josh Bouchard, PE **Project Engineer** 

Whitney Bouchard, PE Permitting

William Gordon Highway Technician

**Project Construction Cost:** \$4.5 Million (Previous utilities improvements)

\$2.0 Million (street/sidewalk)

Project Contact: Greg Placy Selectman Town of Colebrook (603) 237-4070



# Salmon Falls Road Improvements (HSIP) Project Rochester, NH

CMA Engineers has assisted the City of Rochester in developing and completing a Federal Highway Safety Improvement Program (HSIP) project for sections of the Salmon Falls Road. Two separate curves have been documented to be high accident locations for run-off-the road collisions. The project was part of a corridor-wide improvements project.

Design included modifications to the two curves, including improvements to horizontal and vertical geometry, sight distance, shoulders and ditch lines, and guard rails. The project was constructed in early 2017. The HSIP program has been administered by NH DOT through the Local Project Administration (or LPA) program, and has met those program requirements.

Engineering Services: NHDOT/HSIP Project Preliminary and Final Design Public Facilitation Utility Coordination Permitting/HSIP Funding Bidding Construction/ Resident Services Period of Service:

Period of Service: 2015 - 2017

Key Personnel:

William Straub, PE Principal

Philip Corbett, PE Project Manager

Jason Beaudet PE Senior Project Engineer

John Kareckas, CET *Inspection* 

Project Construction Cost: \$470,000

Project Contact: Michael Bezanson, PE City Engineer City of Rochester (603) 335-4352



## Mildred C. Lakeway School Sidewalk Improvements Safe Routes to School (SRTS) Project Littleton, NH

CMA Engineers was retained by the Town of Littleton, New Hampshire to complete the design of the infrastructure component of this Federally-Funded Safe Routes to School (SRTS) project. The project involved the relocation of a major crossing of State Route 116 (Union Street) including new flashing beacons to provide improved access to the school.

Other efforts included the reconstruction of 1,600 feet of sidewalk along Pleasant Street and crossing upgrades along six separate walking paths to the school. Associated efforts involved the coordination with the NHDOT District office for the new Route 116 crossing, utility and abutter coordination, permitting, public involvement and conformance to the NHDOT Local Public Agency (LPA) requirements associated with the Federal funding. The project was constructed in 2017.

Engineering Services: NHDOT/ (SRTS) Project Planning Design Public Facilitation Utility Coordination Permitting/Federal Funding Bidding & Construction Administration Resident Services Period of Service: 2012 - 2017

<u>Key Personnel:</u> William Straub, PE Principal

Philip Corbett, PE Project Manager

Jason Beaudet PE Project Engineer

Project Construction Cost: \$500,000

Project Contact:

Doug Damko Public Works Director Town of Littleton, NH (603) 444-5051



# Sidewalk and Rail Trail Improvement (TAP) Project Claremont, NH

CMA Engineers was retained by the City of Somersworth to complete the design of this Federally Funded Transportation Alternative Program (TAP) project. The project involved reconstructing 1,500 feet of shoulder/sidewalk along the east side of High St from Franklin St to Washington St, formally developing 2,100 feet of a trail connecting Bartlett St/Maple Wood School/Somersworth Middle School, and construction of two ADA compliant pedestrian crossings on Memorial Drive.

Proposed sidewalk on High St utilized a design that retained the existing utility pole locations, but brought them into UAC conformance while also providing critical widening to accommodate snow removal equipment and ADA requirements. This design also addressed interfacing with historic property facades, removing hazardous curb reveals, and incorporation of shoulder reconstruction and closed drainage modifications. Other notable design elements include an RRFB installation at a high traffic/pedestrian location, construction of a woodland trail with a pedestrian bridge, and interfacing ADA compliant crossings within a school campus parking corridor. The project was constructed in 2023.



# Main Street South Sidewalk, University of New Hampshire Durham, NH

CMA Engineers was retained by the University of New Hampshire to complete the design and construction administration of this Federally Funded Transportation Alternative Program (TAP) project. The project involved installing approximately 925 feet of sidewalk along the south side of Main Street between the roundabout and the Fieldhouse main driveway. Sidewalk installation included minor shoulder rehabilitation, drainage modification, landscaping, fencing, pedestrian lighting, retaining walls, and ADA compliant ramps, sidewalks, and bus shelter. This project also involved historic/archeological coordination of a 19th century burial that concluded in positively identifying its location which had been unknown for more than 60 years. Administration of the contract was closely coordinated with resident services. Project construction was substantially completed in fall 2020 and finished in spring 2021.

Engineering Services: NHDOT/TAP Project Engineering Study Preliminary Design Final Design Bid document preparation

Construction Administration Design Engineer Construction

Services <u>Period of Service:</u> 2018 - 2023

Key Personnel: Philip Corbett, PE Principal

Jason Beaudet, PE Project Manager

Sam Fortier, PE Project Engineer

Whitney Bouchard, PE Permitting & Historical Research

Project Construction Cost: \$1,072,000

Project Contact: Amber Hall, P.E. City Engineer City of Somersworth, NH (603) 692-9524

Engineering Services: NHDOT/TAP Project Engineering Study Preliminary Design Final Design Bid Document Preparation Construction Administration Resident Project Representative Services Period of Service: 2018 - 2021 Key Personnel:

William Straub, PE Principal

Jason Beaudet, PE Project Manager

Sam Fortier, PE Project Engineer

Whitney Bouchard, PE

Permitting & Historical Research

Resident Project Representative

Project Contact:

Daniel Rines Project Manager University of New Hampshire (603) 862-1727



# Linden and Court Street Culvert Replacements Exeter, NH

CMA Engineers assisted the Town of Exeter with the planning, design, permitting, bidding and construction phase services of replacement bridges for two crossings of the Little River. The project involved replacing the existing, deteriorated corrugated metal culverts with clear span precast concrete bridges on pile-supported substructures.

The design phase required a detailed hydraulic analysis of the Little River and the Exeter River which influences the hydraulics of the Little River during large storm events. The proposed single span bridges increased the hydraulic capacity at both crossings and improved river access. Project design also included coordination of existing water, sewer and overhead electric utilities. The Linden Street bridge was completed in 2015 and the Court Street was completed in 2017.

#### Engineering Services: Hydraulic Analysis Design Bidding Permitting Construction Administration Resident Services

Period of Service: 2014 - 2017

Key Personnel: William Straub, P.E. Principal Liam Kalloch, P.E. Project Engineer Jack Kareckas, C.E.T. Resident Services

Project Construction Cost: \$1.9 million

Project Contact: JPaul Vlasich, PE Town Engineer Town of Exeter (603) 773-6157



## Nute Road Bridge Madbury, NH

In 2012, CMA Engineers assisted the Town of Madbury with the design of emergency interim repairs for NHDOT Bridge No. 056/072 which carries Nute Road over the Bellamy River. CMA Engineers worked closely with NHDOT Bureau of Planning and Community Assistance on behalf of the Town after the structure was closed and barricadedwhen an NH DOT bridge inspection identified significant deterioration of the plate arch structure.

In 2018, the Town contracted CMA Engineers to conduct an engineering study for the replacement of the culvert with funding through the NHDOT State Aid Bridge Program. Through the engineering study, it was determined that the existing culvert shouldould be replaced with a 33-foot single span bridge that included precast concrete beams supported on abutments with spread footings. In 2020, CMA Engineers completed final design, plans and specifications and onstruction was completed in

Engineering Services: NHDOT/ State Bridge Aid (SBA) Hydraulic Analysis Design Bidding Permitting

Period of Service: 2012 - 2021

<u>Key Personnel:</u> William Straub, P.E. *Principal* 

> Liam Kalloch, P.E. Project Manager Joshua Bouchard, P.E. Project Engineer

Travis Adams, P.E. (Maine) Project Engineer

Project Construction Cost: \$750,000

Project Contact: Eric Fiegenbaum *Town Administrator* Town of Madbury (603) 742-5131

2021.





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