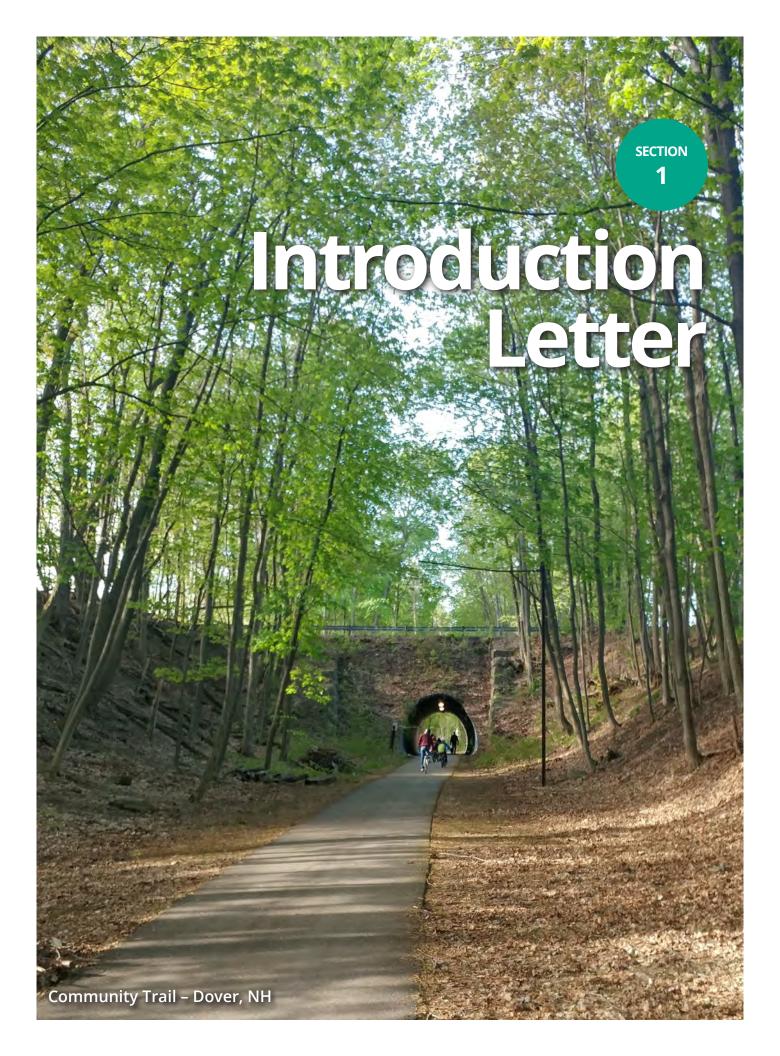


Letter of Interest For Statewide On-Call Preliminary Engineering Prequalified List of Consultants for locally administered Local Public Agency (LPA) Qualifications-Based Contracts

Submitted to New Hampshire Department of Transportation



February 1, 2024





February 2, 2024

C.R. Willeke, PE Municipal Highways Engineer Bureau of Planning and Community Assistance NH Department of Transportation 7 Hazen Drive, PO Box 483 Concord, NH 03302

RE: Statewide On-Call Preliminary Engineering Prequalified List of Consultants for locally administered Local Public Agency (LPA) Qualifications-Based Selection Contracts

Dear Mr. Willeke,

Municipal infrastructure projects are a cornerstone to Fuss & O'Neill's business, in addition to our work with State Transportation Agencies across New England. We understand the needs and obligations of both our municipal and state partners, and we work closely and collaboratively to process projects. Fuss & O'Neill has worked with municipalities on many New Hampshire Department of Transportation (NHDOT) Local Public Agency (LPA) projects and have a great understanding of how projects are completed through this process. By combining our extensive history of working on NHDOT LPA projects, along with the countless improvement projects we have completed with municipalities across New Hampshire, Fuss & O'Neill is well-qualified to provide design and engineering services to municipalities.

Fuss & O'Neill is a multidisciplinary firm. Our local team has personnel ready to manage and design projects for municipalities in any LPA State or Federally funded program. Our firm has worked on many projects for municipalities including Manchester, Nashua, Francestown, Hudson, Rochester, Unity, Chichester, Wolfeboro, Goffstown, Somersworth, Plaistow, Merrimack, Newmarket, Londonderry-Derry, Dover, and Jaffrey. Our team understands the process, and can manage LPA projects in an efficient manner.

This contract will be led by Steve Reichert, PE and JoAnn Fryer, PE, both with whom have worked together on a variety of LPA projects. Project Managers and/or Task Managers will be assigned to individual projects as needed based upon project type, complexity, and schedule. Commitment to responsiveness, anticipation of critical path items, flexibility, communication, schedule, and budget will remain consistent. We have assigned Jaime French, PE, Nicole Fox, PE, and Linda Greer, PE, PTOE, to be Project Managers and/or Task Managers in their respective fields of specialty. Our entire leadership staff is NHDOT LPA Certified.

We frequently serve as a liaison between municipal clients and the NHDOT and have a strong

track record of delivering these types of projects. For questions, please contact either of the

Gateway Building 50 Commercial St. Manchester, NH 03101 t 603.668.8223 800.286.2469

www.fando.com

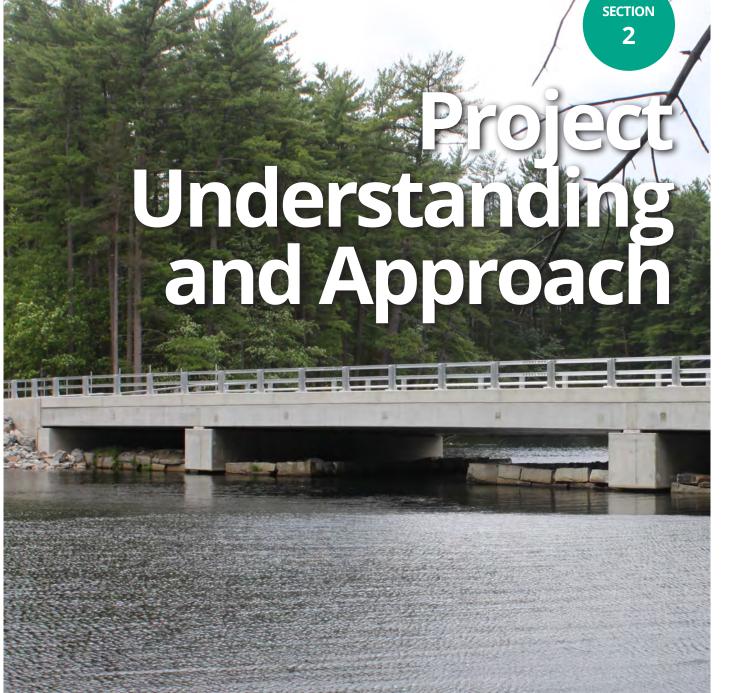
California Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont

undersigned.

Sincerely,

Steven Reichert, PE Project/Program Manager 603-222-3487 sreichert@fando.com

JoAnn Fryer, PE Principal-in-Charge 603-222-3469 jfryer@fando.com



Manchester Street Bridge – Merrimack/Nashua, NH



Project Understanding and Approach

Fuss & O'Neill has been performing the design and development of municipal roadway and bridge alternate transportation projects for many years. Fuss & O'Neill personnel have provided design and project management on a broad range of federal, state and locally funded transportation projects throughout New Hampshire. Through our years of project experience, we have developed a strong understanding of all of the project development procedures and requirements of the Local Public Agency (LPA) process and the State Bridge Aid (SBA) program. We have a deep staff of experienced engineers, designers and planners who work seamlessly with municipalities and the NHDOT to achieve successful project results.

Our project approach is founded in the procedures and requirements of the LPA and SBA programs. We closely follow the procedures in order for the project to go smoothly. Our goals are to provide a quality design and plans on-time, on-budget and to the complete satisfaction of our clients. The first step in our approach is a thorough project understanding. We identify early on what the project issues are and how to quickly overcome them. We identify the critical path items in the design development such as right-of-way or permitting so they can be addressed and not delay the project. We communicate frequently and proactively with our clients and NHDOT to make sure all needs are addressed to everyone's satisfaction. We believe the design development of any project is a collaboration with the municipalities who are our clients and NHDOT. Fuss & O'Neill has a detailed Quality Control Plan followed for all projects. At the outset of each project, a qualified staff person is identified as the QA/QC Manager for the project, who is independent from the project team and is

State and Federal Funding Assistance

Fuss & O'Neill has great understanding of various funding programs, and has helped municipalities manage projects

- Transportation Alternatives Program (TAP)
- Congestion Mitigation Air Quality (CMAQ)
- Municipal Off System Bridge
 (MOBRR)
- Safe Routes to School (SRTS)
- State Bridge Aid (SBA)

responsible for ensuring QC procedures have been followed by the project team, completes/oversees completion of independent QA reviews, and works collaboratively with the team to resolve outstanding issues.

Highway Design Efforts

Through our vast experience working on hundreds of roadway projects throughout New England, Fuss & O'Neill's transportation engineers have become well-versed in roadway geometry, drainage, traffic signal design, traffic calming, and context-sensitive design techniques. Our highway designers have handled assignments from the largest interstate highway improvements to small local road and intersection layouts. Our team also has significant experience with developing bike and multi-use trails, sidewalk projects and other alternative transportation facilities.

FF8		
Design of New Roadways	Trails and Multi-Use Paths	Existing Roadway Rehabilitation
Bicycle Lanes	Intersection Improvements	Complete Streets
Drainage Systems	Traffic Analysis and Impact Studies	Signalization
Corridor Studies	Sidewalks	Park and Rides

We have extensive experience serving municipalities and the NHDOT including services such as:

Over the years we have developed strong working relationships with various local and state transportation officials and have acquired a deep understanding of their respective standards for roadway design. We evaluate each roadway project in a thorough manner before developing a design to address the needs and concerns of individual communities. We are able to evaluate an existing high-crash location, safety issue, or access management concern and integrate our highway design recommendations with proposed land use and regional transportation improvement strategies.



Bridge Design Efforts

Fuss & O'Neill has been designing bridge projects in the NHDOT Municipally Managed State Bridge Aid Program (SBA) since the program's inception in the early 1990s. We have also developed several bridge projects that have received federal funding. Our expertise includes preservation projects, bridge rehabilitation, and bridge replacements, with projects including precast concrete buried structures, steel and concrete girders, trusses, stone and concrete arches and pedestrian bridges. We have managed projects ranging from 10-foot culverts to 1000-foot long multi-span bridges. Additionally, Fuss & O'Neill has performed bridge inspections for municipalities and developed plans to manage, maintain and rehabilitate all of their bridges.

Our firm has performed ratings for existing bridges and new bridges using the NHDOT Form 4 format. We can perform ratings on all elements including gusset plates on truss structures. We also design ancillary structures such as retaining walls and foundations for lights or overhead signs.

Fuss & O'Neill has significant expertise and experience in hydrology and hydraulics. Our in-house team has performed the hydraulic analysis for many municipal and DOT bridge projects over the years. We recently worked closely with NHDOT to evaluate new programs and procedures for hydraulic modeling. We can also evaluate scour and develop scour countermeasures as needed.



Inspections & Maintenance for Municipalities Fuss & O'Neill works closely with municipalities, including the City of Manchester, to regularly inspect and maintain existing bridges.

Associated Work Efforts

Every project whether roadway or bridge in nature also requires many other services in order to successfully complete an LPA or State Aid Bridge Project.

Environmental permitting and cultural coordination are necessary for most projects. At Fuss & O'Neill we have extensive experience with developing environmental documents, environmental permitting and the Section 106 cultural and historic process. We regularly present projects at the NHDOT Natural and Cultural Resource Agency Coordination meetings. **Right-of-way (ROW) or easement acquisition** can be a time-consuming process. Our in-house survey, research and ROW plan preparation team has developed ROW plans for many municipal and NHDOT projects. We closely work with the property owners, municipal officials and the municipality's counsel to attain the easements and access needed.

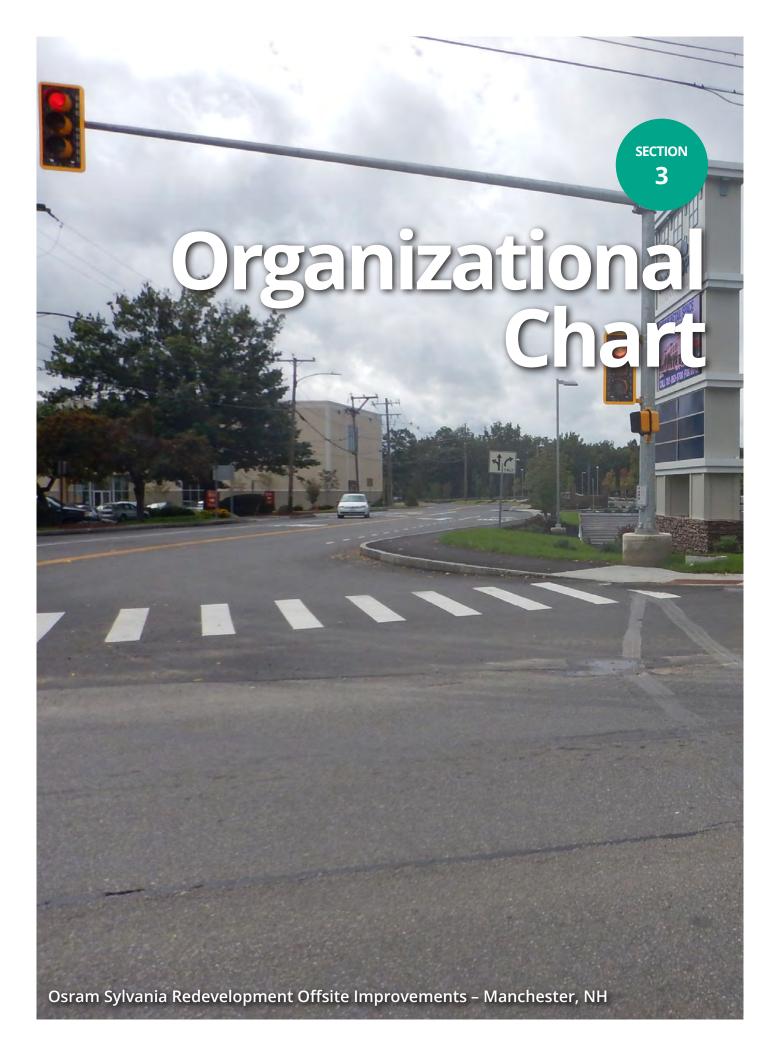
Public outreach is vital on virtually every public project. Getting input from and informing those most directly affected by the project early in the process is critical to project success. Fuss & O'Neill's Project Managers all have significant experience in providing informative and comprehensive presentations to the public and project stakeholders. We are also skilled at informing the public through social media and project websites, and can develop sophisticated computer renderings and animations to help the public envision the final product.

Traffic Control Design impacts many projects. Vehicular or pedestrian traffic can be maintained by road closures with detours, temporary bridges, alternate alignments or phased construction with one-way alternating traffic. Fuss & O'Neill's in-house traffic team that develops successful traffic control plans for all types of projects for municipalities and states alike.

Relocating utilities can be necessary for construction of bridges, roadways, or any new enhancement to travel. We work closely with the affected utilities to find mutually acceptable ways to eliminate interference and to accommodate upgrades to services. Our team has also completed several projects where existing overhead utilities were relocated underground.

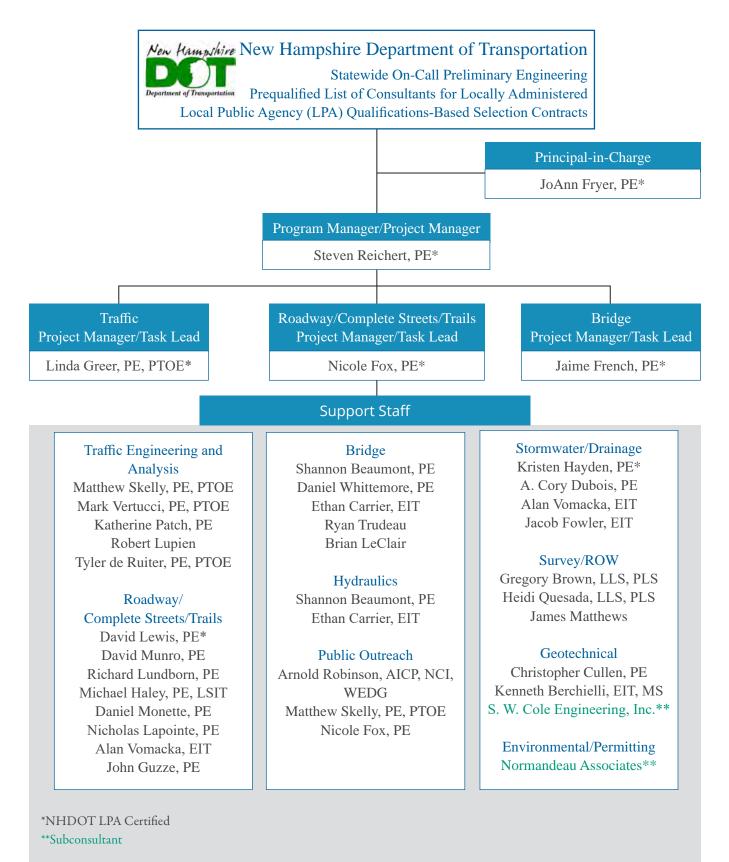
Geotechnical investigations and evaluations are sometimes needed depending on the project. If this is the case, we can call on our in-house geotechnical team, or turn to our trusted subconsultant S.W. Cole depending on the scope of the individual project.

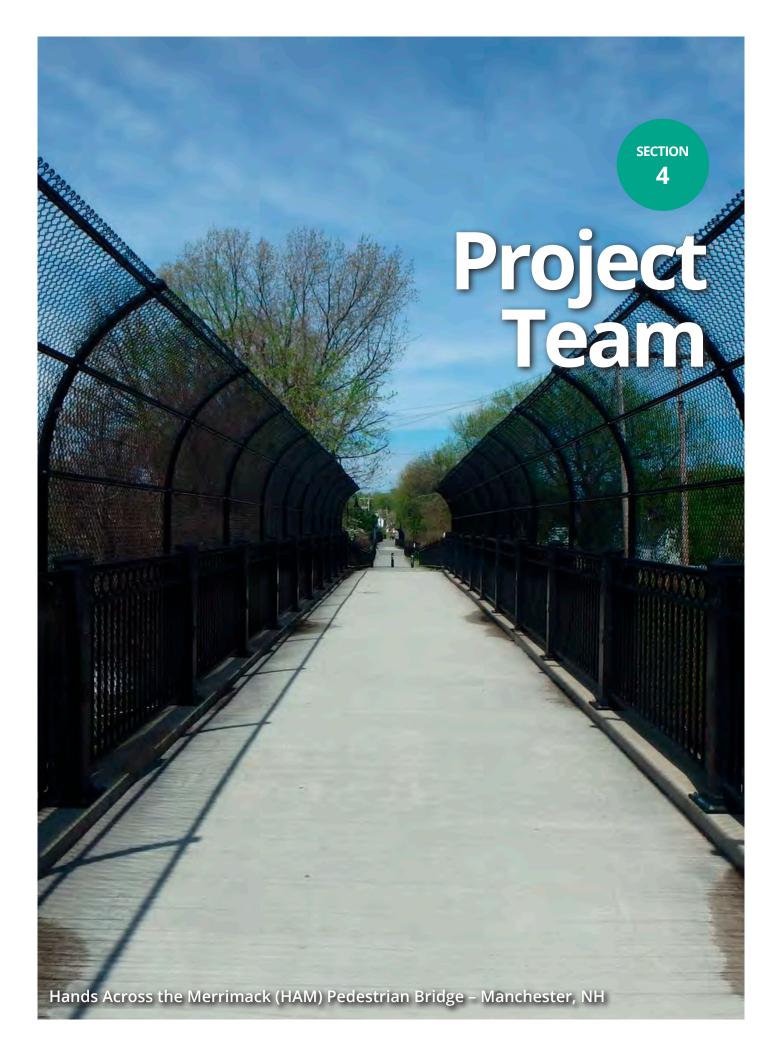
www.fando.com



Organizational Chart

FUSS&O'NEILL







Project Team Summary

We have assembled a team of highly qualified engineers with extensive experience in their respective fields for this contract. This leadership group frequently works together on municipal projects, and are all NHDOT LPA Certified. The narrative below summarizes the qualifications of key staff and outlines their roles for this project. Resumes with more detailed information follow in the Appendix.



JoAnn Fryer, PE Principal-In-Charge JoAnn is a Senior Vice President and Regional Manager at Fuss & O'Neill, in charge of all Northern New England operations. She has been involved in NHDOT LPA projects for more than two decades. She is a strong communicator and works collaboratively with project sponsors and funding agencies to successfully complete projects.



Jaime French, PE Bridge Task Lead/Project Manager Jaime manages Fuss & O'Neill's Bridge Team in our Manchester office, and brings 20+ years of relevant experience. She has managed bridge projects for the NHDOT and municipalities throughout the State. She is currently leading three municipal bridge projects that are under construction in Manchester and Francestown.



Nicole Fox, PE Highway Task Lead/ Project Manager Nicole is a seasoned highway and roadway engineer and has excellent experience managing projects for municipal clients. She has led the design efforts for the landmark I-93 Exit 4A Design in Londonderry-Derry, and recently managed Phase IV of the Dover Community Trail.



Steven Reichert, PE

Program/Project Manager Steve has managed numerous projects through the NHDOT LPA process, including roadway and infrastructure improvement projects in Milford, Merrimack, Manchester, Jaffrey and more. He has a strong blend of project management experience and field inspection insights to understand the intricacies of LPA projects.



Linda Greer, PE, PTOE Traffic Task Manager/ Project Manager Linda leads our Traffic Team in our New Hampshire office, and has expertise in traffic planning, analysis and management on projects large and small. Recently, Linda led the development for a Federal RAISE Grant with many traffic components for the City of Manchester.

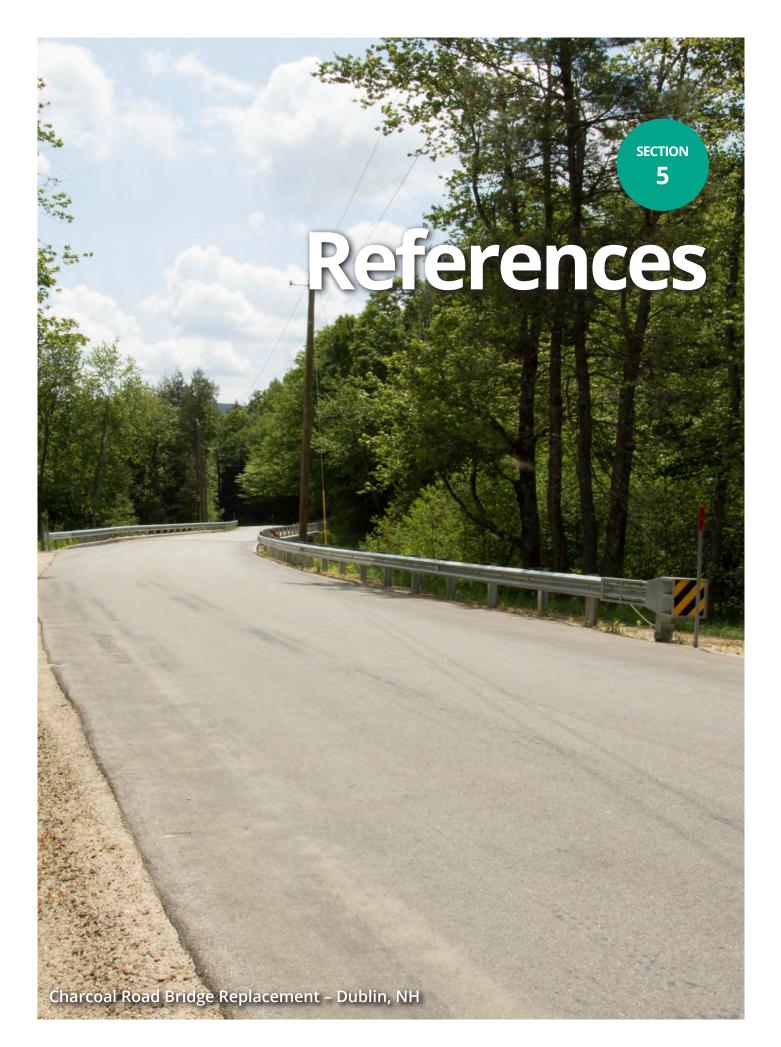


Project Team: Experience Table

Fuss & O'Neill presents a strong project team with appropriate levels of experience for the Preliminary Engineering Contract.

Our team is diverse, collaborative, and ready to work.

Key Personnel	Project Role	Years of Experience	Years with Firm	Municipal Project Management	QA/QC Reviews	LPA Certified	Highway Design	Intersection Improvements/Signals	Roadway Safety Improvements	Stormwater/Drainage Improvements	Sidewalks	Trails/Bike Lanes/Complete Streets	Traffic Analysis/Impact Studies	Traffic Control Design	Planning Level Corridor Studies	Bridge Design	Bridge Ratings	Bridge Inspection	Hydrology and Hydraulics	Environmental Permitting/NEPA	Survey and ROW Layout	Public Involvement	Geotechnical
JoAnn Fryer, PE	Principal-in-Charge	31	31	•	•	•	•	•	•	•	•	•		•		•			•	•		•	
Steven Reichert, PE	Program/Project Manager	31	16	•	•	•	•	•	•	•	•	•								•		•	
Jaime French, PE	Bridge Task Lead/PM	23	23	•		•											•	•		•			
Nicole Fox, PE	Highway Task Lead/PM	23	13	•		•	•	•	•		•	•		•	•					•		•	
Linda Greer, PE, PTOE	Traffic Task Lead/PM	24	7	•		•	•	•	•		•	•	•	•	•							•	
Kristen Hayden, PE	Stormwater/Drainage	21	11				•	•		•												•	
David Lewis, PE	Municipal Design Engineer	34	24		•	•	•	•			•												
Richard Lundborn, PE	Roadway Engineer	28	8	•							•	•										•	•
Michael Haley, PE	Roadway Engineer	20	15				•	•	•		•	•											
Daniel Monette, PE	Roadway Engineer	14	9								•	•											
Mark Vertucci, PE, PTOE	Traffic Engineer	28	27					•					•	•	•							•	
David Munro, PE	Highway Engineer	28	26		•		•	•	•	•	•												
Matthew Skelly, PE, PTOE	Traffic Engineer	14	10					•					•	•	•							•	
Nick Lapointe, PE	Transportation Engineer	17	16				•	•	•	•		•										•	
Shannon Beaumont, PE	Bridge/Hydraulics Engineer	21	21													•	•	•	•	•		•	
Ethan Carrier, EIT	Bridge/Hydraulics Engineer	11	7													•	•	•	•			•	
Alan Vomacka, EIT	Highway/Drainage Engineer	8	7				•	•		•		•			•								
Gregory Brown, LLS, PLS	Surveyor/ROW	42	37																		•		
Heidi Quesada LLS, PLS	Surveyor/ROW	35	22																		•		
Christopher Cullen, PE	Geotechnical Engineer	32	13	•						•									•				•
Chad Michaud, S.W. Cole	Geotechnical Engineer	21	21																				•
Lee Carbonneau, Normandeau	Environmental Permitting	34	34																	•			





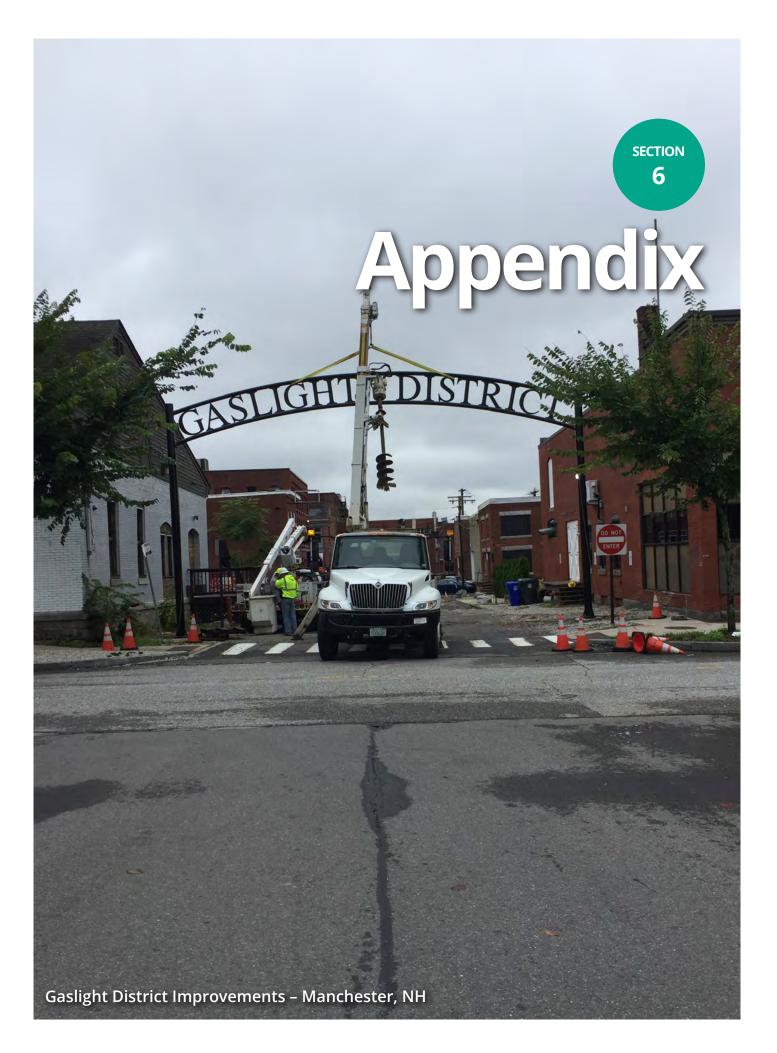
References

We are proud of the quality of our work and encourage you to contact any of the references listed below.

Gary Paige Road Agent, Highway Department Town of Francestown, NH 603-547-8841

Donna Benton, AICP City Planner City of Dover, NH <u>d.benton@dover.nh.gov</u> 603.516.6462

Tim Clougherty Director of Public Works City of Manchester, NH <u>tclougherty@manchesternh.gov</u> 603-624-6444





Resumes





Appendix: Resumes



JoAnn Fryer, PE Principal-in-Charge NHDOT LPA Certified Senior Vice President Company Owner Regional Manager - North 31 Years of Experience BS, Civil Engineering JoAnn is the past President and founder of the New Hampshire Chapter of Women in Transportation (WTS).



Steven Reichert, PE Program/Project Manager NHDOT LPA Certified 31 Years of Experience BS, Civil Engineering Steve serves a number of roles, including Project Manager, Designer and Resident Engineer at Fuss & O'Neill. He has worked for municipalities throughout New Hampshire on infrastructure improvement projects. Combining more than two decades of practical, hands-on roadway, bicycle/pedestrian, bridge, and utility project experience in New Hampshire with years of project and resource management, JoAnn is ideally suited to act as Principal-in-Charge for this contract. JoAnn has outstanding communication skills, which leads to efficient and effective coordination with clients, staff, subconsultants, and other stakeholders. This streamlines the management and development of projects to meet budgeting and timeline constraints. As Principal-in-Charge, JoAnn shall ensure that Project Quality Control Plans are developed and followed, including the QA review. She shall allocate resources to the project to ensure successful completion on schedule and within budget. Recent examples of relevant experience include:

- Community Trail Projects Dover, NH
- Sidewalk Improvement Projects Jaffrey, NH
- Central Square and South Street Sidewalk Improvements Troy, NH
- York River Access Improvements, Boardwalk and Canoe Launch York, ME
- I-93 Exit 4A Derry/Londonderry/NHDOT
- Cooperative Way Extension/Kline Way/Route 3/106 Pembroke, NH
- VT Route 100 (Lower Main Street) Sidewalk Project Stowe, VT
- ME Route 26/11 Intersection Improvements – Mechanic Falls-Poland, ME
- Main Street Roadway/Sidewalk Reconstruction York, ME

Steve is the Office Manager Fuss & O'Neill's Manchester, NH office, and has more than 31 years of experience designing and constructing public works projects, including: full roadway reconstruction; water, sewer and appurtenance replacement; drainage replacement and erosion and sedimentation controls evaluations; complex sidewalk and roadway grading and ADA evaluation/design; design/constructability quality assurance reviews (pre-bid, RFIs, field change notices); preparation of contract specifications and bid documents; detailed calculations for quantity take-offs and schedule estimates; as well as resident engineering inspection and administration (inspection, critical review of contractor payment requisitions and extra work claims, invoicing, and closeout). Recent examples of relevant experience include:

- South Main Street and Bay Road Utility Improvements Newmarket, NH
- South Street Reconstruction Milford, NH
- Emerson Road Reconstruction Milford, NH
- Brock Street Reconstruction Rochester, NH
- Gaslight District Reconstruction Manchester, NH
- Library Park Intersection Improvements Hudson, NH
- Sidewalk Improvements Project Jaffrey, NH
- Community Trail Dover, NH
- Rochester Neck Road, Waste Management of New Hampshire Rochester, NH





Jaime French, PE Bridge Task Lead/ Project Manager NHDOT LPA Certified 23 Years of Experience FHWA Certified Bridge Inspector BS, Civil Engineering Jaime is thoughtful in her design - considering form, function, constructability, cost, user experience, and, always, safety.



Nicole Fox, PE Project Manager and Roadway Engineering Task Lead 24 Years of Experience BS, Civil Engineering Nicole has been involved with the Exit 4A project since the beginning, leading aspects of the project. Nicole finds that early identification of potential obstacles and collaboration to find the best available solutions can save rework and prevent project slowdowns. Jaime is Fuss & O'Neill's Bridge Team Lead in our Manchester, NH office. Her approach to project management is multifaceted, ensuring client satisfaction, technical excellence, and coordination with the non-structural disciplines associated with projects. Jaime's years of technical experience include the design of steel, reinforced concrete, and pre-cast concrete structures, bridge inspection, bridge rating and construction inspection. She is an FHWA Certified Bridge Inspector, and works closely with the City of Manchester, as she manages their Bridge Inspection and Management Program. Recent examples of relevant experience include:

- Queen City Bridge Rehabilitation and Preservation Manchester, NH
- Goffs Falls over Abandoned BMRR Manchester, NH
- South New Boston Road over South Branch of Piscataquog River Francestown, NH
- Woodward Hill Road over Brennan Brook Francestown, NH
- Juniper Hill Road over Brennan Brook Francestown, NH
- Charcoal Road over Charcoal Brook Dublin, NH
- Manchester Street over Merrimack Reservoir Merrimack/Nashua, NH
- Henri Burque Bridge Repairs Nashua, NH
- Webster Mills Road Bridge Chichester, NH
- Stage Road over the Little Sugar River Unity, NH

Nicole's 24-year transportation career has been based here in New Hampshire. She has a thorough understanding of the landscape and the needs of roadway, highway, and bridge users. Nicole has experience in all phases of transportation design and planning. She is an exceptional project planner, mapping out project schedules to identify key milestones, critical path items, and necessary resources to meet desired timelines. She is responsive to her clients' needs, valuing the time-sensitive nature of those critical path items and prioritizing workload to address those first. As Project Manager, Nicole will have overall organizational charge, monitoring project budget, managing the schedule, and frequently communicating with you. She will develop the Project Quality Control Plan and shall ensure that an acceptable level of expertise is provided. Recent examples of relevant experience include:

- I-93 Exit 4A Derry/Londonderry/NHDOT
- I-93 Widening Contract 14633H NHDOT
- Georges Mills Road Bridge Approaches, Springfield NHDOT
- Cooperative Way and Kline Way at US Route 3/106 Pembroke, NH
- Dover Community Trail Dover, NH
- Delaware and Hudson Rail Trail Southwest, VT VTrans
- VT Route 100 and Moscow Rd. and West Hill Rd. Stowe, VT
- Goffs Falls Bridge Manchester





Linda Greer, PE, PTOE Traffic Task Lead/ Project Manager NHDOT LPA Certified Regional Manager - North 25 Years of Experience BS, Civil Engineering Linda is an integral part of Fuss & O'Neill's Community Development Team, using her traffic planning and management experience to improve community facilities. Linda has extensive experience working collaboratively with State Departments of Transportation, taking projects from conceptual design through final construction plans. She also has a history of successfully delivering projects with timeline constraints to meet funding or construction schedules. The foundation of Linda's career as a Roadway Engineer was built by combining traffic analysis with construction field experience. Linda's specialty is her ability to develop comprehensive traffic control and maintenance plans on complex roadway, highway and bridge projects. Recent examples of relevant experience include:

- Traffic Analysis, I-93 Exit 4A Londonderry-Derry, NH
- North-South Road Roundabout, OVP Management North Conway, NH
- BUILD Grant Application Assistance, Alternative Access to South Commercial Street – Manchester, NH
- Off-site Improvements, Osram Sylvania Retail Conversion Manchester, NH
- Traffic Planning and Analysis, Queen City Bridge Rehabilitation Manchester, NH
- Traffic Control, Goffs Falls over Abandoned BMRR Manchester, NH



David A. Lewis, PE Municipal Design Engineer NHDOT LPA Certified 34 Years of Experience BS, Civil Engineering Dave has extensive field and construction experience, serving as a resident engineer and construction quality assurance on many municipal projects throughout New Hampshire. David has decades of experience providing municipal, civil, and geotechnical engineering services for both public infrastructure and private development projects. Design and permitting work has included rural and urban roadway design, solid and industrial waste landfills, sewers, and pump stations. He has provided field consultation to owners, designers, and construction managers during both design and construction phases. Recent examples of relevant experience include:

- Central Square Sidewalk Reconstruction and Safe Routes to School Troy, NH
- Drapers Corner Intersection Improvements Claremont, NH
- South Street Reconstruction Milford, NH
- South Main Street/Bay Road Utility Improvements - Newmarket, NH
- Brock Street Water/Sewer Design Rochester, NH
- Belvedere Road Rehabilitation Keene, NH
- Washington Street Water/Sewer Design and Pump Station Rochester, NH
- South Main Street Water/Sewer Design and Pump Station Rochester, NH
- Granite Street Reconstruction Manchester, NH
- VT Route 131 Sewer Reconfiguration Cavendish, VT





Gregory Brown, PLS, LLS Surveyor/ROW 42 Years of Experience With over 40 years of applicable experience, Greg is one of the premier land survey professionals in New Hampshire. With his experience working on public and private, state and municipal projects, Greg is a great resource for all survey challenges.



Michael Haley, PE, LSIT Highway Engineer 20 Years of Experience BS, Civil Engineering Mike has experience working with both State and municipal clients on highway and roadway improvement projects. He is passionate about improving the user experience for all transportation facilities. Greg is in charge of the daily administration of Fuss & O'Neill's land surveying services in New Hampshire, Maine, and Vermont. His responsibilities include project scheduling, supervision of field and office personnel, quality control, project management, boundary re-establishment and/or determination, and technical supervision. Greg has been involved in numerous residential, commercial, municipal, state, and construction survey assignments, as well as the organization and performance of various GPS control surveys throughout New England. Recent examples of relevant experience include:

- Boundary Survey, Nesenkeag Brook Londonderry, NH
- Survey Services, CSO Abatement Program Manchester, NH
- Gaslight District Infrastructure Improvements Manchester, NH
- Granite Street Reconstruction Manchester, NH
- South Main Street Reconstruction Rochester, NH
- South Street/Downtown Improvements Milford, NH
- Drapers Corner Intersection Claremont, NH
- Manchester Street Bridge over Pennichuck Reservoir Merrimack-Nashua, NH
- Charcoal Road over Charcoal Brook Bridge Dublin, NH
- South Main Street and Bay Road Utility Improvements Newmarket, NH
 - I-93 Exit 4A Connector Road/Town Road Survey and ROW Determination Londonderry-Derry, NH

Mike has experience designing a variety of highway and site development projects ranging from paving and overlay to full depth reconstruction to curb and sidewalk projects. His primary area of expertise is in the development of 3D roadway design models, but he is well versed in all aspects of roadway design. Mike's career path has taken him from New York to California and back to New England where his focus is now on highway design projects. He has served as a resident engineer on a number of construction projects which has further enhanced his design skills. Mike is known for being a reliable problem solver who has a commitment to producing quality designs for clients. Recent examples of relevant experience include:

- Gaslight District Reconstruction Manchester, NH
- Brock Street Reconstruction Manchester, NH
- Washington Street Reconstruction Rochester, NH
- South Street Improvements Milford, NH
- Derry Street Sidewalk and Bike Lane Design Hudson, NH
- Hanson Street Roadway Reconstruction Rochester, NH
- Daniel Webster Highway Sidewalk Extension Design – Merrimack, NH
- Drapers Corner Improvements Claremont, NH
- Pine Street Reconstruction Rochester, NH
- Granite Street Reconstruction Manchester, NH
- Town Planning Board Reviews Hudson, NH





Normandeau Associates

Environmental and Cultural Resources Normandeau Associates is a regional environmental engineering consulting firm providing natural resource consulting services for New Hampshire projects. Their staff understands the regulatory nuances and complexities inherent in permitting transportation projects in New Hampshire. They will identify natural and cultural resources, assist with agency coordination, prepare environmental documentation and complete permitting efforts, as needed.

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S. W. Cole **Geotechnical Engineering** S. W. Cole Engineering provides geotechnical engineering, geology, environmental consulting and construction quality assurance testing services. Their experience performing geotechnical engineering and construction materials testing services on utility and roadway projects ranges from waterline upgrades and pump station improvements to town roadway investigations, state widening projects and combined sewer overflow separations. They will work with our in-house geotechnical team to navigate geotechnical challenges.



Applicable Work Experience





Appendix: Applicable Work Experience

Fuss & O'Neill has a strong track record working with municipalities and the NHDOT. This section helps demonstrate our level of expertise on these types of projects.

Project	LPA or NHDOT Funded	Municipal Project Manageemnt	LPA/NHDOT Coordination	Roadway Design	Intersection Improvements and Signalization	Roadway Safety Improvements	Stormwater/Drainage Improvements	Sidewalks	Trails/Bike Lanes/ Complete Streets	Traffic Analysis/Impact Studies	Traffic Control Design	Planning Level Corridor Studies	Bridge Design	Bridge Ratings	Bridge Inspection	Hydrology and Hydraulics	Environmental Permitting and NEPA Documents	Survey and ROW Layout	Public Involvement	Geotechnical
Jaffrey – Pedestrian Improvements	•	•	•	•			•	•	•								•	•	•	
Manchester – Gaslight District Improvements	•	•	•	•	•	٠	•	•			٠						•	•	•	
Milford – South Street Improvements	•	•	•	•	•	•	•	•		•	٠	•				•	•	•	•	
Milford – Emerson Road Improvements	•	•	•	•	•	•		•		•	٠						•		•	
Hudson – Library Park Intersection Improvements	٠	•	•	•	•	٠		•			•						•		•	
Troy – SRTS Sidewalk Project	•	•	•			•	•	•									•		•	
Claremont – Drapers Corner Intersection	•	•	•	•	•	•	•	•		•	٠					•	•	•	•	•
Londonderry/Derry – I-93 Exit 4A Interchange		•	•	•	•	•		•	٠	•		•	•			•		•	•	
Manchester – South Commercial Street BUILD Grant		•		•	•		•	•	•		٠	•	•			•	•	•	•	•
Dover – Community Trail Improvements	•	•	•			•	•	•	•				•	•	•		•	•	•	
Manchester – Queen City Bridge Preservation	٠	•	•								٠		•		•		•		•	
Manchester – Goffs Falls Bridge Replacement	٠	•	•	•							٠		•				•		•	•
Manchester – HAM Pedestrian Bridge and Approach		•							•				•		•		•		•	•
Francestown – South New Boston Road Bridge	٠	•	•	•		٠					٠		٠	•		٠	•		•	•
Francestown – Woodward Hill Bridge Replacement	٠	•	•	•		٠					٠		•	•		٠	•		•	•
Francestown – Juniper Hill Bridge Replacement	٠	•	•	•		٠					٠		•			٠	•		•	•
Hudson – Pelham Road Bridge Replacement	٠	•	•	•									•						•	•
Merrimack/Nashua – Manchester Street Bridge	٠	•	•	•									•	•			•		•	•
Unity – Old Cheshire Road Bridge Replacement	٠	•	•	•									•				•			•
Dublin – Charcoal Road Bridge Replacement	٠	•	•	•									•	•		٠	•		•	•
Manchester – Osram Sylvania Offsite Improvements					•			•		•						•	•	•	•	
Conway – North-South Roundabout				•	•			•	•	•	٠					•				
Manchester – Dartmouth-Hitchcock Traffic Analysis			•	•	•		•			•						•	•	•	•	
Newmarket - Water & Sewer Utility Improvements		•		•		•	•	•									•	•		
Rochester - Colombus Ave/Summer St Intersection Improvements		•		•	•	•	•	•		•	•						•	•	•	•



Downtown Traffic and Pedestrian Improvements Milford, NH

This project incorporates two funding sources administered by the New Hampshire Department of Transportation (NHDOT) under the Transportation Enhancement and Section 1702 Federal Funding Designated Project program.



Fuss & O'Neill first prepared a Traffic and Pedestrian Study to prioritize projects, the first of which involved improving safety for vehicles and pedestrians on South Street, from Union Square to the railroad crossing between Clinton and Lincoln Streets. Significant truck traffic and the narrow nature of the corridor resulted in multiple vehicular impacts with utility poles. Roadway reconstruction included the use of asphalt-injected reclaiming technology. Crumbling underground infrastructure discovered during construction was also replaced. Overhead utilities were relocated underground which made for a much more attractive gateway to the town center. Utility poles previously located on the curb line were relocated for better driver and pedestrian visibility and safety.



Dover Community Trail

The Newington Branch rail line passes through downtown Dover and presented a unique opportunity to create a new bicycle and pedestrian trail. Fuss & O'Neill worked with the City for over a decade on multiple TE/CMAQ/ TAP projects to complete preliminary and final design, provide technical assistance to the City in the areas of environmental documentation and permitting, and construction administration.

The crossings of Silver Street (NH Route 9) and the Cocheco River presented challenges. The deck of the former bridge at Silver Street had been removed and the gap filled to create an at-grade roadway. The bridge over the Cocheco River, built in 1908, needed to be assessed and retrofitted before it was ready to serve as a link in the trail system. Following a thorough inspection, Fuss & O'Neill designed a truss rehabilitation with new timber deck and industrial railing for a functional and safe river crossing. The crossing of Silver Street was made with the installation of a cost- efficient, corrugated, aluminum plate underpass structure. The ends of the old bridge granite block walls were left exposed as a reminder of the sites' history. Most recently, our team designed the third phase of the project to connect to the river at the north end, and another section at the south end to connect the Transportation Center to Central Avenue. This project has completed construction.

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Emerson Road Intersection Design Milford, NH

The Emerson Road Intersection with NH Route 13 and Armory Road was deficient and lacked dedicated turning lanes. Fuss & O'Neill provided the design, permitting, and construction administration to improve mobility, safety, and efficiency on this NHDOT LPA project.



The intersection was signalized, but lacked the turn lanes to allow the traffic to move through the intersection. There were no existing pedestrian crossings, so the project added a short sidewalk segment and ADA-compliant crossing to move pedestrians away from the intersection. Due to heavy truck traffic using the new right-turn lane in a widened area, we designed and installed pavement reinforcing mesh to minimize separation of any future cracking. In addition, the project has been designed to avoid an existing NHDOT culvert, avoiding additional wetlands permitting. Construction inspection services included securing documentation for and participating in a Federal Highway Administration (FHWA) audit of project records.



Gaslight District Improvements

Manchester, NH

Fuss & O'Neill provided engineering and construction administration services for the Gaslight District/Elm Street infrastructure and pedestrian improvements for the revitalization of a portion of the downtown area. This area is considered the gateway to downtown Manchester.

Services and improvements included stakeholder outreach, design of roadway, sidewalk, street lighting, aesthetic improvements, and landscaping. We also incorporated ADA requirements into the historic area without adversely affecting any of the historic buildings, and provided the necessary coordination for the project. The project area is adjacent to the regional civic center and thriving local businesses, therefore stakeholder outreach and coordination was a critical component to the design. Our team completed design and prepared Contract Documents and Construction Plans, managing the bid advertising of the project. We generated visioning graphics during a facilitated design charrette to build consensus on the conceptual design. Our team administered the construction of this NHDOT LPA Project, with full-time resident engineering services, sub-consultant management, and coordination with City departments.



Queen City Bridge Rehabilitation and Preservation

Manchester, NH Fuss & O'Neill is providing engineering and construction services for the rehabilitation and preservation of the 1,190-foot long Queen City Bridge, which spans the F.E. Everett Turnpike, Merrimack River, Riverwalk and BMRR tracks.



Originally built in 1923, the Queen City Bridge has had several repairs and modifications since it was originally constructed. The project includes repairs and partial clean and paint of the truss, concrete repairs to the deck and substructure components, and new membrane and expansion joints. Due to the high volume of traffic, work will be completed in stages. We developed detailed traffic control plans, including traffic analysis and modeling. Our team worked closely with City personnel throughout the project design. This \$8-million project is nearing completion and is funded through the NHDOT State Bridge Aid Program.



South New Boston Road Bridge

Francestown, NH

Fuss & O'Neill provided the design for the replacement of an existing 43-foot span steel girder bridge on concrete abutments. The existing bridge was in poor condition with severe rusting and other deterioration.

The replacement bridge will be an 85-span single span steel stringer bridge on integral abutments. The span was increased to 85 feet to meet NHDES stream crossing requirements and to meet current NHDOT hydraulic requirements. A hydraulic analysis was performed to determine the required bridge opening size. The jointless integral abutment bridge will be founded on steel h-piles. The project is funded through the State Bridge Aid program, and Fuss & O'Neill was responsible for preparing Construction Plans, Contract Documents, and assisting the Town with advertising the project, evaluating bids and recommending award to the successful contractor. The road will be closed to traffic during construction which is currently ongoing.



Hands Across the Merrimack (HAM) Bridge Manchester, NH

Fuss & O'Neill provided the design to retrofit the existing truss bridge that crosses the Merrimack River and I-293 into a designated pedestrian and bicycle bridge. The Hands Across the Merrimack Bridge was the key feature in the Riverfront Development Plan.



Our team provided the design calculations for the new bridge, including connection of the new structure to the existing truss and plate girders, pedestrian rail, ramp transition, deck design, overlooks, and substructure modifications. This project was in conjunction with the Riverwalk and Bikeway Master Plan and design, which was the motivating force for the revitalization of downtown Manchester, adding value to increased tourism, and commercial development, as well as addressing recreational and transportation needs. Our team also provided construction inspection and administration services for the project.



Manchester Street Bridge over Pennichuck Brook

Nashua-Merrimack, NH

The City of Nashua and the Town of Merrimack were in need of replacing the narrow jack-arch bridge while minimizing impacts to the reservoir. The reservoir serves as the municipal water supply with the main intake structure only 1,500 feet downstream of the bridge.

Many deficiencies of the existing bridge needed to be addressed, including a poor substructure, pedestrian safety issues, and poor drainage. The new bridge is a three span precast concrete structure with a total length of 124 feet supported on abutments and piers with micro-piles. A longer multi-span bridge was used to keep the construction out of the water which saved significant costs, versus an in-kind replacement. Significant historic and environmental coordination was required as historic and environmental impacts adversely affected each other. During construction, operations needed to be limited to certain times of the year due to an inhabited bald eagle nest within 300 feet of the bridge. We coordinated with personnel from both Nashua and Merrimack to manage this challenge.





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