



January 26, 2024 | Letter of Interest

New Hampshire Department of Transportation

Statewide On-Call Preliminary Engineering
Prequalified List of Consultants for

Locally Administered Local Public Agency (LPA) Qualifications-Based Selection Contracts





January 26, 2024

Mr. Tobey Reynolds, PE
Assistant Director of Project Development
Chairperson, Consultant Selection Committee
New Hampshire Department of Transportation
7 Hazen Drive, PO Box 483 | Concord, NH 03302-0483

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

Dear Mr. Reynolds and members of the Consultant Selection Committee:

Enhancing communities through our commitment to municipal projects remains at the core of who we are at VHB. As development transforms municipalities across the State, the need for efficient multimodal transportation, including safety and connectivity remains more important than ever. Through the Local Public Agency (LPA) Process, the New Hampshire Department of Transportation (NHDOT) partners with communities to do just that. Improving our transportation infrastructure plays a critical role in preserving the character of our communities, attracting young professionals, and promoting active lifestyles. VHB is eager to support New Hampshire communities as they navigate the LPA process. We offer:

- **The skills and passion needed to succeed.** LPA projects are more than just another day on the job for us. In addition to specializing in holistic, context-sensitive transportation solutions, we also have professionals that are members of our New Hampshire Community Development Team and are active in local advocacy programs, including serving on local planning boards and committees. This background—paired with the wealth of VHB’s in-house resources, which includes engineering, environmental permitting, survey, and public outreach—will allow us to provide the communities with comprehensive solutions that make sense from both an engineering and end-user’s standpoint.
- **A cohesive team with a proven track record.** In recent years, VHB professionals have undertaken numerous municipal projects throughout Northern New England, including LPA projects funded through Transportation Alternatives Program (TAP), Congestion Mitigation and Air Quality (CMAQ), and State Aid Bridge (SAB). We have assembled a team of professionals, many certified in the LPA process and who have experience actively working on these types of efforts. Communities can feel confident that we are bringing our “A-Team” to their LPA projects.
- **A comprehensive understanding of the LPA process.** With ten LPA-certified professionals and experience working on LPA projects throughout New Hampshire, VHB professionals are well-equipped to navigate the processes required for communities under this program. It will be our goal to minimize the managerial burden placed on the shoulders of municipal staff and act in their best interest as we work to drive projects forward efficiently and effectively.

The VHB team places a very high value on our working relationship with the NHDOT and New Hampshire’s communities, and we would be honored by the opportunity to help make a lasting, positive impact through assistance with LPA projects across the State. Thank you for reviewing our statement of qualifications. Should you need further information, please feel free to reach out to me at mkennedy@vhb.com or 603.391.3902.

Sincerely,
VHB

A handwritten signature in black ink that reads "Martin F. Kennedy".

Martin F. Kennedy, PE, ENV SP, NCICS
Principal-in-Charge

Engineers | Scientists | Planners | Designers

2 Bedford Farms Drive, Suite 200, Bedford, NH 03110

P 603.391.3900

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Project Understanding and Approach

Navigating municipal projects requires a comprehensive understanding of the New Hampshire Department of Transportation’s (NHDOT) Local Public Agency (LPA) process, where federal and state funding is administered by the NHDOT for use by communities. VHB staff have a deep understanding of the LPA process—the mechanics of which are outlined in the flowchart in **Figure 1** and discussed in our approach in the following pages. In fact, as highlighted in **Project Team and Appendix A**, the Bedford office currently has ten staff members with NHDOT LPA certification. We are also currently involved with LPA projects in a number of communities throughout the State, including Conway, Milford, Pelham, Claremont, Manchester, Salem, and Webster, to name a few.

Ability to Drive the LPA Process

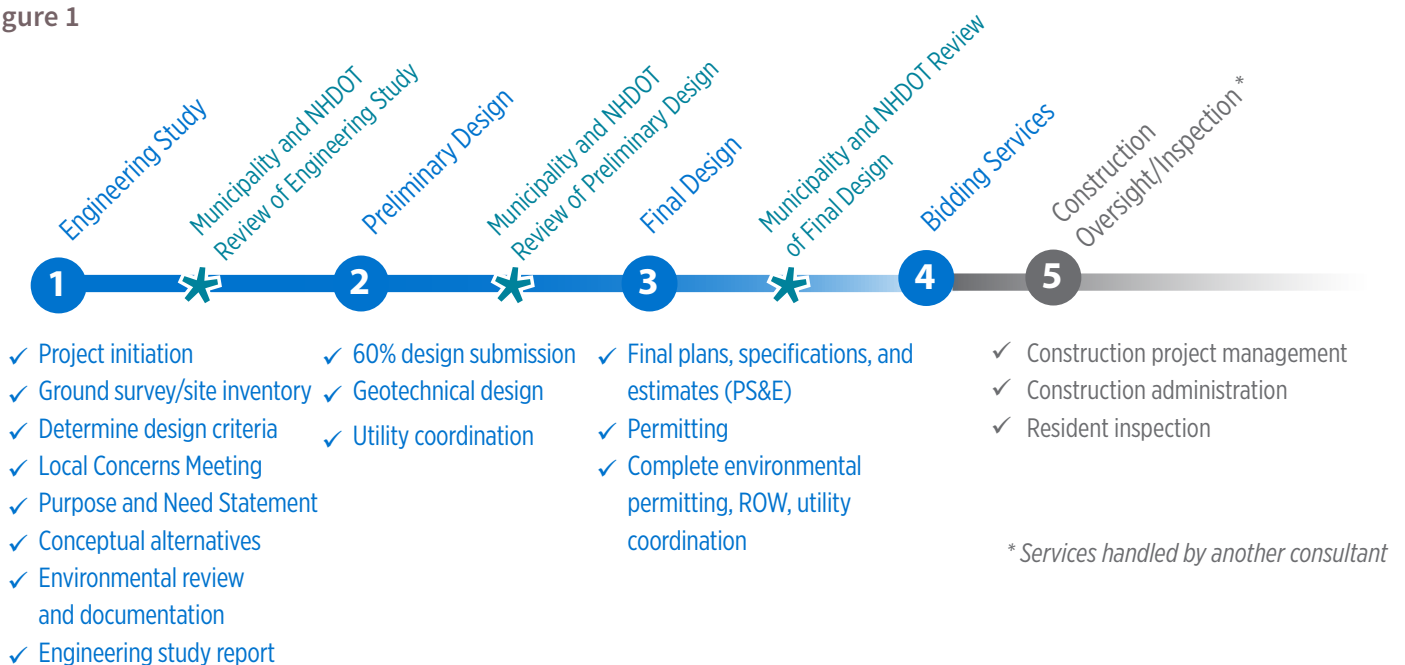
The LPA process requires reviews from the NHDOT at regular intervals. VHB’s approach to the project involves not just helping communities navigate this process—but also leveraging our trusted relationships with the NHDOT and the regulatory agencies to keep projects moving efficiently toward advertising for construction. VHB has deep relationships with our peers at the NHDOT, which

can help expedite the project process. For instance, if there are specific NHDOT design, permitting, and right-of-way questions that need to be resolved, we have first-hand working knowledge of both the process and people involved. This will enable us to resolve any concerns that might surface during the NHDOT review phases proactively, instead of waiting for post-submission comments.

Environmental Resources

The use of federal funds requires that communities document all natural and cultural resources within the project limits to satisfy the requirements of the National Environmental Policy Act (NEPA). VHB’s team of in-house environmental and cultural resource specialists have extensive experience completing this required documentation, including the Request for Project Review (RPR) that is often required to be submitted to the New Hampshire Division of Historical Resources (NHDHR). If needed, VHB is also adept at presenting the project at NHDOT monthly cultural resource review meetings. Municipal projects vary in size and scope, and so too does the level of environmental permits that are required. While these are often minor in nature, a project may occasionally trigger the need to submit an Alteration of Terrain permit, due to the extents of the ground disturbance. VHB is well equipped to support municipalities in documenting and submitting the required permit applications.

Figure 1



Community Acceptance

Public meetings comprise an important component of the LPA process; they are opportunities to gather information about local concerns and preferences, and to present potential alternatives. VHB professionals encourage interaction in meetings so attendees leave with an understanding of the project, and its opportunities and concerns. In turn, we listen closely to input and communicate effectively, translating what we have heard into the required understanding of the issues facing a project. VHB also has a record of successfully working with our clients to develop tailored outreach approaches that appropriately meet the scale and special needs of the project—while delivering clear messages that resonate with target audiences.

The LPA process typically includes two public meetings during the study phase. The first is the “Local Concerns” meeting at which VHB explains our understanding of the existing conditions, and gathers any comments, concerns, or observations the public may have. This meeting helps VHB solidify the written Purpose and Need Statement with assistance from local officials for the project. For expediency, we usually recommend holding the Local Concerns meeting shortly after initiating the project. The second public meeting is the “Alternatives Presentation” meeting at which VHB presents the design alternatives that are under consideration, as well as the recommended alternative.

Summary of LPA Policy Options

The NHDOT offers municipalities the following **three options** as to how an LPA project can be managed: **locally managed, prequalification by the NHDOT, or NHDOT managed.** VHB has experience supporting the NHDOT throughout the implementation of the LPA policy changes over the past two years, and is eager to continue assisting our local communities in whichever option they choose. We value our working relationship with the Department and New Hampshire’s municipalities and look forward to supporting future efforts to enhance and shape our local communities.

Keeping the public engaged and building support and consensus is critical to moving municipal projects forward efficiently.

Familiarity with Funding Sources

Transportation Alternatives Program and Congestion Mitigation and Air Quality Programs

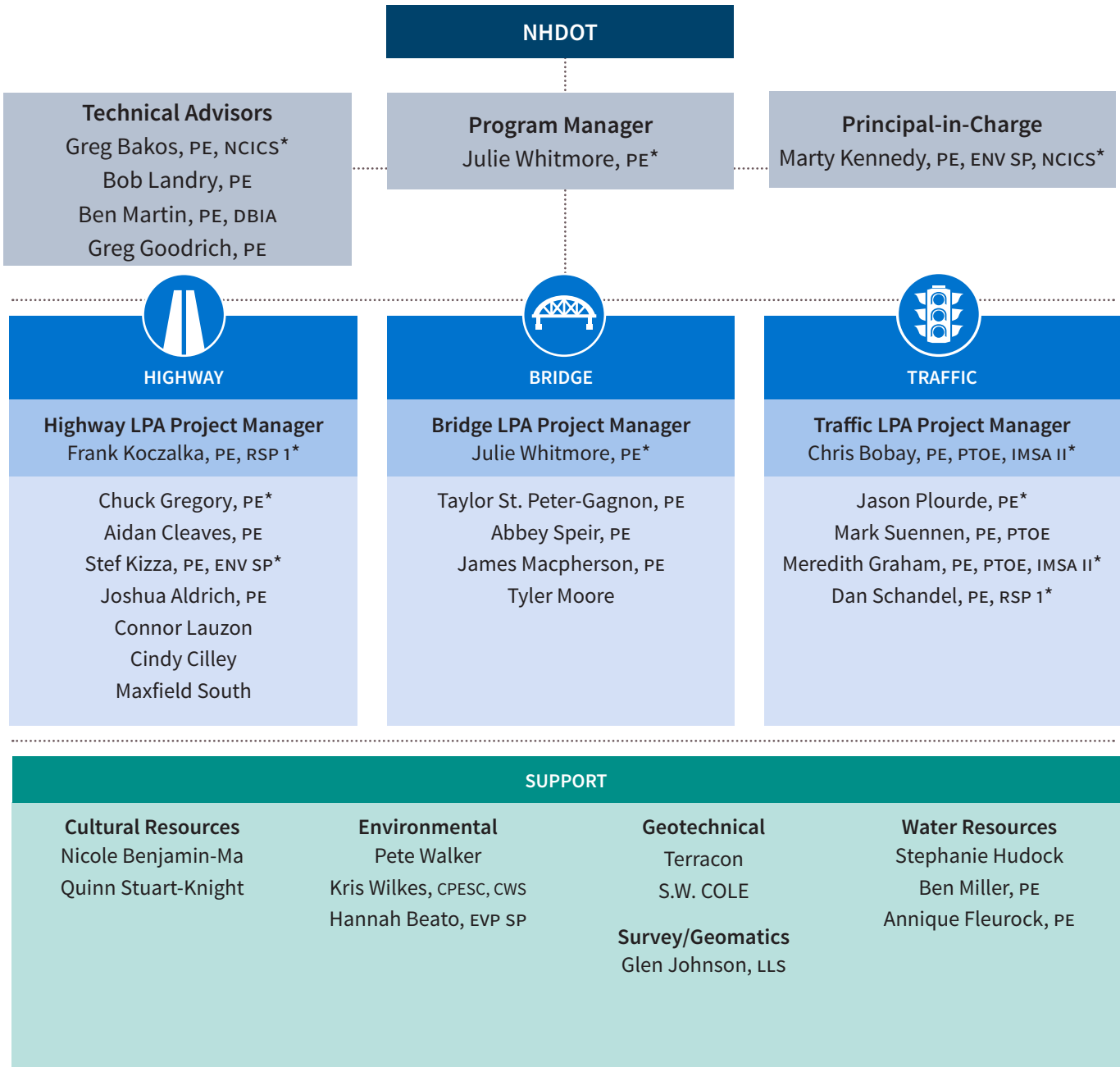
Transportation Alternatives Program (TAP) and Congestion Mitigation and Air Quality (CMAQ) projects are administered under the NHDOT LPA program. TAP combined three former federal programs: Transportation Enhancements (TE), Safe Routes to Schools (SRTS), and Recreational Trails Program (RTP). Funding for these programs are designed to support local projects aimed at improving communities’ transportation systems or air quality and congestion. VHB has been involved in a number of projects that have used these funding sources as highlighted in **Appendix B**. Projects have ranged from roadway improvements to rail trail efforts to downtown circulation studies and signal system upgrades.

Municipal Bridge Aid Programs

Like TAP and CMAQ projects, the NHDOT’s Municipally Managed State Aid Bridge (SAB) Program operates as an NHDOT LPA program. Regular review by the NHDOT, public meetings, an engineering study including hydrologic and hydraulic studies, preliminary and final design, as well as construction oversight are all required components of the workflow—in addition to a bridge load rating analysis. The program uses federal Municipal Off-system Bridge Replacement & Rehabilitation (MOBRR) funding, Municipally Owned Bipartisan Infrastructure Law (MOBIL), and SAB funding that allows municipalities flexibility in performing design or construction work in-house or by hiring a consultant/contractor. VHB has also worked on municipal bridge projects that use these funding programs, including recent efforts in Webster and Concord, among others.

We are eager to leverage our working relationship with the Department and regulatory agencies to help municipalities successfully navigate the LPA process and help shape New Hampshire’s communities in a meaningful way!

Organizational Chart



* LPA-certified

Project Team

Maintaining the unique charm of New Hampshire's valued communities depends on delivering transportation excellence along our unique and diverse roadways. For more than 30 years, VHB has served the NHDOT and New Hampshire communities on a variety of highway and bridge infrastructure projects, many under the Local Public Agency (LPA) program. Our diverse in-house service offerings coupled with our established relationship with the NHDOT, allows VHB to anticipate potential challenges, apply our extensive experience and resources, and deliver high-quality comprehensive solutions.

In our local New Hampshire office, we have a comprehensive team of transportation engineers, including **ten staff members with NHDOT LPA Parts I and II certification**. VHB's culture emphasizes professional development and training and it is a primary element of our project management process. Emerging professionals are encouraged to complete a series of internal management training modules for project managers. This in-house training is targeted to strategically develop our young professionals and expand our capacity in project management to better serve our clients. These same professionals also attend external trainings such as the NHDOT LPA process certification at this stage in their career development. Establishing this well-rounded foundational knowledge sets our up-and-coming leaders on the path to success as they help navigate community-driven projects.



Our multi-disciplinary LPA team will be led by **Program Manager and Bridge Project Manager Julie Whitmore, PE**, who will oversee the quality of

services and deliverables, monitor schedules and budgets, and make sure expectations are met. She brings 17 years of experience as a structural bridge engineer, as well as notable experience in highway design, drainage design, and hydraulic modeling and scour analysis. Julie manages several bridge projects under the NHDOT on-call, and leads VHB's NH Community Development Team.

A Range of Local Government Projects

The VHB team has served municipalities and regional planning commissions across New Hampshire. Our experience has helped us understand the various challenges facing our communities: funding limitations, consensus building, and the desire to progress while embracing our rich history. Additionally, our team brings a strong focus on Healthy Community Design and Principals in Safety to all our projects. In all aspects of our work we encourage a healthy and safe community by increasing pedestrian and safety enhancements, and creating open spaces offering recreational opportunities.



Frank Koczalka, PE, RSP 1, will leverage his experience on recent LPA projects in Claremont, Conway, and Manchester as **Highway Project Manager**. Frank has spent

much of his 30 year career delivering important roadway projects to the NHDOT and local communities. From his work on the I-93 Exit 2 and Exit 5 park and ride designs, NH Route 125 improvements in Plaistow and Kingston, and NH Route 16 in Dummer, he has developed strong relationships and a deep understanding of NHDOT processes. You can trust that he will be a passionate advocate for communities in moving their projects forward.



Traffic Project Manager, Chris Bobay, PE, PTOE, IMSA II, is a Senior Project Manager based in our New Hampshire office and is serving Northern New England. He has more

than 32 years of experience evaluating and designing traffic signalization projects for NHDOT, MaineDOT, PACTS, and local municipalities. He is a specialist in using advanced Intelligent Transportation Systems and general traffic and transportation related hardware and software to help communities improve mobility and safety. Frank, Greg, and Chris are committed to delivering the responsive service and high-quality deliverables that you expect from VHB.

As depicted in the table on the following page and previously highlighted in our Organizational Chart, the VHB Team is also supported by a local team of junior and senior talent across a range of disciplines ready to support LPA projects. Additionally, VHB maintains strong working relationships with geotechnical engineering subconsultants, such as Terracon and S.W. COLE. We will leverage these connections to call upon whichever firm is best-suited to complete an assignment as needed. Further information on our team's experience and credentials can be found in **Appendix A**.

Engineering Services in Support of LPA Projects

Key Personnel	Project Role	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	Hydrology	Environmental	Traffic Analysis	Geotechnical Engineer	Surveyor	Public Involvement
Julie Whitmore	Program Manager	17	17	●	●	●	●	●	●			●	●					●
Marty Kennedy	Principal-in-Charge	41	41	●	●					●					●			●
Greg Bakos	Technical Advisor	44	40	●		●				●								●
Bob Landry	Technical Advisor	35	4		●		●	●	●		●	●						●
Ben Martin	Technical Advisor	20	6		●	●			●									●
Greg Goodrich	Technical Advisor	25	18	●	●		●	●	●		●	●						●
Frank Koczalka	Highway Lead	30	27	●	●	●			●	●								●
Aidan Cleaves	Highway	6	6			●												
Cindy Cilley	Highway	32	25			●												
Josh Aldrich	Highway	11	11			●				●								
Stef Kizza	Highway	14	14			●												
Taylor St. Peter-Gagnon	Bridge	6	5			●	●	●				●						
Abbey Speir	Bridge	5	5				●	●				●						
Chris Bobay	Traffic Lead	32	28	●	●				●	●					●			●
Jason Plourde	Traffic	28	5	●	●					●					●			●
Mark Suennen	Traffic	28	18		●				●						●			●
Meredith Graham	Traffic	19	19	●	●					●					●			
Dan Schandel	Traffic	8	6	●						●					●			
Pete Walker	Environmental	30	22		●				●	●			●	●				●
Kris Wilkes	Environmental	17	15		●									●				●
Hannah Beato	Environmental	7	6											●				
Nicole Benjamin-Ma	Cultural Resources	24	14		●									●				
Quinn Stuart-Knight	Cultural Resources	18	7		●									●				
Glen Johnson	Survey	42	39		●												●	
SUBCONSULTANTS																		
Terracon	Geotechnical	-	-														●	
S.W. COLE	Geotechnical	-	-													●		

References

Client satisfaction is at the forefront of any project the VHB team undertakes. We are pleased to have trusting relationships with our clients, including the NHDOT. We encourage the Department to contact the following references; their comments will reinforce our record of outstanding performance.

1 | Lincoln Daley

Town Administrator
Town of Milford, NH
603.249.0602
ldaley@milford.nh.gov

2 | John Klipfel, PE

Director of Engineering
Town of Salem, NH
603.890.2033
jklipfel@salemnh.gov

3 | Dan Hudson

City Engineer
Nashua, NH
603.589.3120
HudsonD@nashuanh.gov

A: Resumes



Julie Whitmore, PE

Program Manager & Bridge Lead | 17 years of professional experience

Julie is a Project Manager and Lead Engineer who works in VHB's Bedford, New Hampshire, office. As an experienced structural engineer, Julie also has significant experience in highway design, drainage design, and hydraulic modeling and scour analysis. Julie manages several bridge projects under the NHDOT Statewide on-call, manages several municipal projects, and leads VHB's NH Community Development Team. Julie is a Professional Engineer registered in New Hampshire and Maine.

Education

BS, Civil Engineering,
University of New
Hampshire, 2006

Registrations

PE (Civil) NH 2012
PE (Civil) ME 2013
NHDOT LPA 2023

RELEVANT PROJECTS

- NHDOT Bridge Design On-Call, Statewide, NH
- Clothespin Bridge, Webster, NH
- Birchdale Road Bridge Replacement, Concord, NH
- Alder Creek Road Culvert, Concord, NH
- Madbury Road Reconstruction, Durham, NH
- NHDOT, Spaulding Turnpike Southbound, Newington/Dover, NH



Frank Koczalka, PE, RSP 1

Highway Lead | 30 years of professional experience

Frank is a Project Manager in VHB's Bedford, NH office with experience in conceptual, preliminary and final design of roadway projects. His experience includes geometric design, intersection grading, right-of-way and layout calculations, cost and quantity estimation, and contract document preparation. Frank has substantial experience in utility coordination and has served as Utility Coordinator on various New Hampshire Department of Transportation projects. Throughout his career, Frank has demonstrated proficiency in the foundations of road safety principles. Frank assists in the development of improvement plans to ensure that design features selected during the plan development phase are the most appropriate for the environment and have proven track records of improving safety and mobility for all users—motor vehicles, buses, pedestrians, and bicycles.

Education

BS, Civil Engineering,
University of
Massachusetts
Dartmouth, 1993

Registrations

PE (CE-HWY) NH 2022
PE (Transportation) ME
2021
NHDOT LPA NH 2015

RELEVANT PROJECTS

- Birch Street Lowell Rd. Concept, Hudson, NH
- South Manchester Rail Trail II, Manchester, NH
- Main Street Roadway & Traffic, Conway, NH
- Exeter Route 27 Corridor Study, Exeter, NH



Chris Bobay, PE, PTOE, IMSA II

Traffic Lead | 32 years of professional experience

Chris is a Senior Project Manager and Transportation Engineer in the Transportation Systems Group, operating out of VHB’s Bedford, NH office. His responsibilities include traffic signal system feasibility studies, signal warrant analysis, signal inspections, signal system design (including timing and implementation), traffic simulation studies, traffic signing, pavement marking layout, highway capacity analysis, traffic impact and access studies, public presentations, and technical report writing. Chris also specializes in using advanced ITS and general traffic- and transportation- related hardware and software. His experience includes successful projects throughout the United States.

Education

BS, Civil Engineering,
Purdue University, 1992

Registrations

- PE (Civil) NH 2022
- PE (Civil) ME 2021
- PE (Civil) VT 2022
- PTOE 2020
- IMSA TS2 2022
- IMSA CTSI 2022
- IMSA WZ 2022
- NHDOT LPA
- MaineDOT LPA

RELEVANT PROJECTS

- CMAQ Granite-South Willow Street Design, Manchester, NH
- Nashua CMAQ City-Wide Signal System Management, Nashua, NH
- NHDOT, Statewide Traffic Signal Optimization, New Hampshire
- MaineDOT, Centralized Fiber Optic Signal System Design, Modernization, and Operations Monitoring, Waterville and Winslow, ME
- MaineDOT, PACTS RTMS Phase 2 Centralized Fiber Optic Signal System
- Expansion, Biddeford and Saco, Biddeford-Saco, ME



Marty Kennedy, PE, ENV SP, NCICS

Principal-in-Charge | 41 years of professional experience

Marty is a Senior Principal in VHB’s office in Bedford, NH. He has been involved with many facets of traffic engineering and transportation planning. He specializes in the analysis of transportation impacts and the identification and evaluation of transportation improvement plans. Over the past two decades, he has served as a trusted leader and advisor on dozens of NHDOT projects, both large and small. Marty is using this understanding to actively mentor the next generation of VHB professionals so they are prepared to lead Department projects with the same care and commitment.

Education

BS, Civil Engineering,
Northeastern University,
1983

Registrations

- PE NH 2021
- PE ME 2021
- ENV SP 2013
- NHDOT LPA

RELEVANT PROJECTS

- Town of Hudson, Lowell Road Signal, Hudson, NH
- City of Lebanon, Downtown Visioning Study, Lebanon, NH
- Stiles & Pelham Road Final Design, Salem, NH
- Depot Intersection Routes 28 and 97 Redevelopment Project, Salem, NH



Ben Martin, PE, DBIA

Technical Advisor | 20 years of professional experience

As Director of Transportation for VHB’s Bedford, NH office, Ben has diverse experience in transportation engineering, particularly design and QA/QC for roadway and highway projects of all types and sizes, including major divided highways, roundabouts, intersections, and rail crossings. His responsibilities have included conceptual, preliminary, and final design; public outreach; Road Safety Audits (RSAs); and design for traffic control, drainage, and stormwater management. Ben applies data-driven performance measures to successfully deliver projects with difficult schedule and budget constraints. He is also active in New Hampshire’s larger engineering community, serving on the ACEC - NHDOT Highway Design Subcommittee.

Education

BS, Civil Engineering,
Clarkson University,
2005

Registrations

PE NH 2021
PE ME 2021
PE VT 2022
PE CT 2021
PE NY 2010
DBIA (Associate) 2021

RELEVANT PROJECTS

- Town of Hudson, Lowell Road, Hudson, NH
- South Manchester Rail Trail II, Manchester, NH
- Manchester CMAQ Granite-South Willow Street Design, Manchester, NH
- Main Street Roadway & Traffic, Conway, NH



Gregory S. Goodrich, PE, NBIS

Technical Advisor | 25 years of professional experience

Greg is a Technical Advisor in our Bedford, NH office. He has extensive experience in planning, management, design, inspection, and construction of public and private infrastructure, including bridges, culverts, and sign structure foundations. Additionally, Greg has worked on several ABC and DB efforts throughout the Northern New England region. He has been published in *Aspire: The Concrete Bridge Magazine*, and has also spoken at the Precast/Prestressed Concrete Institute Annual Conferences and the National Accelerated Bridge Conference.

Education

BS, Civil Engineering,
Purdue University, 1999

Registrations

PE NH 2022
National Bridge
Inspection Standards,
Certified Bridge Inspector,
2004
NHDOT LPA

RELEVANT PROJECTS

- South Manchester Rail Trail II, Manchester, NH
- Clothespin Bridge, Webster, NH
- City of Lebanon, Downtown Tunnel Survey, Lebanon, NH
- Birchdale Road Bridge Replacement, Concord, NH



Greg Bakos, PE, NCICS

Technical Advisor | 44 years of professional experience

Greg is a Senior Active Transportation Engineer and Infrastructure Task Manager working out of VHB’s Bedford, NH office. His primary experience is with transportation projects involving improvements to the roadway and utility infrastructure. His project contributions include planning, coordination, agency liaison, permitting, geometric design, public outreach, preparation of contract plans, cost estimates, specifications, and construction engineering services. He also has extensive experience incorporating complete streets elements into transportation projects. In addition, Greg is highly involved with bike and pedestrian design projects, studies and organizations, applying his knowledge of bike and pedestrian design issues as well as real-world cycling experience.

RELEVANT PROJECTS

- Salem Depot Intersection Improvements, Salem, NH
- Lowell Road to Sagamore Bridge Improvements, Hudson, NH
- Mammoth Road Intersection Improvements, Pelham, NH
- Milford Oval Improvements, Milford, NH

Education

BS, Civil Engineering,
Bucknell University, 1979

Registrations

NHDOT LPA (Labor
Compliance) NH 06/2020

PE VT 2017
(Pending Renewal)

PE (CE-HWY) NH 2022

NCICS 2007

LCI 2021



Bob Landry, PE

Technical Advisor | 35 years of professional experience

Bob is a Senior Transportation Technical Advisor for VHB’s Bedford, NH office. Previously, Bob was the Administrator of Bridge Design at NHDOT, having assumed the position in August 2016. He has over 31 years of experience at NHDOT, including 8 years as Project Manager in the Bureau of Highway Design.

RELEVANT PROJECTS

- Clothespin Bridge, Webster, NH
- Nashua Riverfront Implementation, Nashua, NH
- Bridges & Dams Management Plan, Concord, NH
- NHDOT, Allenstown 40362, Allenstown, NH

Education

BS, Civil Engineering,
University of New
Hampshire, 1984

Registrations

PE NH 2022

PE MA 2022



Peter J. Walker

Environmental | 30 years of professional experience

Pete specializes in environmental permitting for transportation projects, including compliance with the National Environmental Policy Act (NEPA); natural resource and planning investigations; and stream and wetland restoration studies. Over the years, he has successfully led efficient NEPA and non-federal environmental documentation efforts for diverse projects, ranging from small LPA projects to major state infrastructure improvements. Previously, Pete was an administrator with the New Hampshire Department of Environmental Services Water Division. His familiarity with this and other state and federal environmental regulatory agencies, helps to keep the permitting components of his clients' projects moving forward smoothly.

Education

MS, Biology,
University of Vermont,
1997

BA, Biology and
Environmental Studies,
Williams College, 1991

RELEVANT PROJECTS

- Mammoth Road Intersection Improvements, Pelham, NH
- Clothespin Bridge, Webster, NH
- Roaring Brook Watershed Management Plan, Keene, NH
- Mill Pond Dam Feasibility Study, Durham, NH

Additional Support Staff Resume Highlights

Name	Education	Project Experience Highlights
Aidan Cleaves, PE <i>6 Years Experience</i>	BS, Civil Engineering, University of New Hampshire, 2017	<ul style="list-style-type: none"> • Broadway (Route 28) & Main Street, Salem, NH • City of Lebanon, Downtown Visioning Study, Lebanon, NH
Cindy Cilley <i>32 Years Experience</i>	AS, Architectural Engineering Technology, New Hampshire Technical Institute, 1992	<ul style="list-style-type: none"> • South Manchester Rail Trail II, Manchester, NH • Epping Road at Continental Drive Intersection Improvements, Exeter, NH
Taylor St. Peter-Gagnon, PE <i>6 Years Experience</i>	BS, Civil Engineering, University of New Hampshire, 2017	<ul style="list-style-type: none"> • City of Lebanon, Downtown Visioning Study, Lebanon, NH • Clothespin Bridge, Webster, NH
Abbey Speir, PE <i>5 Years Experience</i>	BS, Civil Engineering, University of Maine, 2019; BS, Environmental Engineering, University of Maine, 2019	<ul style="list-style-type: none"> • City of Lebanon, Downtown Visioning Study, Lebanon, NH • Clothespin Bridge, Webster, NH
Mark Suennen, PE, PTOE <i>28 Years Experience</i>	MS, Civil Engineering, University of Maryland, 2004; BS, Civil Engineering, Worcester Polytechnic Institute, 1996	<ul style="list-style-type: none"> • City of Lebanon, Downtown Visioning Study, Lebanon, NH • South Manchester Rail Trail II, Manchester, NH
Jason Plourde, PE, PTP <i>28 Years Experience</i>	BS, Civil Engineering, Florida Institute of Technology, 1995	<ul style="list-style-type: none"> • Mammoth Road Intersection Improvements, Pelham, NH • Epping Road at Continental Drive Intersection Improvements, Exeter, NH
Meredith Graham, PE, PTOE, IMSA II <i>19 Years Experience</i>	MS, Civil Engineering, Worcester Polytechnic Institute, 2004; BS, Civil Engineering, Worcester Polytechnic Institute, 2002	<ul style="list-style-type: none"> • CMAQ Granite-South Willow Street Design, Manchester, NH • Nashua CMAQ City-Wide Signal System Management, Nashua, NH
Dan Schandel, PE, RSP 1 <i>8 Years Experience</i>	BS, Civil Engineering, Montana State University, 2015	<ul style="list-style-type: none"> • City of Lebanon, Downtown Visioning Study, Lebanon, NH • Broadway (Route 28) & Main Street, Salem, NH
Kris Wilkes, CPESC, CWS <i>17 Years Experience</i>	BS, Environmental Studies, University of Vermont, 2007	<ul style="list-style-type: none"> • Mammoth Road Intersection Improvements, Pelham, NH • Clothespin Bridge, Webster, NH
Hannah Beato, ENV SP <i>7 Years Experience</i>	MS, Biological Sciences, University of Massachusetts Lowell, 2016; BS, Biological Sciences, University of Massachusetts Lowell, 2015	<ul style="list-style-type: none"> • South Manchester Rail Trail II, Manchester, NH • CMAQ Granite-South Willow Street Design, Manchester, NH
Nicole Benjamin-Ma <i>24 Years Experience</i>	MA, Anthropology, Rutgers University, 1998	<ul style="list-style-type: none"> • South Manchester Rail Trail II, Manchester, NH • Broadway (Route 28) & Main Street, Salem, NH
Glen Johnson, PLS, LLS <i>42 Years Experience</i>	AAS, Civil Engineering Technology, University of New Hampshire, 1982	<ul style="list-style-type: none"> • Mammoth Road Intersection Improvements, Pelham, NH • City of Lebanon, Downtown Visioning Study, Lebanon, NH
Josh Aldrich, PE <i>11 Years Experience</i>	BS, Civil Engineering, University of Massachusetts Amherst, 2009	<ul style="list-style-type: none"> • Town of Hudson, Lowell Road, Hudson, NH
Stef Kizza, PE, ENV SP <i>14 Years Experience</i>	BS, Civil & Environmental Engineering, Northeastern University, 2011	<ul style="list-style-type: none"> • Summer Street/North Street Transportation Alternatives Analysis, Lunenburg, Fitchburg, and Leominster, MA • Boston Street Redesign, Salem, MA

B: Applicable Relevant Work Experience

Making a positive impact in New Hampshire's cities and towns is a priority for VHB professionals: For more than 30 years, we have worked to improve mobility, enhance communities and economic vitality, and balance development and infrastructure needs with environmental stewardship. Together, our team of engineers, scientists, planners, and designers have helped revitalize downtown areas; construct safer streets for motorists, pedestrians, and bicyclists; restore and protect our natural resources—and more.

Municipal projects often involve a variety of integrated components—from roadway design and environmental permitting to public involvement and beyond. In addition, keeping projects moving forward on a schedule will require a consultant with experience working with local key stakeholders, as well as an understanding of a community's long-term transportation goals. VHB's capabilities include:

- » **Roadway:** corridor planning and design, intersection design, roundabout design, ADA-compliant multimodal accommodations, bike/ped planning and design, utility coordination, cost estimating, contract documents and bidding services, construction sequencing and traffic management
- » **Bridge:** bridge and culvert replacement and rehabilitation, hydrologic and hydraulic engineering, construction administration and inspection, alternative procurement methods, inspection and load ratings, overhead sign structure foundations
- » **Traffic:** multimodal transportation planning and traffic operational analyses, safety evaluations, signal design, coordinated signal systems design
- » **Environmental and Cultural Resources:** state and federal regulatory requirements (including NEPA), environmental assessments, water resources management, environmental risk management, air quality and noise assessments, wetland assessments, cultural resource investigations
- » **Public Involvement:** public workshops and charrettes, electronic voting, discussion boards,

dotmocracy exercises, visioning exercises, social media, printed brochure and mailings, advanced modeling and renderings to support stakeholder engagement

- » **Survey and ROW:** topographic, property, right-of-way, construction, wetland delineation, bathymetric, geodetic, and ALTA/ACSM surveys; property title research; preparation of construction documents; legal descriptions for closing documents

As highlighted in the following pages, our team brings a wealth of experience offering integrated, multidisciplinary services to numerous municipal projects across the State.

Relevant Experience

Downtown Rail Trail Connections | Manchester, NH

For residents, commuters, students, and visitors, the City of Manchester's network of trails provides an important connection to area businesses and schools; enhancing the links between these trails furthers their usefulness, allowing travelers to gain greater access throughout the City—and beyond. By linking the South Manchester Rail Trail to the City's Riverwalk Trail, this **LPA project** provides an important step in this direction. It involves converting a portion of a former rail corridor to a trail, as well as a number of city street



bicycle and pedestrian solutions to complete the planned connection. Once constructed, the system will provide connections from Manchester-Boston Regional Airport to the existing Piscataquog Trail and on to the Goffstown Rail Trail. VHB is providing engineering and public outreach services to support this project. Key considerations include on-road crossings, including the potential use of RRFBs; impacts to residential properties; ADA-compliant sidewalk improvements; and wayfinding signage.

Salem Depot Intersection Improvements | Salem, NH

This ambitious **LPA project** addressed significant safety and congestion concerns within the Salem Depot intersection. The project involved widening Route 28 to provide exclusive left turn lanes. It included all new traffic signals and ITS equipment in the intersection as well as signaling the adjacent rail trail crossing. First, it was necessary for VHB to develop a demolition project that would remove the six buildings along the west side of the road that stood in the way of the roadway widening. One of those buildings was determined to be eligible for the National Register of Historic Places, so VHB completed the necessary 4(f) process to allow the building to be taken. That same building was a source of soil and groundwater contamination for their property and adjacent properties. VHB developed the required soil and groundwater monitoring and management plans that allowed the construction to proceed. VHB also **worked with NHDOT** to complete the required property

Environmental Services and the LPA Process

Across the state, the NHDOT's Local Public Agency (LPA) process underpins many municipal transportation projects. Fortunately, VHB is prepared: our Bedford office currently has staff members with LPA certification and has undertaken numerous LPA projects across the state. We also specialize in NEPA compliance and have vast experience with NEPA documentation for LPA and other transportation projects.

acquisitions. During construction VHB provided the Town with construction phase engineering support services.

Route 16 Roundabout Study and Intersection Improvements | Conway, NH

As part of a team **working with both the NHDOT and Town of Conway**, VHB is supporting an **LPA project** to improve signalized intersections at NH Route 113/Route 16 and NH Route 153/Washington Street. VHB's responsibilities included performing a planning-level assessment to evaluate the feasibility of a roundabout option developed by the NHDOT as a long-term solution to accommodate traffic flow. Additional responsibilities included performing an alternative analysis for the reconfiguring the NH Route 16/Route 113 intersection and developing preliminary design plan submission. VHB is currently working on finalizing the environmental documentation and preparing for the public hearing process.



Route 16 Roundabouts Study and Intersection Improvements | Conway, NH

Route 32 and Sawyers Crossing Road Intersection Improvements | Swanzey, NH

This project aimed to reduce vehicular speed and conflicting turning movements, as well as increase pedestrian, bicyclist, and vehicular safety. To support these goals, VHB provided design services to improve the existing intersection, which is a triangle with three stop-controlled entrance and exit points, by converting it to a roundabout. VHB's responsibilities included preliminary and final design for the roundabout, roadway approaches, and sidewalks; complete drainage design, with water quality review and treatment swale design; signing and striping review; and traffic control plans. The project involved **coordination with community stakeholders and Town officials.**

NH Route 3A Lowell Road Improvements | Hudson, NH

VHB was retained by the Town of Hudson to support design and engineering services for the addition of a southbound right-turn lane on Lowell Road (NH Route 3A) from Flagstone Drive onto the westbound ramp to the Circumferential Highway in Hudson, NH. This project utilizes federal **Congestion Mitigation and Air Quality** grant funding assistance. VHB provided all phases of the NHDOT **LPA process**, including engineering study, preliminary design, final design and bidding, and construction support services. VHB also provided environmental compliance and NEPA permitting support.

Mammoth Road Intersection Improvements | Pelham, NH

As part of this **Congestion Mitigation and Air Quality** grant funded project, VHB was retained by the Town to provide design, engineering, and permitting for intersection improvements on Mammoth Road at Sherburne Road and Mammoth Road at Marsh Road in Pelham. As part of the project, VHB is providing preliminary engineering, final design, documentation, survey, public meeting support, preliminary design, right-of-way assistance, final design, and bidding. Additionally, VHB assisted with environmental and cultural review and documentation, including providing preparation of a Request for Project Review



(RPR), natural resource assessment, and NEPA support. The project involves the design of two roundabouts to manage traffic at these critical intersections.

NH Route 12 and North Street | Claremont, NH

An intersection in need of repairs, the NH Route 12 and North Street project involved evaluating horizontal and vertical geometry modifications to the intersection and associated approaches. These approaches would aim to improve motor vehicle operations and safety, provide bike and pedestrian accommodations, and help alleviate river flooding. VHB was retained by the City of Claremont to provide design services for this multidisciplinary project. This project, which followed the NHDOT **LPA project** development process, included profile improvements, drainage improvements, stormwater measures, and utility adjustments. VHB also provided environmental services and historic research and evaluation work.

Epping Road at Continental Drive Intersection Improvements | Exeter, NH

Working on an expedited schedule to **support the Town**, VHB provided design and permitting services for transportation improvements at the Epping Road (Route 27)/Continental Drive intersection. The improvements primarily included roadway widening to provide exclusive turn lanes and signalization to address capacity and safety needs. VHB also provided services related to wetland permitting, field survey,

and utility coordination, as well as presented the project at a neighborhood meeting prior to the start of construction. VHB is currently designing the next phase of widening Epping Road to the north.

Granite Street and South Willow Street Signals Study | Manchester, NH

Traffic congestion, queuing and idling, and plans for future development—including the addition of a parking garage—have proved problematic along these heavily traveled streets. As the consultant selected by the city to study potential improvements, VHB conducted a field review of each of the 24 intersections in the project area. Additionally, VHB performed traffic operation analyses for both the existing and projected signal timings. Ultimately, VHB found that a full Adaptive Signal Control (ASC) solution may be useful for the Granite Street corridor, likely resulting in a projected 50% reduction in travel delays outside weekday peaks. Meanwhile, the South Willow Street corridor will likely benefit from an ACS-Lite or Signal Performance Measures (SPM) solution. This **LPA project** is funded through the **Congestion Mitigation and Air Quality** Improvement Program.

Central Business District Downtown Traffic Circulation Study | Nashua, NH

VHB identified potential strategies to improve roadway and intersection traffic flow and mobility, strengthen pedestrian and bicycle connections, and enhance accessibility for residents and businesses in the City’s Central Business District. **Driven by the Nashua community**, the study analyzed existing traffic volume demands and flow patterns, including seasonal variations, and traffic operations. Developing and presenting alternatives, as well as conducting public meetings, were also components of the project. Improvement alternatives included eliminating one-way street patterns and installing traffic circles to promote traffic calming.

Citywide Traffic Signal Design and Modernization Project | Nashua, NH

VHB was **retained by the City of Nashua** to complete an investigation and design of interconnected and coordinated traffic operations at 68 intersections along 10 corridors to address vehicle and pedestrian operational and mobility deficiencies. In addition to addressing operations and mobility, the project brings the City’s signalized intersections up to the standards established in the Manual of Uniform Traffic Control Device (MUTCD) while upgrading applicable existing signal equipment that is outdated and in a state of deterioration. The goal of the project was to complete an improved vehicular and pedestrian transportation system meeting the National Policy for Enhancements that provides increased mobility while improving the environment as called for under the **Congestion Mitigation and Air Quality** Improvement Program.

Route 3 South River Road Project | Bedford, NH

To **support the Town’s project** to convert South River Road from four to five lanes, VHB provided a range of services, including reviewing geometric alignments from Kilton Road north to the Manchester border; using Synchro 7 to analyze traffic operations; estimating costs for upgrades to on-street signalized intersections in the project area; and providing traffic signal design services, including final design plans and Advanced Traffic Management System (ATMS) communications plans, for improvements to intersections at Washington Place and Colby Court, among others.

Nashua Riverwalk | Nashua, NH

After participating in a PlanNH Charrette, VHB was asked to review the plan results of the community design effort and develop comprehensive recommendations for a Riverwalk that will create a 3-mile trail loop through downtown Nashua along the Nashua River. Several ongoing projects created opportunities for implementing large portions of the Riverwalk: the redevelopment of the Nashua Corporation property; parking lot renovations by BAE Systems; and the construction of senior housing and a senior center at the easterly end of the corridor.

VHB | B: Applicable Relevant Work Experience

Portions of the walk had been previously constructed under a Tax Increment Financing (TIF) program associated with renovation and construction of other buildings. VHB developed conceptual plans, fine-tuned the recommendations from previous studies and facilitated dialogue with adjacent private property owners to further project implementation goals. The result of this effort has been a master plan that outlines the city's vision for the Riverwalk, and has been an invaluable resource in discussions with land owners and potential donors. As individual segments of the Riverwalk have been funded, VHB has assisted the City with development of more detailed plans for the trail.

Birchdale Road Bridge Replacement | Concord, NH

Birchdale Road over Bela Brook is the sister bridge to the Hooksett Turnpike Bridge, similar in size and type, and located about a half mile downstream. Like its sister structure, Birchdale Road is a Red List bridge requiring replacement due to age and condition, geomorphically incompatible, and hydraulically constrained. To address these issues, the City retained VHB to provide preliminary and final design services for the bridge replacement. For this **State Aid Bridge Program** funded project, VHB conducted similar work in conjunction with work done on Hooksett Turnpike, from survey and wetland delineation through the development of Contract Plans, Engineer's Estimate, and Bid Documents.

Clothespin Bridge Road | Webster, NH

The existing 65-foot single span steel beam bridge is a single lane bridge and is on the Municipal Red List. The bridge was constructed in the 1930's and rehabilitated in the 1950's and is beyond its useful life and needs to be replaced. The Town selected VHB to evaluate replacement alternatives for this rural crossing. VHB's responsibilities include topographic survey, right-of-way research, environmental permitting, and preliminary and final design. The project was **State Aid Bridge Program** funded, and is currently in design and is anticipated to advertise in 2024.



Downtown Vision Study and Tunnel Path Project | Lebanon, NH

As part of a renewal project, VHB **worked closely with the City to rehabilitate its downtown tunnel.** VHB's structural engineers inspected the site and evaluated alternatives that would maximize reuse of the iconic tunnel and enhance benefits to the public. Using 3D LiDAR data, VHB's Applied Technology team created detailed designs for the rehabilitation and generated realistic renderings of both ground and aerial views of the tunnel and plaza design concepts to share with the public. Consensus was to advance the project using the option for a deck replacement with an atrium-style feature to allow for some natural lighting. The team balanced the project's many complexities which included the integration of multiple design disciplines; addressing safety concerns due to the tunnel's structural deficiency; reconnecting the two rail trails through the tunnel and upper and lower parking lots; enhancing public safety with a new CCTV system; navigating a tight schedule; and collaborating with multiple entities, including City Council, utility companies, property owners, and integrated VHB disciplines. This project received an American Council of Engineering Companies of New Hampshire (ACEC-NH) Silver Engineering Excellence Award.



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