



910800X
February 1, 2024

C.R. Willeke, PE
Municipal Highways Engineer
NH Dept. of Transportation
The Bureau of Planning & Community Assistance
John O. Morton Building
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. Willeke:

Please find enclosed DuBois & King's (D&K) updated LPA prequalification submission. I encourage you to contact our references. We have a strong interest in continuing to serve the NHDOT and municipal officials in our mission to improve the safety and efficiency of our transportation networks for those traveling throughout and living in New Hampshire. If you have any questions, please do not hesitate to contact me at 802.728.3376 or cgoodling@dubois-king.com.

Very truly yours,
DuBois & King, Inc.

A handwritten signature in blue ink, appearing to read 'Chuck Goodling', is written over a faint, larger version of the signature.

Chuck Goodling, PE, LPA
President and Contract Manager

HIGHWAY DESIGN

D&K is an employee-owned New England firm with transportation engineers who provide geometric design of new or rehabilitation of existing roadways or intersections throughout New Hampshire. Our team has developed preliminary design, final design, and contract plans and documents for municipal, state, and federal transportation programs in compliance with the Manual on Uniform Traffic Control Devices (MUTCD), the AASHTO Green Book, and NEPA, USACE, and NHDES regulations and processes throughout New England. D&K provides professional engineering services for:

Roadway Evaluation, Reconstruction, & Rehabilitation	Road Diets
LID Stormwater	Complete Streets
Scoping & Planning	Sidewalks
Slope Stabilization	Bike Lanes - Protected
Signalized Intersections	Multiuse Pathways
Roundabouts	Parking Lots
ROW Acquisition	Railroad Engineering
Landscape Design	Public Engagement
	Street Lighting
	Salt Sheds

BRIDGE DESIGN

D&K specializes in small to mid-sized bridges and culverts. Since 2009, D&K has provided design services for more than 40 Municipal Bridge Aid projects and over 180 bridges/culverts. D&K Bridge Department staff members are located in Bedford and Laconia and is experienced in the following areas:

- Accelerated Bridge Construction (ABC)
- New Hampshire State Bridge Aid (SBA)
- Municipal Off-system Bridge Replacement and Rehabilitation Program (MOBRR)
- Historic Trusses and Covered Bridges
- Bridge Rehabilitation and Replacement

D&K is a trusted resource experienced with providing preliminary design, final design, and development of contract plans and documents for bridge maintenance, preservation, rehabilitation, and replacement. D&K has designed rehabilitation and replacement for numerous steel, concrete, and timber bridges.

D&K has provided bridge inspection and load rating services for hundreds of bridges throughout New England. D&K performs load rating of bridges in the NHDOT as required by Bridge Rating Form 4 (as-built and as-inspected conditions).

D&K's Water Resources Department completes analysis of and recommendations for proposed hydraulic conditions. This analysis includes existing and proposed scour measures and storm event capacities.

APPROACH

NHDOT LPA projects follow the design development process as outlined in NHDOT's LPA Manual. D&K has significant experience advancing projects in accordance with the Local Public Agency Manual for the Development of Projects. For a standard bridge or roadway project, the required tasks typically include:

- Pre-design conference
- Topographic field survey
- Geotechnical investigation
- Environmental resource inventory
- Engineering study
- Preliminary design
- Public outreach/meetings
- NEPA and SHPO clearances
- Utility coordination
- Final design
- Opinion of Probable Construction Cost (OPCC)
- Bid phase assistance

The following section outlines D&K's approach to the NHDOT LPA process:

Project Initiation. D&K begins projects by discussing the scope and schedule with the municipality and nhdot and refining these items as needed to best serve the interests of the municipality and the project objectives. This step will include data collection, such as survey and environmental resource identification.

Engineering Study. D&K works with the municipality and the NHDOT LPA program to determine what steps are needed to satisfy federal requirements for the alternatives evaluation and public outreach. D&K develops a draft engineering study for the municipality and NHDOT to review, makes revisions based on input

received, and develops a final report before proceeding with the development of preliminary plans.

Right-of-Way (ROW). D&K works with the municipality to determine whether the municipality owns the required ROW for the project. Whether permanent or temporary, if acquisitions or easements are required, D&K works with the community to acquire the rights required to construct the project.

Preliminary Plans. D&K develops preliminary plans in conformance with the NHDOT requirements. Following are key elements of the preliminary plans:

Location plan	Vertical alignment
General plan and profile	Cross slope
Detail sheets	Grading, drainage, utilities, and erosion control
Bridge layout sheets	Signal modifications
Typical and critical cross-sections	Pedestrian crossings
Cross-section intersecting facilities	Signing and striping design and layout
Horizontal alignment	Updated OPCC

In addition, applicable permit applications will be prepared and submitted to the appropriate agencies at this time. Meetings with NHDOT Cultural and Natural Resources occur during the preliminary design phase.

Final Plans/Contract Documents. In this phase, D&K incorporates comments and permitting requirements. The results are the development of plans, specifications, and estimates (PS&E) submission. Deliverables typically include the following:

- Structural bridge details**
- Details for drainage, saw cuts, curbing, and transitions**
- Traffic management plan**
- Erosion Prevention and Sediment Control Plan and details**
- Checks that construction plans agree with pay items in contract and the final OPCC**
- Coordination of utility relocation**
- Updated OPCC**
- Contract documents**

Bidding Documents. D&K prepares completed bid documents in accordance with NHDOT LPA program requirements, including the final contract plans, bid forms, and construction specifications. Construction specifications include standard front-end documents, including instruction to bidders, bid forms, standard general conditions, supplementary conditions, federal funding requirements, and special provisions. We assist the municipality in review the contractor bids and we provide a recommendation of award.

Construction Administration. D&K's services include submittals, pay requests, change orders, meetings, observation, Federal Compliance Office requirements, walk-through, record drawings, and closeout.

ADDITIONAL WORK SERVICES REQUIRED

D&K's Project Managers regularly coordinate with the LPA Program, NHDOT, and stakeholders. D&K provides traffic control design, hydraulic modeling and analyses, and geotechnical services, plus the following:

Permitting Assistance. D&K staff guide projects through local, state, and federal regulatory documentation, clearances, and permits. With expertise in documentation, alternative analysis, and resource identification, delineation, and mitigation, D&K has provided NEPA, environmental, and permitting services for assignments, including large, small, complex, and routine projects.

Planning and Study Phase. D&K's planners and engineers partner with communities, state agencies, RPCs, and the public on many projects. These efforts involve a public engagement process that includes public hearing presentations, project websites, and a range of interactive tools to suit project and stakeholder needs.

Survey. D&K uses the latest survey tools to achieve a high level of accuracy and reduce data collection and processing time for basemaps developed in AutoCAD and/or MicroStation. D&K's field personnel are equipped with robotic total station and RTK GPS systems. The firm also uses small unmanned aerial systems (drones) to collect planning-level survey data and develop project exhibits.

Online Bid Portal. The D&K website includes a bid portal to assist communities in providing project bid services that outreach to contractors throughout New England.

ORGANIZATIONAL CHART

Note: Resumes are included for key staff who are described in **bold** throughout this document.



PROJECT TEAM

	Years of Experience	Years with D&K	LPA Experience	LPA Certified	Project Management	Highway Design	Bridge Design	Structural Engineer	Alt. Procurement Methods	Corridor Study Planning	Bridge Inspection	Bridge Load Rating	Hydrology/Hydraulics	Environmental	Traffic Analysis	Geotechnical Engineer	Surveyor	Public Involvement
Chuck Goodling, PE, Contract Manager	38	36	✓	✓	✓	✓			✓					✓				✓
David Conger, PE, Division Manager	31	18	✓		✓	✓			✓	✓			✓		✓			✓
Chris Lathrop, PE, Senior Highway Engineer	28	17	✓		✓	✓			✓						✓			✓
Brian Breslend, PE, Sr. Highway Engineer	16	16	✓	✓	✓	✓			✓						✓			✓
Ken Robie, PE, Senior Highway Engineer	33	3			✓	✓	✓		✓	✓				✓				✓
Jenny Austin, PE, Traffic Engineer	24	11			✓	✓				✓					✓			✓
Stephanie Solla, PE, Transportation Engineer	10	7	✓			✓									✓			
Olga Dalmer, Senior Designer	18	8	✓															
Megan Ooms, PE, Senior Bridge Engineer	15	2	✓	✓	✓		✓	✓	✓		✓	✓						✓
Bob Durfee, PE, Senior Bridge Engineer	46	18	✓	✓	✓	✓	✓	✓	✓		✓	✓						✓
Babak Tavakoli, PE, Senior Bridge Engineer	38	1			✓	✓	✓	✓	✓		✓	✓						✓
Tim Dall, PE, SE, Senior Structural Engineer	25	10			✓		✓	✓	✓		✓	✓						✓
Andrew Hummers, PE, Bridge Engineer	18	1			✓		✓	✓	✓		✓	✓						✓
Cameron Bellisle, EIT, Bridge Engineer	8	8	✓	✓			✓	✓			✓	✓						✓
Antonio Sanz, Jr., Senior Designer	23	23	✓			✓	✓				✓			✓				✓
Nicholas Sceggell, PE, Env. Engineer	19	11	✓		✓				✓				✓	✓				✓
Aimee Rutledge, PWS, CPESC, CPSWQ	24	2	✓		✓									✓				✓
Jon Ashley, PE, Env. Engineer	31	8			✓	✓			✓					✓				✓
Jon Richardson, Wetland Scientist	11	1												✓				✓
Aaron Marcus, Wetland Scientist	17	1												✓				✓
Emily Lewis, PLA, Landscape Architect	16	3			✓					✓				✓	✓			✓
Dan Mallach, PLA, AICP, CPRP, Landsc. Arch.	19	2			✓					✓				✓				✓
Kait Campbell, Planner	2	1																✓
Andy Hoak, PE, PG, Sr. Water Resource Eng.	30	8	✓		✓	✓			✓				✓	✓				✓
Alaina Smith, PE, CFM, Sr. Water Res. Eng.	30	1	✓										✓					✓
Wil Horton, Jr., PE, Senior Elec. Engineer	36	12	✓		✓				✓									✓
Alan Gould, PE, Senior Electrical Engineer	34	5	✓		✓				✓									✓
Randall Otis, LLS, Licensed Surveyor	22	17	✓															✓
Frank Yerkes, LLS, Licensed Surveyor	45	2	✓															✓
Chad Russo, Survey Party Chief	14	5	✓															✓
Brett Beliveau, Survey Party Chief	37	1			✓									✓				✓
Marshall Burd, Survey Technician	20	2																✓
Charles Johnston, PE	8	8			✓		✓		✓				✓	✓		✓		✓
Zach Bacon, EIT	2	1	✓													✓		✓

KEY STAFF

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS AT D&K
Chuck Goodling: Contract Mgr.	Professional Engineer, LPA	38	34

Chuck is D&K's President and has served as Principal, Project Director, and Project Manager for numerous federally-funded municipal infrastructure projects, including roadway reconstructions throughout New Hampshire and the Northeast.

David Conger: Division Director.	Professional Engineer	31	18
---	------------------------------	-----------	-----------

David is the Director of D&K's Transportation Division and has managed a wide range of multimodal, roadway, bridge, and site projects.

Highway and Civil

Chris Lathrop	NH Professional Engineer	28	17
----------------------	---------------------------------	-----------	-----------

Chris manages D&K's Highway Department. His experience includes resurfacing and safety improvements for local, state, and federal roads.

Brian Breslend	NH Professional Engineer, LPA	16	16
-----------------------	--------------------------------------	-----------	-----------

Brian has experience in the design and construction phases of locally- and state-managed multimodal- and vehicle-focused projects.

Bridge

Megan Ooms	Professional Engineer, LPA	15	2
-------------------	-----------------------------------	-----------	----------

Megan manages D&K's Bridge Department; experience includes study, design, and construction phases of DOT, SBA, MOBRR, and LPA projects.

Bob Durfee	NH Professional Engineer, LPA	46	18
-------------------	--------------------------------------	-----------	-----------

Bob's experience includes 75+ SBA projects. He provides national-level expertise in the restoration of covered and other historic bridges.

Environmental

Nick Sceggell	NH Professional Engineer, LPA	18	10
----------------------	--------------------------------------	-----------	-----------

Nick has significant design and permitting experience for LPA, roadway, utility, utility bridge, SBA bridge, drainage, and site projects.

Aimee Rutledge	Prof. Wetlands Scientist, Cert. Prof. in EPSC, Cert. Prof in H₂O Quality	24	2
-----------------------	--	-----------	----------

Aimee has led a wide range of environmental resource conservation and documentation projects focusing on NEPA, RTE doc., and stormwater.

Multimodal Planning, GIS, and Public Engagement

Emily Lewis	NH Professional Landscape Architect	16	3
--------------------	--	-----------	----------

Emily manages D&K's Planning and Landscape Architecture Group and has experience leading public engagement and managing transportation, community, and land use planning projects for municipal, planning commission, and state clients.

Water Resource

Andy Hoak	Professional Engineer, NH Professional Geologist	30	8
------------------	---	-----------	----------

Andy has experience leading H&H studies, environmental/hazmat, permitting, soil, geology, slope, dam, river restoration, and site projects.

Electrical

Wil Horton, Jr.	NH Professional Engineer	36	12
------------------------	---------------------------------	-----------	-----------

Wil frequently leads design of distribution and code compliance for signals, site lighting, street lighting, facilities, and other infrastructure.

Survey/Drone

Randy Otis	NH Licensed Land Surveyor, FAA Part 107 sUAS Pilot	22	16
-------------------	---	-----------	-----------

Randy manages D&K's survey department. He provides boundary, ROW, topographic, and construction survey and research.

Soils Engineering

Charlie Johnston	NH Professional Engineer	8	8
-------------------------	---------------------------------	----------	----------

Charlie has experience modeling soils structure, groundwater migration, and open channel flow dynamics.

Subconsultants: D&K will engage the following subconsultant partners: Historic Documentation Co. (cultural resources), Monadnock Archeological (cultural resources), S. W. Cole (additional geotechnical capacity, borings), Heritage Protection Group (Fire Protection Engineering), and SFC Engineering Partnership (Fire Protection Engineering).

REFERENCES

David Stack

Bow Town Manager
10 Grandview Road
Bow, NH 03304
603.228.1187 ext. 110,
townmgr@bow-nh.gov



Projects: Four SBA projects, one pedestrian crossing project, and one State Aid Highway Project, plan review, and construction observation

D&K has served as Bow's Town Engineer since December 2011. Services also include formal and informal site visits to respond to emergencies and short- and long-term projects; transportation planning; and engineering to support capital improvement planning.



Carol Murray, PE

Public Works Director
Town of Wells
208 Sanford Road, Wells, ME 04090
603.630.9980, murray@wellstown.org

Projects: Webhannet Seawall Replacement and Rehabilitation, Casino Square Seawall Replacement and Rehabilitation, Newhall Road Bridge Replacement, Drakes Island Bridge Replacement, Bragdon Road Bridge Replacement, and Charles West Bridge Rehabilitation



Tad Putney

Town Administrator
Town of Brookline
8 Milford Street, Brookline, NH 03033
603.620.0014, tadputney@hotmail.com

Project: South Main Street Sidewalks and Bridges, LPA project

Michael Brady

Hill Selectboard
30 Crescent Street, Suite 1
Hill, NH 03243
603.934.1094, hillsselectmen@comcast.net

Projects: Bunker Hill Road Bridge Rehabilitation; Borough Road Bridge Replacement



APPENDIX: PROFESSIONAL RESUMES

Following are descriptions of relevant project assignments for key staff.

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Chuck Goodling	Professional Engineer, LPA	38	34
Marlboro Street Reconstruction, Keene (LPA and Municipal Funds)			
Principal-in-Charge for the design of 4,700 ft of utilities and road reconstruction in an urban commercial/residential area. Provided QA review of transportation design and survey; design of water and sewer service, stormwater, and drainage; public outreach; and permitting assistance. Design elements incorporate Complete Streets multimodal transportation design measures. The utility portion was constructed using municipal funds. The streetscape improvements received LPA-administered funds.			
Keating-Birchwood Area Reconstruction, Dover (Federal and Municipal Funds)			
Principal-in-Charge for design of 4,000 ft of utilities and road reconstruction in a residential area. Firm services included transportation design and survey, and water and sewer service design, stormwater and drainage design, public outreach programs, and associated permitting.			
David Conger	NH Professional Engineer	33	31
NH 12A Bridge over NH RR, Lebanon (MOBRR)			
Director for the design of a 63-ft-long steel stringer with concrete deck superstructure on skewed abutments carrying NH 12A over the NH Railroad.			
Archertown Road over Jacobs Brook Bridge, Orford (SBA)			
Director for the evaluation and design of a municipally-owned bridge. Provided client coordination, including meetings.			
Highway and Civil			
Chris Lathrop	NH Professional Engineer	28	17
NH 12A Bridge Replacement, Lebanon (MOBRR)			
Senior Roadway Engineer for a project that replaces a state highway bridge over the NH Railroad.			
Highway Resurfacing IDC, VTrans, Statewide, VT (FHWA)			
Project Manager for successive on-call paving contracts. Responsible for advancing design for more than 300 miles of US and state highway projects. Projects also include signing, intersection, drainage, and multimodal improvements.			
Brian Breslend	NH Professional Engineer, LPA	16	16
Lahaye Drive Shared Use Pathway, Lebanon (LPA)			
Project Manager responsible for survey, design, permitting of an approximately 1,000-ft section of a multi-use path.			
NH 12A Bridge over NH RR, Lebanon (MOBRR)			
Senior Roadway Engineer for a project that replaces a state highway bridge over the NH Railroad.			
Bethel Mountain Road Slope Stabilization, Rochester, VT (FHWA ER)			
Project Manager responsible for advancing construction, design, and permitting of a 2,800-LF roadway repair project in fewer than six months. <i>The project received a Grand Award for Engineering Excellence from ACEC-VT.</i>			

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Bridge			
Megan Ooms	Professional Engineer, LPA	15	2
NH 12A Bridge over NH RR, Lebanon (MOBRR)			
Senior Bridge Engineer for the design of a 63-ft-long steel stringer with concrete deck superstructure on skewed abutments carrying NH 12A over the NH Railroad.			
NH 18 Bridge Over Connecticut River, Littleton, and Waterford, VT (NHDOT)			
Senior Bridge Engineer for a rehabilitation study of a 526-ft-long five-span steel plate girder bridge that was constructed in 1934. The study includes a detailed superstructure evaluation of the existing steel plate girders, an assessment of the reinforced concrete abutments and piers, and rehabilitation and replacement options.			
Bob Durfee	NH Professional Engineer, LPA	46	18
Main Street Bridge Rehabilitation, Laconia (SBA and Municipally Managed)			
Project Manager for the rehabilitation design of a three-span curved steel stringer vehicle and utility bridge over the Winnepesaukee River in a confined urban context. The project included complex construction phasing. <i>The project received the Overall Award for Engineering Excellence from ACEC-NH.</i>			
Village Covered Bridge Rehabilitation, Wentworth (SBA and Municipally Managed)			
Project Manager for the inspection, transportation, and rehabilitation of a covered recreation bridge with a six-ton capacity. <i>The project received awards from ACEC-NH, SENH, and Plan-NH.</i>			
Lilac Pedestrian Bridge, Hooksett (SBA and Municipally Managed)			
Project Manager for the fast-tracked evaluation, design, and construction phase of a project that replaced a failing bridge with a 490-ft-span steel truss. <i>The project received a Silver Award for Engineering Excellence from ACEC-NH.</i>			
NH 12A Bridge over NH RR, Lebanon (MOBRR)			
Project Manager for a VE study and the design of a 63-foot-long steel stringer with concrete deck superstructure on skewed abutments carrying NH Route 12A over a railroad.			
Environmental			
Nick Sceggell	NH Professional Engineer, LPA	19	11
Marlboro Street Reconstruction, Keene (LPA)			
Project Manager for the design of 4,700 ft of utilities and road reconstruction in an urban commercial/residential area. The project includes the use of chicanes and other multimodal safety improvements.			
Town Beach Water Quality and Drainage Improvements, Sanbornton (Municipal Funds)			
Project Engineer for improvements to the town's beach on Lake Winnisquam. Services included field survey, a drainage study, stormwater design according to Best Management Practices (BMP), and permitting with NHDES in accordance with Shoreland Protection Act requirements. Implemented underground stormwater storage, a bioretention area (rain garden), a vegetated treatment swale, and a series of retaining walls to minimize erosion.			
Lilac Pedestrian Bridge, Hooksett (SBA and Municipally Managed)			
Environmental Engineer for the fast-tracked evaluation, design, and construction phase of a project that replaced a failing bridge with a 490-ft-span steel truss. Responsible for wastewater forcemain and pumping design. <i>The project received a Silver Award for Engineering Excellence from ACEC-NH.</i>			

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Aimee Rutledge	Prof. Wetlands Sci., Cert. Prof. in EPSC, Cert. Prof in H ₂ O Quality	24	2

Stormwater Asset Management Plan, Pembroke (NHDES Funds)

Senior Environmental Technical Lead responsible for coordinating scheduling and budgeting, working with the town to develop a vision statement and stakeholder list, assisting with level of service workshop, utilizing ArcGIS for asset inventory and criticality ratings, and development of implementation plan.

Jeness Cove, Windy Waters Conservancy, Meredith (Local Funds)

Project Manager responsible for developing a scope, site investigation, alternative analysis, and recommendations report to address sedimentation of Jenness Cove in Lake Waukewan, a tributary of Lake Winnepesaukee.

VTrans Natural Resources Services Term Agreements, Statewide, VT (State and Federal Funds)

Project Manager responsible for managing task assignments; performing wetland delineation; stream assessment; identifying rare, threatened, and endangered species; and state and federal permitting. Under numerous term contracts, provided a wide range of environmental services to VTrans, including wetland delineations, wildlife connectivity analyses, stream channel characterization, state and USACE wetland permitting, bat surveys, and rare mussel surveys and relocation.

Multimodal Planning, GIS, and Public Engagement

Emily Lewis	NH Professional Landscape Architect	16	3
-------------	-------------------------------------	----	---

Robin Hood Park, Keene (Municipal Funds)

Project Manager and Lead Landscape Architect to support the City, the Design Concept Committee, and the general public by reviewing the current infrastructure and park conditions, specifically the approximately nine-acre area that encompasses the pool, parking, playground, and tennis courts, while keeping in mind the connectivity to the greater 100-acre park and preparing a new conceptual design plan. Responsible for managing D&K's scheduling and budgeting, leading the conceptual design, and client and stakeholder coordination.

Crescent Connector, City of Essex Junction, VT (FHWA Funds)

Landscape Architect for an \$8M FHWA-funded 1,800-ft-long roadway project that bypasses the east side of a congested five-way intersection with two adjacent rail crossings. D&K's scope of work includes design plans and cost estimates, permitting, right-of-way acquisition and utility relocation assistance, public outreach, preparation of bid documents, and engineering design services during construction. This Complete Streets project was administered through the VTrans Municipal Assistance Section (MAS). Developed landscape plan.

Bicycle and Pedestrian Path Scoping Study, Dorset, VT (Municipal, State, and Federal Funds)

Landscape Architect for a potential multi-use path of approximately 3.5 miles connecting the Village to the northern terminus of the historic Manchester Rail Trail.

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Water Resources			
Andy Hoak	Professional Engineer, NH Professional Geologist	30	8
Keating-Birchwood Area Reconstruction, Dover (Municipal Funds)			
Geologist for design of 4,000 ft of utilities and road reconstruction in a residential area. Design elements incorporate Complete Streets multimodal transportation design measures and the integration of LID stormwater infiltration and treatment facilities. Responsible to evaluate subsurface conditions.			
Roxbury Road Slope Stabilization, Marlborough (Municipal Funds)			
Geologist for evaluation and remedial design to address a failing 50-ft by 50-ft roadway slope on the outside of a corner. Led analysis of subsurface conditions based upon soil testing results, survey, and available mapping.			
Electrical Engineering			
Wil Horton, Jr.	NH Professional Engineer	36	12
Taxiway Lighting System, MHT, Manchester (NHDOT Block Grant)			
Responsible design and layout of a taxiway centerline lighting system and a grounding system for a new apron.			
Main Street Lighting Design, St. Albans, VT (FHWA, State, and Municipal Funds)			
Senior Electrical Engineer for design of underground distribution for a downtown revitalization project. Improvements included distribution design for LED street lighting, 200A event service to a park, and traffic signals.			
Survey/Drone			
Randy Otis	NH Licensed Land Surveyor, FAA Part 107 sUAS Pilot	22	17
Keating-Birchwood Area Reconstruction, Dover (Municipal Funds)			
Topographic survey for 4,000 fe of utilities and road cross-sections in a residential neighborhood.			
Lilac Pedestrian Bridge, Hooksett (SBA and Municipal Funds)			
Survey Party Chief for topographic and existing conditions survey for a project that removed a three-span 490-foot vehicle truss bridge and installed a new pedestrian and utility bridge. The replacement structure accommodates H6 loads and new water and sewer lines. <i>The project received a Silver Award for Engineering Excellence from ACEC-NH.</i>			
Dunklee Road Bridge, Bow (SBA and SAH Funds)			
Survey Party Chief for topographic and existing conditions survey for the rehabilitation of Bridge No. 182/113 on Dunklee Road over Bog Brook. The project replaced a 20-ft precast concrete, rigid frame structure that had inadequate scour protection and wingwall foundation support and substandard retaining walls.			
Soils Engineering			
Charles Johnston	NH Professional Engineer	8	8
Goose Pond Dam Rehabilitation, Keene (Municipal Funds)			
Project Engineer and Resident Project Representative for the design and permitting of a 22-ft-high, 300-ft-long earthen dam and 10-ft-high, 200-ft-long dike. Duties included field engineering; structural and geotechnical engineering; participation in biweekly site construction meetings between the Owner, New Hampshire Dam Safety program, and the Contractor; and review of shop drawings and submittals, RFIs and substantial/final design certifications.			
Granite Wall Reconstruction, One Taylor Street, Montpelier, VT (Federal Funds)			
Resident Engineer for a project to reconstruct 80 ft of granite retaining wall along the Winooski River. The wall is part of a federally-funded project that included removal of 3,000 tons of contaminated soil, site preparation for a four-story transit center, and coordination with regulatory agencies for the redevelopment of this brownfield site.			

APPENDIX: APPLICABLE WORK EXPERIENCE

PROJECT	LOCATION	STUDY	DESIGN	PERMITTING	BID PHASE	CONSTRUCTION
LPA (TA/TE/CMAQ, etc.)						
S. Main Street Sidewalks & Bridge	Brookline	■	■	■	■	■
SRTS Sidewalks	Claremont	■	■	■	■	■
Pedestrian Crossing	Newmarket	■	■	■	■	■
Road Diet Painted Pedestrian Facilities	Keene	■	■	■	■	■
Marlboro Street	Keene	■	■	■	■	
NH 130 Sidewalks	Brookline	■	■	■	■	■
SRTS Sidewalks	Hillsborough	■	■	■	■	■
Alvah Wilson Sidewalks & Bridge	Gilford	■	■	■	■	■
Lahaye Drive Shared Use Pathway	Lebanon	■	■	■		
SRTS Sidewalks	New Ipswich	■	■	■	■	■
State Aid Highway						
Dunklee Road/NH 3A Intersection	Bow	■	■	■	■	■
Municipal Bridge Aid and MOBRR						
South Road Bridge	Harrisville	■	■	■	■	■
NH 12A Bridge over NH RR	Lebanon	■	■	■		
Dunklee Road Bridge	Bow	■	■	■	■	■
Birchdale Road Bridge	Bow	■	■	■	■	■
Lilac Pedestrian Bridge	Hooksett	■	■	■	■	■
First Crown Point Road Bridge	Strafford	■	■	■	■	■
Converse Road Bridge	Temple	■	■	■	■	■
Main Street Bridge,	Laconia	■	■	■	■	■
Archertown Road Bridge	Orford	■	■	■	■	■
Northwood Road Bridge	Strafford	■	■	■	■	■
Evans Road Bridge	Wentworth	■	■	■	■	■
Sutton Road Bridge	Newbury	■	■	■	■	■
Places Mill Road Bridge	Alton	■	■	■	■	■
Village Road Bridge	Newbury	■	■	■	■	■
Fremont Road Bridge	Fremont	■	■	■	■	■
Belknap Mountain Road Bridge	Gilford	■	■	■	■	■
Borough Road Bridge	Hill	■	■	■	■	■
Towle Road Bridge	Chester	■	■	■	■	■
Croydon Road Bridge	Grantham	■	■	■	■	■
Cass Mill Road Bridge	Hill	■	■	■	■	■
Ridge Road Bridge	Nashua	■	■	■	■	■

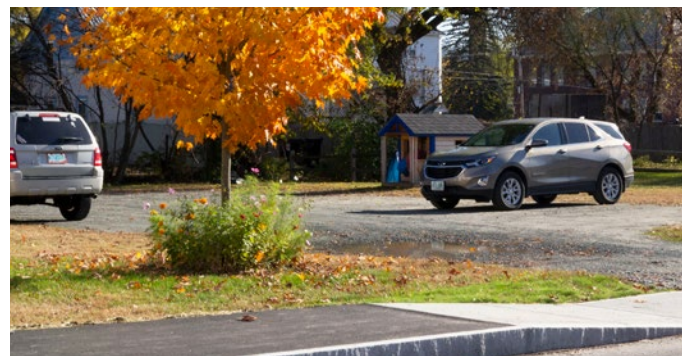
To provide a detailed overview of D&K’s experience for each project type, select project descriptions and photographs follow.



The Main Street Bridge included complex construction phasing (numbered above) to virtually eliminate roadway and waterway closures, as well water, sewer, and electrical utility interruptions. D&K's team partnered closely with the City, businesses, and event organizers throughout design and construction.

Main Street Bridge, Laconia. D&K provided study, evaluation, and design for the rehabilitation of the Main Street Bridge, the primary crossing over the Winnepesaukee River and predominant access in and out of the downtown area. The bridge consists of three distinct and separate bridge structures that each carry a City street. The three streets and bridge structures converge to make one overall bridge structure at the street intersections. The spans include a 137-ft, 80-ft-wide curved bridge, constructed in 1968; a 75-ft by 69-ft-wide structure, constructed in 1970; and a 137-ft, 70-ft-wide, curved bridge, constructed in 1968. *ACEC-NH awarded this project the overall Award for Engineering Excellence.*

SRTS Sidewalks, Claremont. D&K provided evaluation, design, permitting, and bid phase services for 1,500 linear feet of sidewalk in downtown Claremont. The LPA project's elements include installation of ADA tip-downs and detectable warning surfaces and replacement of selected sections of sidewalk on Belding Street from North Street to Hanover Street and the north side of Myrtle Street from Forest Street to Tyler Street. D&K's services included preliminary and final design, public meetings, and bid phase assistance.



Lilac Pedestrian Bridge, Hooksett. D&K provided design and permitting assistance for replacement of a 490-ft former vehicle and wastewater utility bridge over the Merrimack River. The project was completed under a compressed timeframe and included eight separate stakeholder groups with jurisdiction over the project. The completed project is a prefabricated steel truss that mimics the appearance of the original historic truss. D&K managed coordination and moderated conflicts between these groups throughout this complex project's design and construction phases. *The project received a Silver Award for Engineering Excellence from ACEC-NH.*





Four SBA Projects, one Pedestrian Crossing Project, and one State Aid Highway Project, Bow. D&K is providing evaluation, design, and permitting for a range transportation projects, including replacement of the Birchdale, Page, and River Road Bridges, rehabilitation of the Dunklee Road Bridge, installation of a high-intensity activated crosswalk beacon (HAWK Beacon) on NH 3A; and installation of a new signalized intersection of NH 3A and Dunklee Road. Birchdale Road Bridge and the NH 3A HAWK Beacon have been completed and the Dunklee Road Bridge and Intersection projects were recently construction Page and River Road Bridges are advancing through design phases. D&K has served as Bow's Town Engineer since 2011.



Village Common Covered Bridge Rehabilitation (Design-Build), Wentworth. The Town of Wentworth and the NHDOT faced a complex situation: a circa-1909, irreparable, 96-ft-long, steel truss bridge over the Baker River was to be removed, rerouting school children and others along an unprotected shoulder on NH 25. Concurrently, the client found a freely available, but longer, 106-foot covered bridge at an active demolition site. Rapidly, under a small, uncertain budget, D&K designed shoring and historic rehabilitation for transport of the bridge to be placed on modified abutments. D&K observed construction activities and provided resident engineering for this project. Removal of the existing bridge and modification of the abutments were completed using SBA funding; D&K used the design-build method to reduce costs and project delays. *The project received awards from PlanNH, ACEC-NH, and SENH.*

Marlborough Street Reconstruction, Keene. D&K is providing evaluation, study, design, and permitting for a two-phase project that reconstructs utilities, resurfaces the roadway, installs chicanes to calm traffic, and completes appurtenant pedestrian connectivity improvements. The project is located in a mixed-use urban context and requires significant coordination with a large number of abutters as well as city staff. The municipally-funded utility reconstruction is completed and the TAP-funded roadway portion is in the design phase.



NH 12A Bridge over NH RR, Lebanon. D&K studied existing conditions, reviewed work by another consultant, and value engineered the design of a new bridge replacement. Three alternatives were developed for replacement of Bridge 062/117 which carries NH 12A (S. Main Street) over the NH Railroad. Currently posted for 20 tons, the circa-1949 bridge is composed of a 145-ft-long, 27-ft-8-in-wide, three-span steel stringer superstructure with a concrete deck. The substructure consists of pile-supported abutments and pile bents. Firm services include assessment of existing conditions, assessment of previous alternatives/design, development of alternatives concepts, and completion of a narrative report summarizing this information. The preferred alternative is a 63-ft-long steel girder with concrete deck superstructure on skewed abutments. The project received MOBRR funding.



South Main Street Sidewalks and Bridge, Brookline. D&K is assisting the Town of Brookline with the development of sidewalks, pedestrian crossings, and pedestrian bridges along South Main Street and Mason Road. The project includes installation of approximately 2,300 LF of new sidewalk and two pedestrian bridges. Transportation Alternatives Program (TAP) funding for the project is administered through the NHDOT LPA program. D&K guided the Town through the LPA process by providing survey, design, NEPA documentation and permitting assistance, wetland delineation, public engagement, traffic analyses, and construction phase services.



Windham Depot, Windham. D&K provided site engineering services for a historic rail facility and parking/picnic area for the Salem-Concord Bikeway. D&K worked with the Town of Windham's Administrator and the Windham Depot Advisory Committee to prepare design documents. The project rehabilitated the existing train and freight station buildings to mimic their original state; constructed 37 parking spaces and oversized parking for winter motorized and equestrian recreation; created a green space and picnic area space; and installed new electrical, toilet facilities, and cosmetic improvements. The project received funds administered by the NHDOT LPA program.



Lahaye Drive Shared Use Pathway, Lebanon. D&K is providing design and permitting for a TAP-funded project that constructs an approximately 1,000-ft-long multimodal pathway serving employees and visitors of Dartmouth-Hitchcock Medical Center. D&K is responsible for providing study and design phase services, public engagement, and environmental documentation and permitting as required by the NHDOT LPA process. The photo shown to the right indicates a potential pathway location.



Gale River Loop Road Bridges (Design-Build), USFS, Bethlehem. D&K was the lead engineer, provided all of the engineering and survey services, managed the project, prepared all contract documents for the design-build team, and managed the project. A storm event damaged sections of the National Forest roadway, removing surfacing and cutting into the subgrade and ditch, destroying three roadway bridges, and damaging a fourth bridge. D&K designed three replacement structures with spans ranging from 43-ft to 47-ft, including new precast concrete panel walls (large MSE panels) set on precast concrete footings and new glue-lam timber decks. Roadwork included embankment construction, drainage excavation, installation of culverts, and paving the aprons to the four bridges.



Weirs Community Park, Laconia. D&K worked with the City's Parks and Recreation Department to design a new park on Lucerne Avenue. The park includes a restroom building, amphitheater, playground, and pavilion. D&K designed LID stormwater practices, including swales and a new rain garden. Site lighting consisted of low wattage, low-lumen output, full cutoff, LED architectural-style pole-mounted luminaires to produce low-level lighting of the park, roadway, pavilion, and amphitheater. The lighting system utilized occupancy and motion sensors and photocells to control lighting and reduce energy use.



Pier and Wright's Covered Bridges, Newport. D&K designed the rehabilitation of the Pier and Wright's Covered Bridges. Pier Covered Bridge, constructed in 1907, is a 217-ft-long, two-span continuous covered bridge. Heritage Protection Group designed dry sprinkler systems, linear heat detection systems, and dry hydrants. The project included provisions for vandal-resistant lighting. D&K's design included application of intumescent paint, insecticides, and fire retardant and repair of deteriorated upper lateral bracing, timber siding, deck, and runner planks. Wright's Covered Bridge, constructed in 1906, is a 124-ft-long, single-span truss. Principles of the Secretary of the Interior's Standards for Rehabilitation and the Burlington Charter were applied to all phases of the work. This project included a Section 106 historical clearance.



Bunker Hill Road Bridge, Hill. D&K provided study, design, and construction phase engineering for the rehabilitation of Bridge No. 140/099 on Bunker Hill Road. Services included an alternatives evaluation and recommendations to rehabilitate the existing bridge, permitting assistance, preparation of final engineering plans and specifications, assisting the Town during the bid phase, and providing the Town with construction administration services. The Bunker Hill Road bridge is a 21.5-ft-long precast concrete voided slab deck on cast-in-place concrete abutments. D&K completed a detailed study that evaluated several cost-effective rehabilitation alternatives. The preferred alternative was to replace the deteriorated concrete deck span with a new precast concrete voided slab deck, new bridge and approach rails, and minor repairs to the concrete abutments.

