



LINDA M. HODGDON
Commissioner
(603) 271-3201

State of New Hampshire

DEPARTMENT OF ADMINISTRATIVE SERVICES
OFFICE OF THE COMMISSIONER
25 Capitol Street – Room 120
Concord, New Hampshire 03301

19 *DM*

JOSEPH B. BOUCHARD
Assistant Commissioner
(603) 271-3204
Bureau of Public Works
Design & Construction

November 1, 2013

Her Excellency, Governor Margaret Wood Hassan
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Administrative Services, Bureau of Public Works Design and Construction to enter into an agreement with Dubois & King, Inc., (Vendor Code 160381) 6 Green Tree Drive, South Burlington, Vermont 05403 in an amount not to exceed \$300,000 for Mechanical Services required for planning, design and construction of various Public Works' Projects as necessary and required by the Department. The contract is effective from the date of Governor and Council approval through June 30, 2016.

EXPLANATION

The Department proposes to retain the private consulting firm Dubois & King, Inc., to expedite the current project workload and provide appropriate technical expertise as required for specific projects. This is one (1) of three (3) open-ended agreements for Mechanical services that will be presented for approval. The agreement will enable the Department to respond quickly to unscheduled project requests and possible emergencies regarding Mechanical services issues. The decision as to which projects will be assigned will be made on a case-by-case basis depending on the particular expertise required and the firm's current workload.

This type of consulting agreement will be funded from the monies for each project. The majority of projects needing this type of Mechanical services consultant work are maintenance and capital funded projects.

This agreement is a proposed contract with the Mechanical services firm selected to provide on-call Mechanical services. It is anticipated that Mechanical services can be handled by three (3) Mechanical firms through the contract period.

The consultant selection process employed by the Department for this project is in accordance with RSAs 21-I:22, 21-I:22-c, and 21-I:22-d, all applicable Federal Laws and the Department's procedures for "Selection of Engineers, Architects and Surveyors dated July 28,

2005. Cumulative scoring was used in this selection process in order to assure that the perspective of each committee member received proper consideration during scoring deliberations. Each committee member, Mark Nogueira, Michelle Juliano, Gordon Graham and Beverly Kowalik, brings different strengths and knowledge to the table. This allows thorough discussion and weighing of the different perspectives during the scoring process. This process also makes follow-up explanations to the unselected firms easier.

In April 2013, the Bureau of Public Works Design & Construction advertised in the Union Leader, the Bureau of Public Works Design & Construction website and email notification soliciting interest in providing on-call Mechanical Services. The following table lists the fourteen (14) consultant firms that submitted letters of interest and were considered for this assignment.

Colby Company Engineering	RDK Engineers
Dubois & King, Inc.	RFS Engineering
Harriman Associates	SMRT
Loureiro Engineering	Stantec Consulting Services, Inc.
McFarland Johnson	H. L. Turner
Oak Point Associates	WV Engineering Associates
John Penney	Yeaton Associates, Inc.

The firms were then rated on the basis of comprehension of the assignment, clarity of the proposal, capacity to perform in a timely manner, quality and experience of the project manager and team, and overall suitability for the assignment. It is now the Department's intent to enter into Statewide Consultant Service Agreements with the three (3) highest rated firms as their legal documentation and Certificate of Insurance become available.

Dubois & King, Inc.	Yeaton Associates, Inc.
Stantec Consulting Services Inc.	

A copy of Dubois & King's Statement of Qualifications is provided, herewith, for your information and convenience.

The subject agreement has been approved by the Attorney General as to form and execution. Copies of the fully executed agreement are on file at the Secretary of State's Office and the Department of Administrative Services, Bureau of Public Works Design & Construction.

Respectfully submitted,

Linda M. Hodgdon,
Commissioner

Explanation of Statewide Consultant Committee Selection

Members are selected using the approved guidelines for the Bureau of Public Works Design and Construction “Selection of Engineering, Architects, and Surveyor Services”. Per these guidelines, the Committee should consist of the Bureau Administrator plus two other Project Managers.

The Administrator is a member of all the Selection Committees, serving to provide the larger perspective of the consultant capabilities that are desired, also bringing knowledge of the quantity of work and various types of anticipated projects the consultant may be called on to perform. He brings the perspective of achieving agency goals, using a balance of those consultants who have performed excellent work in the past, along with bringing in new consultant firms. His background in the private sector and State services provides insight into expertise, staffing and capacity of the consultant firms.

The Assistant Administrator manages the day-to-day oversight of the Consultant assignments, and is the second member of all the selection committees. Her job description specifically outlines her involvement in the management of the consultants. She brings the expertise of the day-to-day working with consultants. Her past and present experience involves frequent interaction with consultants, including review of consultants’ proposals and their engineering work.

The Discipline Head, (PM 4) for the specific type of work the consultant is being hired for (i.e. Mechanical, Civil, etc.), brings additional expertise concerning the capabilities of various consultants with whom they have worked. Their years of project management experience provide the more detailed perspective about the various consultants’ strengths or weaknesses and how they would fit with the project needs.

Administrator PM 6

Mark T. Nogueira – 24 years private sector/State Service

Asst. Administrator PM 5
Project Mgr – PM 4
Project Mgr – PM 4

Michelle Juliano - 25 years State service
Beverly Kowalik - 20 years State service
Gordon Graham - 11 years State services

Interview/Selection date: 3-Sep-13

**COMMITTEE PROPOSAL RATING FOR
MECHANICAL STATEWIDE**

Consultant Name	Comprehension of Assignment	Clarity of Proposal	Capacity to Perform in a Timely Manner	Quality and Experience of PM/Team	Overall Suitability for the Assignment	Total Score	Cumulative Score	
DuBois & King						0	91.5	<===== Highest Rating
Mark Nogueira	4.5	5	5	4.5	4.5	23.5		
Michelle Juliano	4	4	5	5	5	23		
Bevely Kowalik	5	5	4.5	4.5	5	24		
Gordon Graham	5	4	4	4	4	21		
John F Penney Consulting						0	0.0	
Mark Nogueira	0	0	0	0	0	0		
Michelle Juliano	0	0	0	0	0	0		
Bevely Kowalik	0	0	0	0	0	0		
Gordon Graham	0	0	0	0	0	0		
SMRT						0	82.5	
Mark Nogueira	4	4	4.5	4.5	4	21		
Michelle Juliano	3	4	4	4	4	19		
Bevely Kowalik	4	4.5	4	4.5	4.5	21.5		
Gordon Graham	4	4	4	5	4	21		
Stantec						0	89.5	<===== Highest Rating
Mark Nogueira	5	4.5	4.5	5	4.5	23.5		
Michelle Juliano	4	4	5	4	5	22		
Bevely Kowalik	4.5	4.5	4	4.5	4.5	22		
Gordon Graham	4	4	5	5	4	22		
HL Turner						0	85.5	
Mark Nogueira	4.5	4.5	4.5	4	4.5	22		
Michelle Juliano	4	5	4	4	4	21		
Bevely Kowalik	4	4.5	4	4	4.5	21		
Gordon Graham	4	4.5	5	4	4	21.5		
Yeaton Assoc.						0	86.0	<===== Highest Rating
Mark Nogueira	4	4	4	4.5	4	20.5		
Michelle Juliano	4	3.5	4	4.5	4	20		
Bevely Kowalik	4.5	5	4	5	5	23.5		
Gordon Graham	5	5	4	4	4	22		



522147X
June 26, 2013

Mr. Mark T. Nogueira, PE
Administrator, Bureau of Public Works Design and Construction
NH Department of Administrative Services
7 Hazen Drive, Rm. 250
PO Box 483
Concord, NH 03302-0483

RECEIVED

JUN 26 2013

Bureau of Public Works

Re: Technical Proposal for Statewide Mechanical Engineering Services

Dear Mr. Nogueira:

In response to the New Hampshire Department of Administrative Services' (DAS) Request for Proposal to provide Statewide Mechanical Engineering, DuBois & King (D&K) is pleased to provide four copies of our Technical Proposal. D&K has successfully been providing mechanical services for the DAS through two consecutive on-call retainer contracts for Mechanical Engineering Services.

From our experience with DAS projects, we understand the Department's desire and need for quick execution of the work. D&K has an excellent track record of developing scope and fee that meet project budgets and comply with DAS Project Managers schedule requirements. The firm remains committed to providing responsive service to DAS. D&K provides comprehensive mechanical-HVAC engineering services and licensed professionals to assist DAS with projects statewide.

As in previous contracts, I will serve as D&K's Contract Manager and be the point of contact with DAS Project Managers. I have direct experience working with DAS Project Managers and I have developed an understanding of how to successfully advance projects. D&K looks forward to continuing serving the DAS. Please contact me at 888.718.3376 or rfavali@dubois-king.com with any questions or if you require additional information.

Sincerely,
DuBois & King, Inc.

Robert J. Favali, LEED Green Associate
Director, Building Services

PROJECT APPROACH

Our experience working with the DAS' Project Management staff has allowed us to develop a clear and defined approach to the work. Understanding the needs of the end users (DAS client), providing quick response to scope and fee requests through well-defined proposals, providing fast track design and documentation, and continuous support during and after the construction period are key components of our project approach. Our recent experiences with DAS staff demonstrate our capacity to be responsive in developing scope and fee proposals and in delivery of services on schedule and budget.

D&K's Building Service's Department (BSD) Director, Robert J. Favali, works closely with all members of the BSD team and provides his staff with the necessary tools, time, and additional D&K support staff to accomplish the objectives of each project. With over 80 employees in five locations throughout New Hampshire and Vermont, D&K has the capacity to step-up its document output if the project schedule demands it. Clear, concise, and consistent construction documents provide the core of our approach to each project.

Rob's is an excellent communicator and his active involvement and overall responsibility with every mechanical project assures that schedules are met and that the objectives of each project are satisfied. He is responsible for the quality and timely completion of the work assigned.

Rob is closely involved with every mechanical project including participating in the actual design and drafting work. Mechanical projects that require additional services from D&K's electrical and structural staff are reviewed weekly in order to assure proper staffing for each discipline. By closely managing each project's staffing requirements through weekly meetings, the BSD team consistently meets the milestones for each project.

A key component to our project approach is providing quality staff and maintaining consistent engineering personnel throughout the life of a project. This assures consistency and continuity of the entire process from the initial facility review period through design, construction, and closeout. In summary, our project approach includes conducting a detailed field visit, obtaining field measurements and system analysis data, determining a practical design for the assignment, and then developing clear construction documents in a timely manner.

The professional experience of our staff together with the ability to clearly define the project scope, its objectives, and the schedule, have established D&K as a leader in the MEP consultant marketplace. We strive to work closely with the DAS' assigned Project Manager to make sure the overall intention of the assignment is satisfied. The scope and requirements of the project, including the design period and the construction administrative period services, are discussed and defined in order to assure that the Project Manager is sufficiently supported in a cost efficient manner.

CAPABILITY TO PERFORM THE ASSIGNMENTS IN A TIMELY MANNER

The primary mechanical design effort will be accomplished by Rob Favali, Steven Dumas, Mike Spasyk, and Tom Paquet. All design work is created in AutoCAD MEP (2012). Designer and AutoCAD technical support is provided from within the firm as required by each assignment. We incorporate the latest in sustainable design principles, comply with all State of New Hampshire codes and ordinances, and will assist you in achieving any available energy rebates or incentives on a per project basis.

We recognize that every assignment has specific coordination issues, scheduling demands, and construction measures. These unique demands are defined up-front during the field investigation period and are carried throughout our design documents so that the necessary information required to correctly bid and construct the work is reflected in our documentation.

Once the specific issues are defined, we develop the design utilizing the traditional phased approach of schematic design, design development, and construction documents. All projects are subject to our internal QA/QC process. Meetings, progress submissions, and reviews are typically part of each phase and necessary to a timely and successful project. Where necessary, we also provide fast track services that substitute the traditional phased approach of the design period with an expedited design-direct-to-document method that has proven successful for a handful of projects with DAS over the past two term agreements.

The ability to meet schedules is enhanced by our pool of available AutoCAD technical staff that can be called on to support the production demands of an assignment's schedule. Between our five offices, we have the capacity to expand or contract our production staff as necessary.

After the design period is completed and the construction documents have been released, we provide support (on an as-needed basis) during the bidding and negotiation phase. The engineering staff that was involved in the design effort will be the same staff that attend the project construction meetings, perform the on-site construction and punch list reviews, and participate in project close-out requirements.

The experience and expertise of the DuBois & King team is well suited for the diverse project assignments for the NH Department of Administrative Services, Bureau of Public Works Design and Construction team. We provide comprehensive mechanical-HVAC and plumbing engineering services including on-site system and equipment assessments, forensic and HVAC system evaluations, code compliance, energy improvements, cost estimates, complete design documents, QA/QC reviews, and construction administration services necessary to address the objectives stated for each project.

The D&K team has delivered multiple successful projects to the DAS project management staff. We have the in-house engineering experience and production capacity to address a diverse range of HVAC, plumbing, piping, ventilation, equipment upgrades, and facility assessment projects. In addition, we also have the in-house capacity to address the electrical, structural, and/or civil engineering requirements of any project that may require these additional services. Taken as a whole, this provides the DAS staff a single source for its mechanical project requirements.

PROJECT TEAM

DuBois & King has been providing professional multi-disciplined engineering and construction phase services for over 50 years. D&K has provided mechanical engineering services for over 30 years. In addition to mechanical engineering, the firm provides professional services related to mechanical systems design, including electrical and structural engineering. The firm's Building Services Division is a focused group of professionals specializing in providing engineering services related to the assessment and design of building systems infrastructure. D&K has a long history of providing engineering services for Federal and State agencies including the State of New Hampshire, State of Vermont, US Postal Service, US Fish & Wildlife, USDA Forest Service, USDA Natural Resources Conservation Service, and the US Army Corps of Engineers, along with numerous private clients and architectural firms.

Following is a summary of the key individuals assigned to this project. Professional resumes are included immediately following this Technical Proposal document.

Robert J. Favali, LEED Green Associate, Building Services Director, is D&K's **Contract Manager** for the firm's current DAS agreement. Rob will continue in this capacity for the new contract and subsequent assignments. Rob has over 35 years of professional experience in mechanical-HVAC, plumbing, and structural design and construction. He has served as Project Principal and Principal Designer for a wide range of MEP design and design-build projects. Rob has extensive project management and construction experience providing a practical approach to schematic design, system selection and layout, and overall review of D&K's integrated construction documents.

Rob will serve as the client manager and overall Senior Project Manager for all projects. His career experience includes commercial, educational, healthcare, correctional facilities, and historic preservation projects. Rob is a long standing member of ASHRAE and is current VP of the Vermont chapter.

Steven V. Dumas, PE, Senior Mechanical Engineer and Department Manager, has 30 years of engineering experience. Mr. Dumas has been responsible for overall project management, engineering, and construction administration services for projects ranging from conceptual design studies and facilities evaluations to complex, multi-discipline design packages for multi-million dollar projects. He has been directly involved in all areas of project administration: initial client need definition, proposal, basis of design definition, design development, CA services, start-up/commissioning support, and operational verification. He has specific experience with life cycle cost and ROI analysis, energy conservation evaluations, and system controls design to provide energy saving operation for both existing and new systems. He is knowledgeable in all aspects of MEP design, including HVAC, plumbing and piping, and both process and building controls. Mr. Dumas has provided services for institutional, industrial, government, and healthcare sectors.

Michael A. Spasyk, PE, LEED AP, Senior Mechanical Engineer, has over 20 years of mechanical-HVAC and plumbing design experience. Mike's broad professional experience includes higher education, commercial, industrial, and healthcare projects, including alternative energy. Mike has worked closely with Rob Favali on many of D&K's DAS mechanical projects. Mike is a professional engineer registered in the States of New Hampshire, Vermont, Massachusetts, Maine, and Virginia.

Organization Chart

STATE OF NEW HAMPSHIRE
Department of Administrative Services

CONTRACT MANAGER

Robert J. Favali, LEED Green Associate

PRINCIPAL

Jeffrey W. Tucker, PE, LEED AP

BUILDING SERVICES DIVISION

MECHANICAL

Thomas F. Boil, PE
Senior Structural Engineer

Robert F. Kischko, PE
Sr Electrical Engineer/Electrical Dept Mgr

Robert J. Favali, LEED Green Associate
Director, Building Services

Richard W. Dall, PE, SECB, LEED AP
Senior Structural Engineer

Wilbur H. Horton, Jr., PE
Senior Electrical Engineer

Steven V. Dumas, PE
Sr Mechanical Engineer/Mechanical Dept Mgr

Timothy W. Dall, PE, SE, LEED AP
BD+C, SECB
Structural Engineer

Sylvia R. Miller
Electrical Designer

Michael A. Spasyk, PE, LEED AP
Senior Mechanical Engineer

Elijah J. Daniels
Electrical Designer

Tom Paquet
Mechanical Engineer

Ronald C. Lyon, PE
Civil Engineer

David Conger, PE
Civil Engineer

Ronald E. Gauthier, LS
Chief of Survey

EDUCATION

Diploma in Architecture,
Porter School of Design, 1977

B.A., M.A., Humanities, 1990

REGISTRATIONS

LEED Green Associate

Mr. Favali has over 36 years of mechanical-HVAC and plumbing design-build experience. During his diverse career, Rob has served as: Senior Mechanical Designer for a multidisciplinary, consulting engineering company; VP, Construction Operations; VP, General Manager; VP, Estimating and Design for mechanical design-build contractors; and adjunct lecturer for Central Connecticut State University's Construction Management Program. Rob is a LEED Green Associate and is a member of ASHRAE, NEHES, NFPA, and the Vermont Green Builders Network (VGBN). He is currently President-Elect for the Vermont ASHRAE chapter.

Mechanical Engineering Services, Statewide Term Agreement, New Hampshire Bureau of Public Works Design and Construction. Senior Project Manager working with the Bureau of Public Works to address mechanical, electrical, and associated structural engineering issues for HVAC for State facilities. Projects include:

- **New Hampshire Army National Guard, Concord**
 - › Designed renovations to the HVAC systems for a truck repair facility at Building 'G'.
- **Men's State Prison, Concord**
 - › Completed design to reconfigure the existing HVAC ventilation system that serves the Special Housing Unit.
 - › Replaced (2) existing aging gas-fired boilers with (3) new high efficiency condensing boilers.
- **New Hampshire Department of Health & Human Services**
 - › Designed upgrades to replace a 200-ton chiller and a 25-ton glycol chiller and exterior panels on the cooling tower and improvements to pumping systems.
 - › Designed the fast-track replacement of a 200HP high pressure steam boiler.
- **State of New Hampshire Transportation Agency (2010)**
 - › Director for the MEP assessment at Traffic Buildings A, B, and C.
 - › Designed gas-fired radiant tube heating upgrades to Traffic Garage Building B.
 - › Designed gas-fired heating upgrades to Traffic Garage Building C.
- **New Hampshire State House**
 - › Design HVAC upgrades to the State House's central kitchen and dining facility including new air conditioning equipment, kitchen hood make-up air, and exhaust equipment.
 - › Replacement of (2) packaged air conditioning units and upgrades to the kitchen ventilation system.
- **Hooksett Toll Building Renovation, Hooksett**
 - › HVAC, plumbing, electrical, and site renovations for a toll booth support building on I-93.
- **TMC Diesel Generator Exhaust, Concord**
 - › Project Manager and Design Director for a new diesel emergency generator exhaust booster system. The existing emergency generator serves the State of New Hampshire's Traffic Management Center and 911 Facility. The high velocity Strobic Tri-Stack upblast exhaust fan was integrated into the generator's existing exhaust breeching system. The result was the elimination of gas fumes that had been entering the facility through a local outside air intake louver.
- **Data Center Upgrades, Traffic Management Center, Concord**
 - › Project Manager for a new computer room air conditioning and enhanced power requirements for the primary data center that serves the State of New Hampshire's Traffic Management Center and 911 Facility. The new system was sized for current and future expansion of the server equipment requirements (air conditioning, power, and emergency services). The new stand-alone computer room A/C system utilizes a glycol cooling loop through an exterior dry cooler to also provide "free cooling" during colder outside ambient temperatures. The project reconfigured two existing central station units to provide back up air conditioning for the new system.
- **Boiler Installation Projects - Peterson & Dube Buildings, State of New Hampshire, Department of Administrative Services, Lakes Region Facility, Laconia**
 - › Senior Project Manager for heating plant renovations for the Peterson and Dube Buildings at the Lakes Region Facility. The project removed the obsolete steam-to-hot water heating system components, installed the new heating system components within the constraints of the existing mechanical rooms, and connected the new systems to the current heating hot water distribution systems. New digital boiler controls and fully modulating boiler gas burners were added to both buildings to optimize the energy efficiency of these stand alone heating plants.



- **Facility Assessments and Inventory, New Hampshire National Guard, Statewide.**
 - › Project Manager for ongoing project to assess 44 NHARNG facilities, including electrical; mechanical; energy audits/building energy analysis; site assessments; condition of buildings roof, walls, doors, and windows; and maintenance plan.
- **Cooling Coil Replacements, New Hampshire Hospital, Acute Psychiatric Facility, Berlin**
 - › Senior Project Manager and Design Director for this custom sheet metal fabrication project. The facility's four primary air handling units—each operating at a nominal 55,000 CFM—required replacement of the cooling coils. These custom built machines required a custom sheet metal layout for each coil replacement, including new double-high coils, diamond plate flooring, piping modifications, and stainless steel drain pans. Each machine was designed as a stand-alone project in order to keep the facility operational during each coil replacement.

Dartmouth College, Tuck School of Business Suite 205 Renovations. Senior Project Manager for mechanical renovations to provide heating and air conditioning to the graduate research fellow's academic suite and conference areas. The historical significance of the building required careful coordination of the new HVAC equipment and ductwork with the existing building's architecture. Scope included new HVAC equipment, exhaust systems, plumbing modifications, and electrical services for the renovated area.

Assessments & Mechanical Renovations, Manchester, Facilities Division, Manchester, NH. Senior Project Manager for assessments and renovations of HVAC systems for five schools in Manchester, New Hampshire. Scope of work included assessment and design of improvements to ventilation and distribution of existing HVAC systems to address noise issues and provide proper balance of air supply and exhaust throughout four school facilities.

Barre Housing Authority IDC, Barre, VT. Project Director for seven development and office building properties, totaling 369 subsidized housing units. Engineering and architectural services include: planning, needs assessments, energy audits, parking lots, sidewalks, ADA compliance, heating/ventilation, lighting, drainage, and security.

Historic Facility Renovations, Englesby House, University of Vermont, Burlington, VT. Senior Project Manager for mechanical, electrical, plumbing, and structural engineering and construction phase services for the interior renovation of the Englesby House. The structure was built in 1914 and is listed on the National Register of Historic Places. Provided oversight of engineering services for the interior building elements for the main residence including electrical and mechanical upgrades, installation of air conditioning, and an upgrade of the existing heating system. Other MEP upgrades were provided for the upgrade of the main level kitchen, installation of a second floor laundry room, renovations to two second floor bathrooms and master bed/bathroom suite, and complete refurbishment of the third floor.

Community College of Vermont, Academic Addition, Montpelier, VT. Project Director for the 12,000-sf, 2-story addition to CCV's Montpelier campus together with upgrades to the air conditioning systems in the facility's existing building. Engineering services included new HVAC systems (boiler, air conditioning, and energy recovery); plumbing systems (including water conservation measures); and new electrical service with lighting, power, and data distribution.



EDUCATION

M.S., Mechanical Engineering,
Rensselaer Polytechnic Institute, 1995

B.S., Mechanical Engineering,
University of Vermont, 1982

REGISTRATIONS

Professional Engineer: VT

Professional Engineer: CT

LEED Accredited Professional

Mr. Dumas is a mechanical engineer with 30 years of engineering experience. Mr. Dumas has been responsible for overall project management, engineering, and construction administration services for projects ranging from conceptual design studies and facilities evaluations to complex, multi-discipline design packages for multi-million dollar projects. He has been directly involved in all areas of project administration: initial client need definition, proposal, basis of design definition, design development, CA services, start-up/commissioning support, and operational verification.

He has specific experience with life cycle cost and ROI analysis, energy conservation evaluations, and system controls design to provide energy saving operation for both existing and new systems. He is knowledgeable in all aspects of MEP design, including HVAC, plumbing and piping, and controls. Mr. Dumas has provided services for institutional, industrial, government, and healthcare sectors.

Data Center Upgrades, Traffic Management Center, Concord, NH, Mechanical Engineering Services, Statewide Term Agreement, New Hampshire Bureau of Public Works Design and Construction. Senior Engineer for a new computer room air conditioning and enhanced power requirements for the primary data center that serves the State of New Hampshire's Traffic Management Center and 911 Facility. The new system was sized for current and future expansion of the server equipment requirements (air conditioning, power, and emergency services). The new stand-alone computer room A/C system utilizes a glycol cooling loop through an exterior dry cooler to also provide "free cooling" during colder outside ambient temperatures. The project reconfigured two existing central station units to provide back up air conditioning for the new system.

Disaster Recovery Room, Central Vermont Medical Center, Berlin, VT. Senior Mechanical Engineer for air handling and climate control of rack mounted IT infrastructure serving the hospital.

State of Vermont, Department of Buildings and General Services. Project Manager/Engineer for an HVAC and controls upgrade to the St. Albans State Office Building, a three story, 42,000 sf facility. Performed cost benefit/ROI analysis for all potential systems to upgrade existing building infrastructure. Developed plan and specification packages for new equipment, including energy recovery devices with integrated control sequences for new web based system. Developed pre-purchase equipment specifications to meet Owners schedule. Provided complete CA services to ensure full design integration.

Laboratory Building Renovation, University of Vermont, Burlington, VT. Project Engineer for a complete renovation and infrastructure upgrade to a 27,000 sf multi-story building to alleviate sick building symptoms. Responsible for all aspects of evaluation and design for complete mechanical, electrical, and building controls replacement systems and LEED certification documentation for this multi-use laboratory, classroom, and general office space structure. Worked closely with the Owner and Architect to ensure tenant needs were completely addressed. Project received LEED Gold certification and alleviated all tenant complaints.

Dartmouth College, Hanover, NH. Provided a complete construction package for a multi-space chemistry lab renovation. Included modifications to pressure independent exhaust systems, lab utilities infrastructure upgrades to meet updated Owner needs, power distribution and lighting upgrades, and major updates to mechanical system controls architecture.

St. Michael's College, Colchester, VT. Project Manager/Engineer for the boiler evaluation and replacement at Alumni Hall, located on the main campus. Scope included evaluation of existing boilers, hot water heat exchangers, and storage systems. Existing steam boilers replaced with new high efficiency hot water boilers and existing domestic hot water storage replaced with hot water heat exchanger units. Evaluated code requirements, space utilization, and ancillary system designs and addressed areas requiring upgrades.

IBM, Essex, VT. Project Engineer on several multifaceted design and construction support projects. MEP systems design, equipment layout, and specialized equipment design, including custom air handling and HVAC component specifications, design, and Vendor site testing for critical clean room applications. Services include design and post design, from concept to commissioning.

Historic Facility Study, YMCA, Burlington, VT. Project Engineer responsible for evaluating existing HVAC equipment and heating system for the Burlington YMCA Facility. Main objective of the evaluation was to provide recommendations for energy efficiency upgrades and system modifications to improve client comfort. In addition, proposed an HVAC system configuration that would allow existing steam boilers to be removed from service in the off-heating season. Evaluated the overall building ventilation for IAQ concerns, including multiple pool areas. Provided energy efficient design concepts for both energy recovery and natatorium ventilation. Constraints of existing historic brick structure and downtown location were considered in all recommended upgrades.

EDUCATION

M.S., Mechanical Engineering,
University of Utah, 1986

B.S., Applied Science & Engineering,
United States Military Academy, 1975

REGISTRATIONS

Mechanical Engineering: ME 8025

Mechanical Engineering: VT 018-06821

Mechanical Engineering: NH 08313

Mechanical Engineering: VA 0402-025120

Mechanical Engineering: MA 38370

Professional Engineer: NY 091218-1

LEED Accredited Professional

Mr. Spasyk has over 18 years of mechanical engineering experience. He served as an Assistant Professor of Mechanical Engineering at the United States Military Academy in West Point, New York, and taught courses in energy system design, statics and dynamics, and thermodynamics. As an HVAC Engineer, Mike has prepared both BOCA and ASHRAE energy standard reports, as well as utility energy rebate program applications. He is a Leadership in Energy and Environmental Design (LEED) accredited professional.

Mechanical Engineering Services, Statewide Term Agreement, New Hampshire Bureau of Public Works Design and Construction. Mechanical Engineer working with the Bureau of Public Works, Design & Construction to address mechanical engineering issues associated with HVAC for State facilities. Projects include:

- **New Hampshire Army National Guard, Concord**
 - › Designed renovations to the HVAC systems for a truck repair facility serving Building 'G'.
- **Men's State Prison, Concord**
 - › Completed design to reconfigure the existing HVAC ventilation system that serves the Special Housing Unit.
 - › Replaced two existing aging gas fired boilers with three new high efficiency condensing boilers.
- **New Hampshire Department of Health & Human Services**
 - › Design services for replacement of a 200-ton chiller and exterior panels on the cooling tower and improvements to two air handling units. Energy recovery methods were examined with control sequencing and occupancy usage.
- **Boiler Installation Projects - Peterson & Dube Buildings, State of New Hampshire, Department of Administrative Services, Lakes Region Facility, Laconia**
 - › Mechanical Engineer for heating plant renovations for the Peterson and Dube Buildings at the Lakes Region Facility. The project removed the obsolete steam-to-hot water heating system components, installed the new heating system components within the constraints of the existing mechanical rooms, and connected the new systems to the current heating hot water distribution systems. New digital boiler controls and fully modulating boiler gas burners were added to both buildings to optimize the energy efficiency of these stand alone heating plants.

Dartmouth College, Tuck School of Business Suite 205 Renovations. Mechanical renovations to provide heating and air conditioning to the graduate research fellow's academic suite and conference areas. The historical significance of the building required careful coordination of the new HVAC equipment and ductwork with the existing building's architecture. Scope included new HVAC equipment, exhaust systems, plumbing modifications, and electrical services for the renovated area.

Assessments & Mechanical Renovations, Manchester, Facilities Division, Manchester, NH. Senior Mechanical Engineer for assessments and renovations of HVAC systems for four schools in Manchester: Hallsville Elementary, Bakersville Elementary, West High School, and Memorial High School. Scope of work included assessment and design of improvements to ventilation and distribution of existing HVAC systems to address noise issues and provide proper balance of air supply and exhaust throughout four school facilities.

Changes and Upgrades to the Mechanical Systems, Northern State Correctional Facility, Newport, VT. Senior Mechanical Engineer for project to implement energy efficiency measures in mechanical and HVAC systems at the Northern State Correctional Facility in order to lower operating costs in six of the facility's eight buildings. Project is receiving funding through the American Recovery and Reinvestment Act.

Vermont Economic Development Authority (VEDA) Office Building, Montpelier, VT. Mechanical and plumbing design for the renovation of the building's water source heat pump system. This building is a four story office building of 24,500 square ft. The project included a new high efficiency oil-fired boiler with variable speed distribution pumping, new zone heat pumps, and a new cooling tower with variable speed fan. The new heating plant has a capacity of 886,000 BTU/hr.



CERTIFICATE OF LIABILITY INSURANCE

OP ID: BC

DATE (MM/DD/YYYY)

09/12/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Poole Professional Ltd.-TM 107 Audubon Rd. #2, Ste. 305 Wakefield, MA 01880 Thomas M. Mullard		Phone: 800-371-1063 Fax:	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: DUBOI-2	FAX (A/C, No): INSURER(S) AFFORDING COVERAGE INSURER A : XL Specialty Insurance Co. INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :	NAIC # 37885
INSURED DuBois & King, Inc. P.O. Box 339 Randolph, VT 05060					

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

NSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	\$
	<input type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						MED EXP (Any one person)	\$
							PERSONAL & ADV INJURY	\$
							GENERAL AGGREGATE	\$
	GENL AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	\$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC							\$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	\$
	<input type="checkbox"/> ALL OWNED AUTOS						BODILY INJURY (Per accident)	\$
	<input type="checkbox"/> SCHEDULED AUTOS						PROPERTY DAMAGE (Per accident)	\$
	<input type="checkbox"/> HIRED AUTOS							\$
	<input type="checkbox"/> NON-OWNED AUTOS							\$
	UMBRELLA LIAB						EACH OCCURRENCE	\$
	<input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE						AGGREGATE	\$
	<input type="checkbox"/> DEDUCTIBLE							\$
	RETENTION \$							\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATUTORY LIMITS	OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)						E.L. EACH ACCIDENT	\$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$
A	Prof. Liability			DPR9711285 DEDUCTIBLE \$60,000	08/01/2013	08/01/2014	Per Claim	2,000,000
							Aggregate	2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required) for professional liability coverage, the aggregate limit is the total insurance available for all covered claims presented within the policy period.
 te: Mechanical Statewide Agreement

CERTIFICATE HOLDER State of New Hampshire Dept of Admin Services Bureau of Public Works Design Construct PO Box 483 Concord, NH 03302-0483	CANCELLATION STATENH SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
10/21/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER People's United Ins. Agency VT 2 Burlington Sq., 4th Floor PO Box 485 Burlington, VT 05401	CONTACT NAME: Dinah Jacobsen	FAX (A/C, No):	
	PHONE (A/C, No, Ext): 802 863-2841	E-MAIL ADDRESS: Dinah.Jacobsen@peoples.com	
INSURED DuBois and King, Inc. P.O. Box 339 Randolph, VT 05060	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Netherlands Insurance Company		24171
	INSURER B: Peerless Insurance Company		24198
	INSURER C:		
	INSURER D:		
	INSURER E:		

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR Blanket Addt Insured Per Written Contract GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC		Y	BOP9427222	06/01/2013	06/01/2014	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$300,000 MED EXP (Any one person) \$15,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000 \$
	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS			BA9313388	06/01/2013	06/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$10,000			CU9243669	06/01/2013	06/01/2014	EACH OCCURRENCE \$2,000,000 AGGREGATE \$2,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> N (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC9243671	06/01/2013	06/01/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project: Mechanical Statewide Agreement
The State of New Hampshire is listed as additional insured under general liability as required by written contract for work performed by insured subject to terms and conditions of the policy.

CERTIFICATE HOLDER State of New Hampshire Department of Administrative Services Bureau of Public Works Design & Construction PO Box 483 Concord, NH 03302	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Dinah Jacobsen</i>
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