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Nobis Engineering, Inc. | NH | MA | NJ | VT | MD

Engineering a Sustainable Future

BREM 017.08.08.2014

AUG 08 2014

TOWN CLERK-CARLISLE
CHARLENE M. HINTON

August 8, 2014
File No. 6465
Via Email and U.S. Mail

Mr. Steve Hinton
Town of Carlisle, Zoning Board of Appeals
66 Westford Street
Carlisle, MA 01741
shinton@mindspring.com

Re: Proposal for 40B Housing Application Review
100 Long Ridge Road
Carlisle, Massachusetts

Dear Mr. Hinton:

Nobis Engineering, Inc. (Nobis) is pleased to present the Town of Carlisle Zoning Board of Appeals (Carlisle ZBA) with this proposal for professional services. Services to be performed are to review hydrogeologic and engineering aspects of a proposed 40B housing development on the Brem property located at 100 Long Ridge Road (site) in Carlisle, Massachusetts. The application was submitted to the Carlisle ZBA by Lifetime Green Homes, LLC (LGH) on July 2, 2014.

Nobis proposes to assist the Carlisle ZBA by reviewing hydrogeologic, engineering, and traffic aspects of the LGH application and providing support at Carlisle ZBA meetings and/or public hearings. The present proposal will assume specified levels of effort on Nobis' part; these levels of effort may need to be modified during the process as the scope of Nobis' required effort becomes apparent.

Nobis understands that the objective of the hydrogeologic portion of the review is to assess the potential impact of the proposed septic system (Areas 1, 2, and 3) on neighboring wells. An additional objective is to assess the proposed septic system design for compliance with Massachusetts Title 5 regulations. The objective of the engineering portion of the review is to compare the proposal to Carlisle's zoning ordinances and the State of Massachusetts 40B requirements for key elements of the application. These elements include grading and drainage (for potential offsite adverse impacts and compliance with Massachusetts Stormwater Guidelines), landscaping plans, and traffic considerations. A final objective is to provide technical support at ZBA meetings and/or public hearings.

QUALIFICATIONS

Nobis is a multi-disciplinary consulting firm that delivers a full range of environmental, geotechnical, and civil engineering services. A qualifications package is attached to this proposal.

Primary project team members for this project include James H. Vernon, Ph.D., Senior Hydrogeologist, and Richard A. Baummer, P.E., Senior Project Manager and Director of Civil Engineering. Resumes are attached. Jim Vernon has performed similar hydrogeologic services for the Town of Carlisle in the past. Dick Baummer has more than 30 years of experience, more

Nobis Engineering, Inc.
18 Chenell Drive
Concord, NH 03301
T (603) 224-4182

than 15 of which is in Massachusetts, in civil engineering and real estate development in multiple states. His experience includes being a key leader of the development team for a large 40B Senior Housing Community located in Hingham, Massachusetts.

SCOPE OF WORK FOR PRELIMINARY FEASIBILITY ASSESSMENT

Task 100: Assessment of Proposed Septic System and Potential Impact of Neighboring Wells

Nobis will assess information provided by the Carlisle ZBA regarding the septic system design, and the location and design of neighboring drinking water wells. The assessment will include compliance with applicable regulations and Nobis' professional opinion as to risks that may be posed by the proposed septic systems to the existing two neighboring drinking water wells. As noted on "Preliminary Utility Plan and Profile" provided to Nobis by the Carlisle ZBA, the Proposed Septic Area 1 is less than 300 feet from an existing well on the Hanauer property southwest of the site, and Proposed Septic Areas 2 and 3 are slightly more than 100 feet from an existing well on the Berkes property west of the site.

The assessment will also consider risks that may be posed to the eight (8) new wells proposed in the LGH application for the project.

If additional existing wells are near any of the Proposed Septic Areas, assessments for these wells can be added, but additional budget would likely be needed.

Work under this task to evaluate two (2) existing neighboring wells, eight (8) proposed new wells, and the three (3) septic system designs will be performed as follows:

- Nobis assumes that we will perform a "desktop" review, for the purpose of assessing threats to existing wells and proposed new wells, based on materials provided to Nobis by the Carlisle ZBA and readily available published mapping or public domain GIS information. *Eight (8) hours are budgeted for this portion of Task 100.*

- Nobis will also evaluate the septic designs, if provided to Nobis, relative to Massachusetts Title 5 requirements. For the Title 5 evaluation, as with the well evaluation, no sampling or direct quantitative investigations are included in the present proposal, but these may be recommended if needed to meet the project objectives. However, a hydrogeologic site visit is included to observe site conditions (topography, drainage, soils, and geology) in the areas of the proposed septic systems for the site. If permission to enter private property is obtained by the Carlisle ZBA, Nobis will also visit neighboring properties during this same site visit to observe the type and setting for the existing drinking water wells. However, the wells will not be opened or inspected, nor will water samples be collected. *Sixteen (16) hours are budgeted for this review and site visit.*

Nobis' hydrogeologic assessments for Task 100 will be provided by email in a letter format to the Carlisle ZBA. A more formal hydrogeologic report can be prepared upon request, at additional cost.

Task 200: Engineering Evaluation of LGH Application

Nobis will generally review the application documents provided by the Carlisle ZBA. More specifically, Nobis will review layout, grading, drainage, planting and utility plans, and drainage calculations. We will prepare a letter report to the Carlisle ZBA summarizing our findings and identifying areas of potential concern to the Town. We anticipate that the Carlisle ZBA will request that the applicant consider modifications to the project and that revised material will be submitted. *Thirty-eight (38) hours are budgeted for this Task to perform the initial review of the application documents and prepare the letter report. Sixteen (16) hours are included for a second limited review of the revised application documents and preparation of a revised letter report.*

Task 300: Traffic Study

Nobis understands that a traffic study will be undertaken, but perhaps, not until after September 1, 2014. Nobis also understands that LGH has requested input from the Carlisle ZBA in defining the scope of the traffic study. Upon request, Nobis will subcontract with a qualified Massachusetts Traffic Engineer to assist the Carlisle ZBA in defining the scope of the traffic study and/or reviewing the traffic study after it is completed. *Four (4) hours are included to secure a subcontractor for these services. For budgeting purposes, Nobis has assumed approximately $4000 to secure this service to define the scope of the traffic study and review the study once completed. Depending on the scope, the level of effort to review LGH's study may require additional costs. Nobis will obtain approval of these costs prior to expenditure.*

Task 400: Meeting Support and Project Planning

Task 400 includes attendance and technical support by Jim Vernon and Dick Baummer at two (2) ZBA meetings or public hearings, with an option for a fourth meeting. It also includes attendance at an engineering site visit and internal meeting with ZBA representatives to confirm existing conditions relative to the application documents, to meet with staff to identify issues of potential concern, and to confirm the project schedule. The technical support may include formal presentations, Q & A, or both. In addition to project management, this task includes liaison with the Carlisle ZBA throughout the project. *Meeting attendance for two (2) staff, including travel and preparation is 12 hours per meeting. Two (2) meetings and/or public hearings plus the engineering site visit are budgeted, with additional meetings to be added if requested and at additional cost. Project Management and ongoing communication with the ZBA is assumed to be 20 hours for the duration of the project.*

BUDGET

Our estimated fee for the scope items as described above are as follows below. Additional work that could be performed according to the attached Schedule of Fees.

Scope	Fee Structure	Estimated Fee
Phase 1: Preliminary Feasibility Assessment		
Task 100: Hydrogeologic Assessment	*Time & Expense*	*$3,500*
Task 200: Engineering Evaluation of LGH Application	*Time & Expense*	*$7,800*

Task 300: Traffic Study (Allowance)	*Time & Expense*	*$4,500*
Task 400: Meeting Support (3 meetings – 1 engineering meet/site visit with ZBA staff only and 2 with the applicants) and Project Planning	*Time & Expense*	*$8,300*
Optional Additional Meetings or Site Visit (per meeting or visit)	*Time & Expense*	*$2,500*
Estimated Total: Tasks 100 – 400 (excluding 4th meeting)		***$24,100***

Services will be billed monthly in accordance with the hourly rates in the attached Schedule of Fees. Cost will not exceed the total listed above without requesting and receiving approval to provide such additional scope of services as may be required. Incidental expenses (printing, mileage, etc.) will be provided at cost plus 15% for administrative expenses. Our payment terms are net 30 days. **We will require that a retainer in the amount of $5,500 be received by our Concord, New Hampshire office prior to commencement of work.** You will be notified if conditions require a change to the scope of services and budget estimate. This proposal is valid for 30 days from the date of issue.

SCHEDULE

The anticipated project schedule is to commence work in August 2014. Nobis is prepared to begin work on this project upon receipt of this signed proposal, retainer fee, and application materials for review from the Carlisle ZBA.

- Completion of Tasks 100 and 200 will depend on the timeliness of receipt of the application materials from the LGH application.
- Completion of Task 300 depends on the timing of the traffic study but may not happen until September 2014 or later.
- Completion of Task 400 depends on the Carlisle ZBA meeting schedule and the number of meetings at which the ZBA needs Nobis' support.

ASSUMPTIONS

- Additional work to support the ZBA on this project will not be performed without prior written direction and consent from Carlisle ZBA.
- The Carlisle ZBA will provide all relevant LGH application materials, including septic designs, and supporting maps or drawings in electronic format, if available, or in paper format if electronic format is not available. The Carlisle ZBA will provide Nobis with a copy of its Zoning Ordinance and any other relevant Town regulations.
- Task 200 does not include a comprehensive re-review of the application materials.
- Task 300 work is currently limited to securing an expert in traffic studies, if required. If the work to understand traffic concerns is more robust; then, additional scope and budget will be requested. No meetings are included under this task.

TERMS AND CONDITIONS

We will perform these services in accordance with the attached Statement of Terms and Conditions. Please note that Article 12.0 of our Terms and Conditions includes a "Limitation of Liability" clause by which you agree to limit our liability for any damages arising out of our professional negligence to $50,000 or our fees, whichever is greater. You may request an increase to this limitation by making the request in writing and by paying an additional fee. This proposal is valid for 30 days from the date of issue.

We look forward to working with you on this project. Thank you for the opportunity to be of service. If you require additional information, please do not hesitate to contact us at (603) 224–4182.

Sincerely,

Nobis Engineering, Inc.

James H. Vernon, Ph.D., P.G.
Senior Hydrogeologist

Heather M. Ford
Vice President of Engineering and Science

Attachments:
- Schedule of Fees
- Terms and Conditions
- Qualifications

ACCEPTANCE

This proposed contract for services and its attachment are hereby accepted by The Town of Carlisle Zoning Board of Appeals (Carlisle ZBA), as evidenced by the signature below, and such a person so executing the same on behalf of Carlisle ZBA does hereby warrant full authority to act for, in the name of, and on behalf of Carlisle ZBA. This proposed contract is valid for 30 days from the date of issue.

Signature _____ Date _____
For Town of Carlisle

Title _____

Please indicate your acceptance by signing and returning <u>one</u> copy of this proposal.

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SCHEDULE OF FEES

CATEGORY	HOURLY RATE
Principal	$190
Senior Project Manager III/LSP/LEP	$175
Senior Project Manager II	$160
Senior Project Manager I	$140
Senior Landscape Architect	$130
Landscape Architect	$100
Project Manager III/LSP	$135
Project Manager II	$130
Project Manager I	$125
Senior Project Engineer/Geologist/Scientist III	$145
Senior Project Engineer/Geologist/Scientist II	$130
Senior Project Engineer/Geologist/Scientist I	$120
Project Engineer III	$115
Project Engineer II	$105
Project Engineer I	$ 90
Project Geologist/Scientist III	$110
Project Geologist/Scientist II	$ 95
Project Geologist/Scientist I	$ 85
Staff Engineer/Geologist/Scientist III	$ 85
Staff Engineer/Geologist/Scientist II	$ 80
Staff Engineer/Geologist/Scientist I	$ 75
Technician III	$ 85
Technician II	$ 70
Technician I	$ 60
Senior Project Coordinator	$115
Project Coordinator	$100
Word Processor/Clerical II	$ 65
Word Processor/Clerical I	$ 60

REIMBURSABLE EXPENSES

Report Materials	at cost
Travel, Field and Miscellanous Services	Cost Plus 15%
Subcontracted Services	Cost Plus 15%

NOTE:
1) Fees charged to the project will be in accordance with these rates for all work performed.
2) Fee Schedule effective through December 31, 2014.

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REIMBURSABLE EXPENSES

FIELD EQUIPMENT

Photoionization Detector (PID)	$90/ day
4-Gas Meter	$90/ day
Water Level Meter	$15/ day
Interface Probe	$25/ day
pH, Conductivity and Temperature Meter	$20/ day
Dissolved Oxygen Meter	$30/ day
Oxidation Reduction Potential (ORP) Meter	$30/ day
Metal Detector	$15/ day
Air Sampling Pump	$35/ day
Data Logger Pressure Transducer	$100/ day
Disposable Bailers	$10/ each
Field Supplies	$25/ day
Groundwater Sampling Filter	$20/ each
Groundwater Sampling Pump	$40/ day
Low-flow sampling systems	$175/day
Hand Auger	$15/ day
Level, Tripod, Rod/Prism, Tape/Chain	$80/ day
Transit, Tripod, Rod/Prism, Tape/Chain	$80/ day
Multi Channel Data Logger	$250/ day
Hand-held GPS Unit	$30/ day
Trimble GPS Unit	$200/ day
Turbidity Meter	$15/ day
Horiba Multimeter	$80/ day
Field PDA	$25/ day
Digital Camera	$15/ day

Expenses, Field Supplies, Travel and Subcontracted Services	Cost Plus 15%

TERMS AND CONDITIONS

These terms and conditions are incorporated by reference in the attached Proposal for Services, dated **August 8, 2014**, File Number **6465**, directed to **Town of Carlisle**, (the "Client"). This proposal contains clauses that limit the liability of Nobis Engineering, Inc. (the "Company") to Client and require the Client to indemnify Company for certain claims for damages. This Proposal should be reviewed carefully and Client may choose to consult with an attorney. Company and Client agree as follows:

1.0 Services. Company shall provide Client with the "Services" set forth in the Proposal for Services ("Proposal") with respect to the property identified in the Proposal ("Site"), under these terms and conditions. Company's Services will be performed on behalf of and solely for the exclusive use of Client for the purposes described in the Proposal and for no other purpose. Client acknowledges that Company's Services require decisions, which are based upon judgment stemming from limited data rather than upon scientific certainties. Client, in accepting Company's Proposal, acknowledges the inherent risks to Client and its property associated with the Services described in the Proposal and with underground work in general. Company reserves the right to refuse to undertake any work on behalf of any project or on behalf of any prospective Client. Client acknowledges that other qualified persons and entities are available to carry out the proposed Services. Client also acknowledges that the proposed Services may reveal certain conditions affecting the site, of which Company will inform Client and of which Company may be obligated to inform governmental agencies.

2.0 Billings and Payment. Client will pay Company for Services performed in accordance with the rates and charges in the Proposal. Invoices for Company's Services will be submitted on a periodic basis, or upon completion of Services as Company shall elect. All invoices are payable in full upon receipt. If payment in full is not received by Company within 30 days of the date on the invoice, the account will be deemed delinquent. Invoice balances remaining unpaid will bear interest from invoice date at 1.5 percent per month or at the maximum lawful interest rate if such interest rate is less than 1.5 percent per month. If Client fails to pay any invoice in full within 30 days of the invoice date, Company may, at any time, and without waiving any other rights or claims against Client, and without thereby incurring any liability to Client elect to terminate performance of Services upon ten (10) days prior written notice by Company to Client. Notwithstanding any termination of Services by Company for non-payment of invoices, Client shall pay Company in full for all Services rendered by Company to the effective date of termination of Services plus all delinquent fees, termination costs, and expenses incurred by Company and related to such termination. Client shall be liable to Company for all costs and expenses of collection, including reasonable attorney's fees. Company's non-exercise of any rights or remedies, whether specified herein or otherwise provided by law, shall not be deemed a waiver of any rights or remedies, nor preclude Company from the exercise of such rights or other rights and remedies under this instrument, or at law.

3.0 Right of Entry. Client grants to Company the right, exercisable from time to time, of entry to the Site by Company, its agents, employees, consultants, contractors and subcontractors, for the purpose of performing all acts, studies and research, including the performing of test borings, test pits and other explorations as described in the Proposal. Should Client not own the Site, Client warrants and represents by acceptance of this Proposal that it has authority and permission of Site owner and any other Site occupant to grant Company this right of entry. Company may require evidence of such authority in a form reasonably satisfactory to Company.

4.0 Subsurface Explorations.

4.1 Normal Disturbance. Client acknowledges that the use of exploratory equipment and processes may affect, alter or damage the terrain, vegetation, buildings, structures, improvements and equipment at, in or upon the Site. Client accepts such risks. Company will not be liable for any affect, alteration or damage arising out of such explorations except that caused by Company's grossly negligent acts. The cost of restoration of the Site because of any damage to the site has not been calculated or included in Company's fees.

4.2 Subterranean Structures. Company will exercise a reasonable degree of care in seeking to locate subterranean structures in the vicinity of proposed subsurface explorations at the Site. Company will contact public utilities and review plans, if any, provided to Company by public utilities and public agencies and plans and information about the Site provided by Client. Company shall be entitled to rely on the accuracy and completeness of such plans and information. So long as Company observes such standard of care, Company will not be responsible for any damage, injury or interference with any subterranean structure, pipe, tank, cable or any other element or condition that is not called to Company's attention prior to commencement of work or which is not shown, or accurately located, on any plans furnished to Company by Client or by any other party (public or private).

5.0 Samples. Company may dispose of all soil, rock, water and any other samples within thirty (30) days after submission of Company's initial report. Client may request in writing that any such samples be retained beyond such date and Company shall arrange for shipment and storage of such samples at mutually agreed shipment and storage charges. Company will not give Client prior notice of intent to dispose of samples.

6.0 Documents. All reports, boring and test pit logs, field data, field notes, laboratory test data, calculations, estimates and other documents, data or information prepared by Company as instruments of Service shall remain the sole property of Company. All reports and other work prepared by Company for Client shall be used solely for the intended purposes and the Site described in the Proposal. Company will retain all pertinent documents for three (3) years following submission of Company's report to Client. Such documents will be available to Client upon request and upon reasonable notice and copies will be furnished by Company to Client for the total cost of reproduction.

7.0 Client's Duty to Notify Company of Hazards. Client represents and warrants that it will provide Company with any and all information known to or suspected by Client with respect to 1) The existence or possible existence at, on or under the Site of any hazardous materials, pollutants or asbestos as defined in the federal Water Pollution Control Act; the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; the Superfund Reauthorization Act of 1986; the Resource Conservation and Recovery Act of 1976; or under the provisions of federal, state and local laws of similar import now or hereafter existing, 2) any conditions known to Client to exist in, on, under or in the vicinity of the Site which might represent a potential safety hazard or danger to human health or the environment, or 3) any permit, manifest, title record, or other record of compliance or non-compliance with any federal, state or local laws relating in any way, directly or indirectly, to the past or present environmental conditions at the Site.

In no event shall Company be deemed a handler, generator, transporter, or owner of any hazardous materials that may be at the Site. Client shall defend, indemnify, and hold Company harmless from and against any and all claims, suits, costs, damages, liabilities, and expenses, including reasonable attorneys' fees, arising from or related to any such claims or allegations of any kind directed at Company by any party or entity that may arise out of or relate to Company's Services.

8.0 Hazardous Materials, Pollutants, Asbestos. If unanticipated potentially hazardous materials, pollutants or asbestos are encountered during the course of this work, Company shall have the right 1) to suspend its work immediately and 2) to terminate its Services upon ten (10) days of Company's written notice of intent to terminate, unless Company and Client agree on mutually satisfactory amendment to the Proposal that may include a revision of the scope of services, adjustment of budget estimates, revised Terms and Conditions, and revised fees.

9.0 Confidentiality. Company will not disclose information regarding the proposal, Company's Services or reports, except 1) to Client, 2) parties designated by Client, 3) as provided in section 10.0 below, 4) as required by law, 5) or to the extent reasonably necessary to substantiate a claim or defense in any adjudicatory proceeding. Information which is in the public domain or which is provided to the Company by third parties is excepted from the foregoing undertaking.

10.0 Public Responsibility. Client acknowledges that the Client or the Site owner, as the case may be, is now or shall remain in control of the site for all purposes and at all times. Company does

not undertake to report to any federal, state, county or local public agencies having jurisdiction over the subject matter any conditions existing at the subject Site from time to time which may present a potential danger to public health, safety or the environment. Client by acceptance of this Proposal, agrees that Client will timely notify each appropriate federal, state, county or local public agency, as required by law, of the existence of any conditions at the Site which may present a potential danger to public health, safety or the environment.

Notwithstanding the provisions of section 9.0 and the foregoing, Company will comply with judicial orders or government directives, and federal, state, county or local laws, regulations and ordinances, and applicable codes regarding the reporting to appropriate public agencies of findings with respect to potential dangers to public health, safety or the environment. Company shall have no liability or responsibility to the Client or to any other persons or entity for reports or disclosures made with such statutory or other lawful requirements. Client shall defend, indemnify and hold Company harmless from and against any and all claims, demands, liabilities and expenses, including reasonable attorneys' fees, incurred by Company and arising directly or indirectly in connection with Company's reporting or disclosing such information under a bona fide belief that such reporting or disclosure is required by law.

11.0 Indemnification. To the fullest extent permitted by applicable law, unless caused by Company's sole negligence or willful misconduct, Client agrees to defend, indemnify and hold harmless Company, its subcontractors, consultants, agents, owners, directors, officers and employees harmless from and against any and all claims for damages and all costs, liability or expense, whether direct, indirect, economic or consequential, including reasonable attorneys' fees, and court and arbitration costs sustained or alleged by any person or entity other than Client, based upon or arising in connection with: 1) a release of hazardous materials or pollutants; 2) bodily injury including death and property damage (real or personal) or any other claim of damage, expense or loss, caused by the release, removal, remediation, assessment, evaluation or investigation or hazardous materials or pollutants; 3) removal, assessment, evaluation or investigation of hazardous materials or pollutants; 4) any federal, state, local or other governmental fines or penalties related to hazardous materials or pollutants; or 5) the detection, abatement, removal or replacement of products, materials, or processes containing asbestos.

12.0 Limitation of Professional Liability.

12.1 General. Client agrees that Company has neither created nor contributed to the creation of any hazardous materials, pollutants, asbestos, or other potentially dangerous substance that is now or may be in the future discovered or introduced at the Site. The Company does not assume any liability for the known and unknown presence of such materials. Company's liability to Client whether based upon or arising out of Company's actual or alleged breach of contract, tort, breach of warranty, negligent professional acts or omissions, or any other cause of action, is limited in the aggregate to the Company's fees actually received for Services rendered on the project or $50,000, whichever is greater.

12.2 Increased Limit of Professional Liability. Company may, upon Client's written request, agree to increase the limit of Company's limitation of liability in consideration of payment by Client of additional monetary and other consideration. Any request for increased limit in professional liability must be made to Company in writing within five (5) days of Client's acceptance of this Proposal. Company is not obligated in any way to grant such request. Such additional monetary and other consideration given to the Company for the additional economic risk assumed by the Company shall not be construed as a charge for the placement and provision of additional professional liability insurance by Company.

13.0 Governing Law, Severability, Modifications, Assignments. The agreement between Company and Client shall be governed by and enforceable in accordance with the laws of the State of New Hampshire. The provisions of these Terms and Conditions are severable. The invalidity of any part of these Terms and Conditions shall not invalidate the remainder of these Terms and Conditions nor the remainder of any portion hereof. These printed Terms and Conditions cannot be modified orally or by any course of conduct. Any modification must be acknowledged in writing by Company. These Terms and Conditions shall take precedence over any inconsistent or contradictory provision contained in any proposal, contract, purchase order, requisition, notice to proceed, or like document issued by Client. Client shall not assign any aspect of the agreement between Client and Company except upon the prior written consent of Company.

14.0 Standard of Care for Services. The Company agrees to perform its Services under this agreement in accordance with the degree of skill and care ordinarily exercised by similarly practicing professionals performing similar services under similar conditions. The Company makes no other representations and no warranties of any kind, whether express or implied, with respect to the quality or performance of the Services.

15.0 Waiver of Subrogation. The Client hereby by waives all rights of subrogation against the Company with respect to any damages the Client may incur to the extent such damages are covered by any insurance maintained by the Client. The Client shall endeavor to require corresponding waivers of subrogation rights in Company's favor from any contractors or consultants Client may retain to perform work or services relating to the Services.

16.0 Additional Insured. Client shall name or require its insurance carriers to name Company as an additional insured on any Commercial General Liability insurance policy maintained by Client and shall require the same of any other contractors or consultants retained by Client that may be performing work or services relative to the Services.

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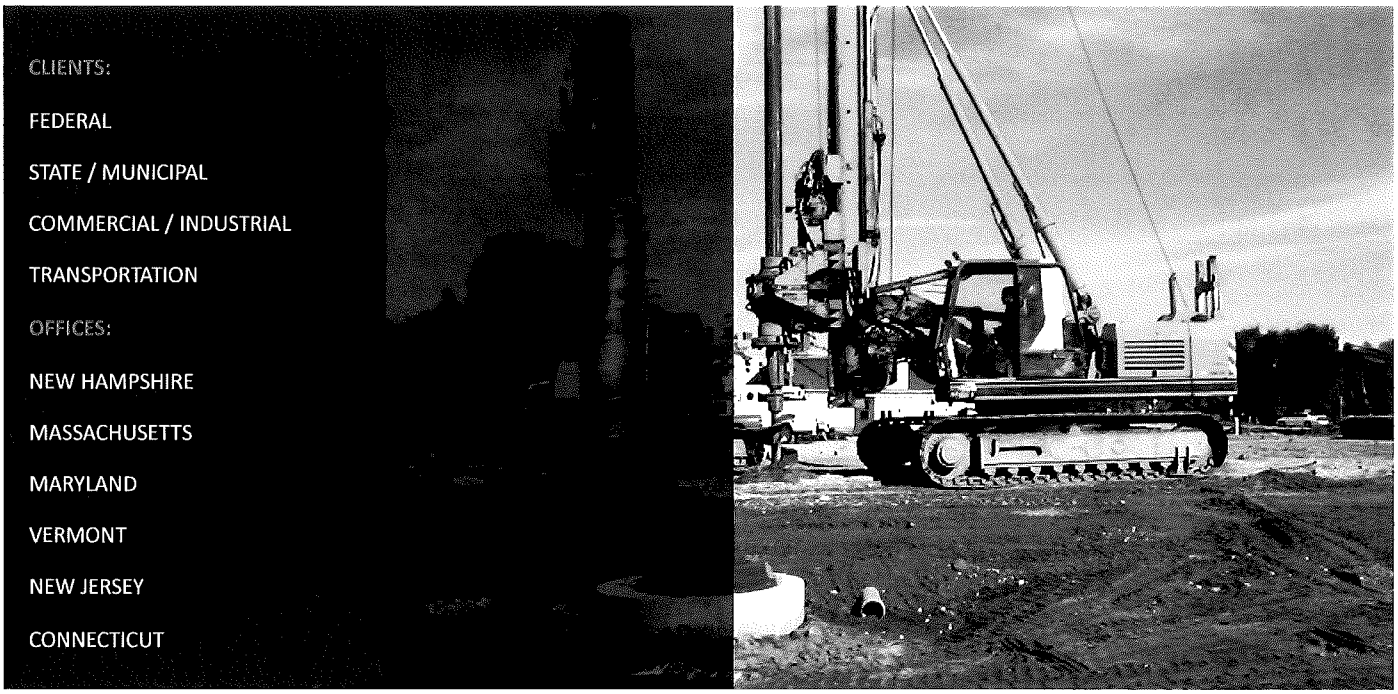

Corporate Business Overview

TECHNICAL PRACTICE AREAS:

COMPLIANCE / PERMITTING

BROWNFIELDS

FACILITIES / CAMPUS ENGINEERING

CIVIL SITE DEVELOPMENT

GEOTECHNICAL ENGINEERING

ENVIRONMENTAL SERVICES

WATER SUPPLY

Nobis is a multi-disciplinary consulting firm providing diversified services to clients throughout the U.S. With proven expertise and established industry relationships, Nobis delivers a full range of environmental, geotechnical and civil engineering services. Strategically organized to offer the benefits of a large company with the high level of personal service available through smaller firms, every member of the Nobis team personally supports the company's commitment to providing value to every client and teaming partner. Nobis is an employee-owned company with a 25-year legacy of collaboration, responsiveness, and community involvement.

Nobis is a Minority Owned Business Enterprise (MBE) in multiple states. At Nobis, we pride ourselves in offering clients creative engineering solutions. Our professional resources, ability to mobilize quickly, and diverse expertise allow us to successfully serve as both a prime contractor and team subcontractor on contracts.

Nobis

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EXPERTISE:

SOLID WASTE SERVICES

STORMWATER MANAGEMENT

WETLANDS

Compliance / Permitting

SERVICES:

DRAINAGE STUDIES

STORMWATER POLLUTION PREVENTION PLANS

LOW IMPACT DESIGN

LANDFILL DESIGN, OPERATIONS & CLOSURE

TRANSFER STATION PLANNING & DESIGN

STORM DRAIN DESIGN

EROSION & SEDIMENT CONTROL PLANS

WETLANDS SITE ASSESSMENTS & PLANNING

WETLAND DELINEATION

ENVIRONMENTAL & REGULATORY PERMITTING

Through our comprehensive regulatory permitting and compliance services, Nobis provides innovative, cost-effective, and practical solutions to expedite local, state, and Federal permitting.

Our team continues to grow and adapt to ever-changing regulatory requirements and challenges. With this broad expertise, we are well positioned to help clients meet applicable regulations.

Additionally, Nobis has prepared Storm Water Pollution Prevention Plans (SWPPP) and Spill Prevention Control and Countermeasure (SPCC) plans on a variety of projects for industrial, government, commercial, and utility clients.

Our team is fully qualified to obtain permits from local, state, and Federal agencies.

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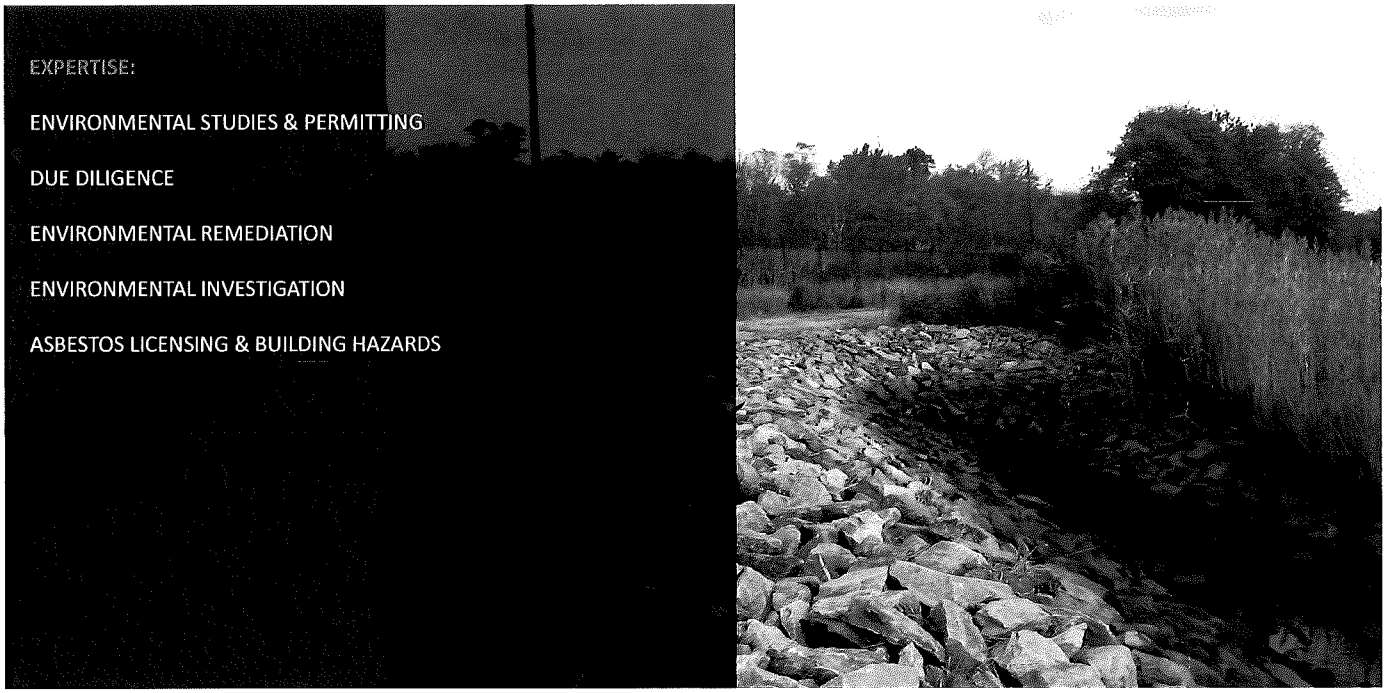

Environmental Services

SERVICES:

PHASE I & PHASE II ESAs

SITE CHARACTERIZATIONS

CONTAMINANT INVESTIGATIONS

IN-SITU TESTING

ASBESTOS INSPECTION, MONITORING, ABATEMENT

SOIL VAPOR EXTRACTION

AIR SPARGING (IN-SITU & EX-SITU)

SOIL EXCAVATION/STABILIZATION

BIO-VENTING

Nobis brings together a broad mix of technical expertise and professional staff that provide quality environmental services to our clients. Our breadth of environmental services consists of Assessment, Investigation, Remediation, Studies & Permitting/Due Diligence, LSP Services and Asbestos & Building Hazards.

Our clients in this sector include Federal and State agencies, municipalities, non-profit organizations, commercial and industrial owners and developers. Our environmental experience, coupled with our strong geotechnical engineering and site civil design capabilities, provides our clients a full-service firm that is capable of starting a project from initial environmental assessment through investigation and remediation to beneficial site redevelopment incorporating sustainable design principles. This is in line with our core values of social responsibility.

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EXPERTISE:

RETAIL - OFFICE

NON-PROFIT

INDUSTRIAL

EDUCATION

HOUSING

HEALTHCARE

Civil Site Development

SERVICES:

MASTER PLANNING

UTILITY COORDINATION

POWER INFRASTRUCTURE

DESIGN

PERMITTING

DUE DILIGENCE

COMPLIANCE

CONSTRUCTION ADMINISTRATION

Nobis' civil/site design and land development team offers professional engineering services for the built environment, from concept through completion.

Our comprehensive land planning and engineering design approach focuses on the basic principles of economic, social, and ecological sustainability. Our goal is to provide every client with the maximum flexibility and return on investment.

Nobis' project delivery approach enables our clients to develop a project that best suits their needs while balancing local public and environment needs.

We strive to incorporate practical sustainable design strategies into our projects that not only benefit our communities, but also benefit our customers with cost-effective, long-term solutions for site development.

Nobis

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Geotechnical Engineering

SERVICES:

SUBSURFACE EXPLORATION

DEEP/SHALLOW FOUNDATION DESIGN

EARTH RETAINING SYSTEM DESIGN

EARTHWORK SPECIFICATIONS

SLOPE STABILITY

SOIL LIQUEFACTION ANALYSIS

GROUND IMPROVEMENTS

PAVEMENT DESIGN & SUBGRADE EVALUATIONS

CONSTRUCTION PHASE INSPECTIONS

Nobis' expertise in geotechnical design and our understanding of construction processes has alleviated, averted, and solved potential and experienced problems at sites throughout the Northeast. Nobis' geotechnical staff offer extensive experience in performing geotechnical engineering evaluations, including: addressing shallow foundation (e.g., spread footing) design; deep foundation (e.g., pile) design; earth retaining systems; earth and rock anchor design; dam stability and design; slope stability; reinforced earth; deep strata densification; pavements; groundwater seepage; groundwater control; and construction specifications and earthwork construction methods. Project sites include: residential, commercial and industrial, as well as roadway, landfills and dam projects.

Nobis

Engineering a Sustainable Future

EXPERTISE:

SITE / CIVIL

GEOTECHNICAL

ENVIRONMENTAL

PERMITTING

Facilities / Campus Engineering

SERVICES:

HEALTHCARE

PUBLIC EDUCATION

POST-SECONDARY EDUCATION

INDUSTRIAL

RESIDENTIAL HOUSING

MULTI-BUILDING FACILITIES

EXPANSION/CONSOLIDATION

Nobis offers multi-building campus and facility engineering services within our core competencies of site/civil, geotechnical, and environmental engineering.

Our experience with healthcare, public education, post-secondary education, industrial, and residential housing affords a wide array of logical, proven solutions to facility problems.

Our depth of experience ranges from solving simple everyday problems to full-scale expansion or consolidation of multi-building/multi-location facilities.

Our goal is to provide our customers with consistent, reliable, and timely response to their needs, regardless of the complexity of the project. This has resulted in long-term relationships with several prominent clients throughout New England.

Nobis

Engineering a Sustainable Future

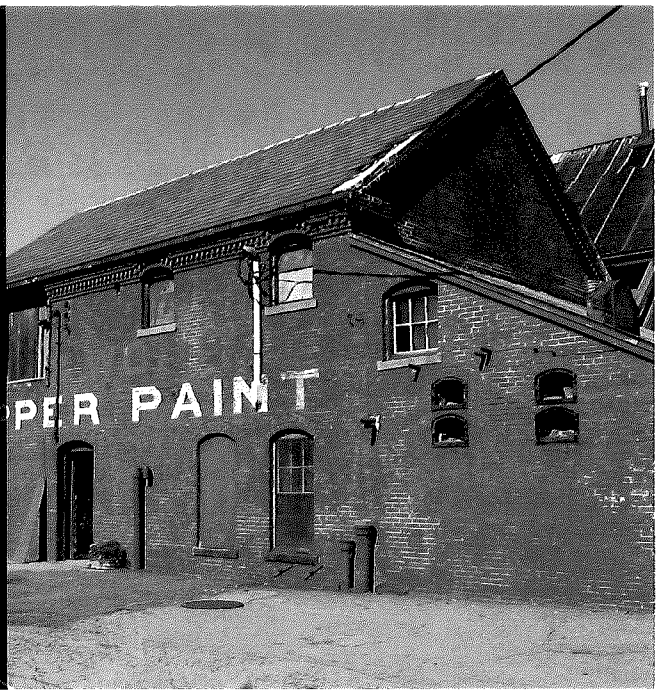
EXPERTISE:

BROWNFIELDS REMEDIATION

GRANT & FUNDING ASSISTANCE

TARGETED BROWNFIELDS ASSESSMENTS (TBA)

REUSE & REDEVELOPMENT



Brownfields

SERVICES:

PHASE I & II ESAs

SITE MAPPING & INVENTORY SUPPORT

QAPP DEVELOPMENT

UST REMOVALS

REMEDIAL ACTION PLANS (RAPS)

CORRECTIVE ACTION PLANS (CAPS)

FEASIBILITY STUDIES

GRANT & FUNDING ASSISTANCE

SOIL GAS MITIGATION

WASTE DISPOSAL

Nobis' Brownfields Practice Team is comprised of a multi-disciplinary group of professionals from all levels of the organization to work cooperatively to provide value added services for the assessment, remediation and reuse/ redevelopment of Brownfields sites in the Northeast.

Our Brownfields clients include the US EPA, state governments, regional planning commissions, municipalities, site developers, and nonprofit organizations, consistent with Nobis' culture of social responsibility. The Team has successfully assisted some of these clients to secure millions of dollars in Brownfields assessment/cleanup funding.

Nobis' environmental assessment and remediation expertise, coupled with our geotechnical and sustainable civil design capabilities, have afforded our site development clients and stakeholders with long-term "win-win" solutions.

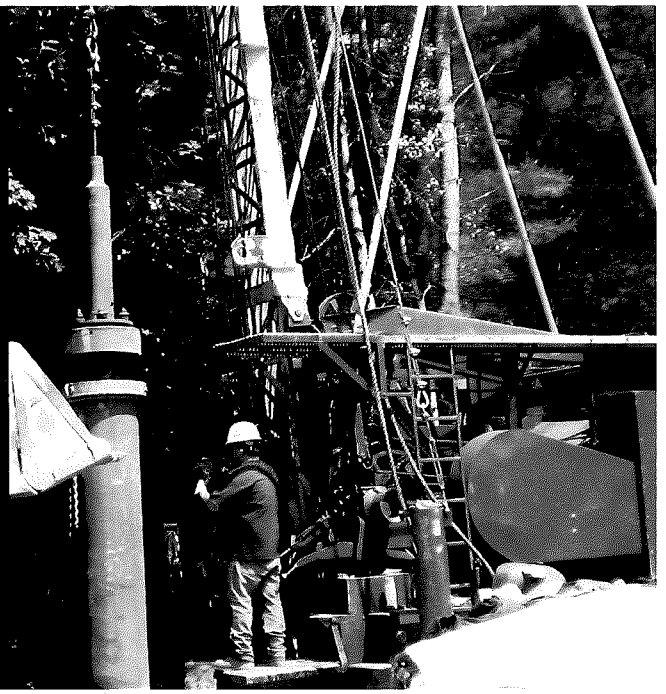
Nobis

Engineering a Sustainable Future

EXPERTISE:

ASSESSMENT & PLANNING

NEW GROUNDWATER DEVELOPMENT



Water Supply

SERVICES:

WATER SUPPLY NEEDS ASSESSMENT

INTEGRATED WATER RESOURCES PLANNING

WATER WELL SUSTAINABLE YIELD ASSESSMENT

HYDROGEOLOGIC & AQUIFER MAPPING

WATER CONSERVATION PLANS

SURFACE & BOREHOLE GEOPHYSICAL SURVEYS

BOTTLED WATER SOURCE ASSESSMENTS

NEW GROUNDWATER SUPPLY (WELL) EXPLORATION

TEST DRILLING & PRODUCTIVE WELL INSTALLATION

PUMPING TEST DESIGN, CONDUCT & INTERPRETATION

Nobis offers water supply services that include broad planning and assessment services from a water resources perspective and technical, "bread and butter" services focusing on groundwater sources for water supply (wells). A particular focus is the development and permitting of new water supply wells and bottled water sources. We are highly experienced with wells tapping both overburden and bedrock aquifers. Nobis also is active, professionally, within the water supply field, serving on technical advisory committees, teaching professional seminars, and serving on committees for professional organizations such as the New England Water Works Association.

Richard Baummer, PE

Director of Civil Engineering

EDUCATION:

MS, 1982, Urban Planning, Johns Hopkins University, Baltimore, MD

BA, 1978, Sociology, Undergraduate Study in Architecture, University of Maryland, College Park and Baltimore County, MD

CERTIFICATIONS / REGISTRATIONS:

Professional Engineer, MA #49147, MD #19187

PROFESSIONAL AFFILIATIONS:

American Society of Civil Engineers

Boston Society of Civil Engineers

LEED Green Associate

NAIOP – Commercial Real Estate Development Association - Government Affairs/Environment Committee

ACEC – MA Government Affairs Committee

ACEC – MA Private Sector Committee

International Council of Shopping Centers (ICSC)

Highlights of Experience

- Over 15 years of experience in site design and construction, hydrology, hydraulic design, roadway design, site planning, master planning, permitting, and utilities.
- Over 15 years of experience providing in-house development management services for a leading national developer and operator of large-scale continuing care retirement communities.
- In depth understanding of both the owner and consultant perspectives generating respect, confidence, and solutions that consistently create added value.
- Over 15 years of experience reviewing staff and consultant engineering reports and designs for compliance with Owner program and regulatory requirements.
- Ability to critically analyze and understand regulations; creates an atmosphere of trust with regulators and approving authorities at Federal, State and Municipal levels.
- Expertise in maximizing project value through creative problem solving and implementing effective land use and planning strategies.
- Team player with a common-vision management style accompanied by presentation and interpersonal communication skills that consistently deliver positive outcomes.
- Successfully resolves complex, high-visibility issues requiring exceptional expertise and collaborative leadership of multi-disciplinary design teams.
- Provides results-oriented, project-specific development management advice to the development community, including developers, institutions, architects and other design consultants, and contractors.
- Provides project specific development management advice and services to developers, institutions, design consultants, contractors, and other members of the development community.

Professional Experience

Linden Ponds at Hingham, Hingham, MA
Secured MA Chapter 40B approval of $480 Million, two 262-unit retirement community on a site that lacked hi-density zoning and public sewer and water availability. Directed consulting team with the value of design contracts of $20 Million. Developed a first-of-its-kind wastewater disposal system to provide groundwater recharge on an adjoining golf course with a design process that reduced project schedule and minimized change orders.

Richard Baummer, PE
Director of Civil Engineering

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Entegra Property Acquisitions, Taunton, Dighton and Walpole, MA
Formed and led a multi-disciplinary design team evaluating four large-scale industrial properties. The team prepared Property Conditions Assessment Reports in compliance with ASTM Guidelines to support our client's acquisition of the property portfolio.

Crowne & Eagle Apartments, Uxbridge, MA
Serving as Project Manager, provided drainage design and wetlands permitting services to assist the owner in replacing a failing masonry arch culvert on the site of an historic mill in Uxbridge, MA. The mill structure had in the past been redeveloped into senior housing. Conservation Commission approvals were secured for proposed work in the Mumford River and the adjacent Riverfront Protection Area. Nobis was retained for these services by The Community Builders, Inc., Property Manager for the Owner.

New Orchard Hill Estates, Oxford, MA
Served as Project Manager for the bidding and construction phases for this challenging sanitary sewer manhole remediation project in an occupied public housing project. Extensive care and coordination was required in order to maintain service to existing occupied apartment buildings and maintain safety around work areas for the project's occupants, including families with small children.

Appleton Mill, Lowell, MA
Serving as Project Manager, coordinated with client, project architect, and City of Lowell to design and secure approvals for new water and sewer services in Jackson Street; solicited bids from contractors; coordinated contract preparation and execution for construction; managed construction administration services.

Brooksby Village, Peabody, MA
While working for the owner, saved $3 Million on a $20 Million site budget by assembling a geotechnical team that recommended in-place deep densification of soils in lieu of piles to support structures for a 1,862-unit retirement community on a 90-acre highly disturbed abandoned quarry and landfill site. Closed municipal landfill in accordance with state requirements. Secured Conservation Commission approval to proceed with repair of storm drain system and providing services to bring the facility into operational compliance with MA Wetlands Protection Act.

Boott Cotton Mill, Lowell, MA
Project Manager for civil engineering services providing feasibility analysis, design and permitting services to complete the final phase of redevelopment of this historic mill building into 43,000 SF of commercial space and 77 rental apartments.

James Vernon, PhD, CG, PG

Senior Hydrogeologist

EDUCATION:

PhD, 1987, Geology, University of Oklahoma, Norman, OK

MA, 1982, Liberal Studies/Science, Wesleyan University, Middletown, CT

BA, 1974, Geology, Mathematics, Bucknell University, Lewisburg, PA

CERTIFICATIONS / REGISTRATIONS:

Certified Professional Geologist, ME #GE374

Professional Geologist, NH #00674

OSHA 40-Hour HAZWOPER Training

Hazardous Waste Generator Training

Highlights of Experience

- Expertise in hydrogeology, structural geology, geophysics, project management, source water protection, hydrology, and field geology.
- Develops conceptual site models for contaminated groundwater sites in complex hydrogeologic settings, especially fractured bedrock.
- Assesses potential groundwater flow directions and contaminant transport pathways in fractured rock settings using methods including photolineaments (fracture trace analysis), published geologic mapping, outcrop fracture measurement, borehole geophysics (Acoustic Televiewer Logging).
- Provides water supply services, including water yield assessment, groundwater exploration, and well testing and permitting in both fractured bedrock and stratified drift settings.
- Develops and permits new water supply wells.
- Experience with wells tapping both overburden and bedrock aquifers.
- Serves on technical advisory committees, teaches professional seminars, and serves on committees for professional organizations such as the New England Water Works Association.

Professional Experience

Old Orebed Road, Lanesborough, MA
Assessed groundwater contamination in a residential bedrock well under a SARSS V contract. Used fracture trace analysis on historical air photos along with published bedrock geologic maps to assess potential sources for the contamination and potential migration pathways in the fractured rock. Supervised borehole geophysical surveys and their interpretation as part of the fractured rock characterization.

City of Dover and US EPA, Wellhead Protection and Monitoring for Fractured Bedrock Well, Dover, NH
Managed the case study for wellhead protection area (WHPA) delineation in fractured crystalline bedrock, as part of a nationwide series of WHPA delineation and monitoring projects. Specialized techniques included borehole geophysics, dye tracing, and fluid replacement logging, which were combined with geologic mapping and pumping tests to delineate a highly site specific protection area in a heterogeneous bedrock aquifer in glaciated terrain and to design a monitoring program and to locate bedrock and overburden monitoring wells. A peer-reviewed scientific paper followed.

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NHDES, USA Springs Large Groundwater Withdrawal Permit Application Review, NH
Managed and served as technical lead for this project, after winning a competitive selection by the NHDES. Assisted in reviewing a highly controversial Large Groundwater Withdrawal Permit application for a proposed new bottled water source by USA Springs in Nottingham, New Hampshire. Provided technical support to NHDES on pumping test conduct and interpretation, withdrawal impact analyses, and permit application compliance. The support included written comments on permit applications and hydrogeologic reports as well as support at stakeholder meetings.

Municipal Well Installation, Marlborough, NH
As Project Manager and Technical Lead, assisted the Town with installing, testing, and permitting two new gravel-packed production wells to serve the Town water system. Provided overall project coordination; drilling and well construction supervision; permit applications to NHDES for a Large Groundwater Withdrawal Permit and a New Large Community Well permit; pumping test design and conduct; monitoring groundwater, wetlands, and stream flow; assisted the Town with Water Conservation Plan, approved by NHDES, and a Wellhead Protection Plan; and support at Public Hearings. The two new, gravel-packed wells were drilled in Summer 2011 by Nobis' subcontracted well drilling firm and tested in 2012 to meet permitting requirements. Large Groundwater Withdrawal Permit and New Large Community Well Permits were granted by NHDES in August 2013. Assisted the Town in obtaining a federal grant/loan funding package for the project.

Pillsbury Lake District, Webster, NH
Assisted the District in improving its Community Water System, following water supply shortfalls in 2010 and 2011. Working closely with the District and the New Hampshire Department of Environmental Services (NHDES), assisted the District in obtaining accurate yield estimates for three of its four existing bedrock wells, deepening and hydrofracturing two of its wells, and testing and permitting the deepened wells. The District has worked to locate and repair water main leaks. The District has been notified by NHDES that its water supply shortfalls have been corrected. This was done without the expense of drilling and testing a new well.

Waterville Estates Village District, Campton and Thornton, NH
Assisting the Waterville Estates Village District with the current and future water supply for their Community Water System. Working closely with the District and NHDES to evaluate several options for new water supply in addition to protecting the existing wells. Services have included assisting the District in applying for a Flood Mitigation Grant from FEMA, following the close approach of Mad River flood waters to the existing wells during Hurricane Irene in 2011.

Public Spring Assessment, Plymouth, NH
Assessed and made recommendations for improvements of the Town's roadside spring. Examined the spring's construction and the upgradient contributing area to the spring and submitted a report with recommendations for improving and protecting the spring.