



VIA EMAIL: rob.nlswp@tds.net

October 23, 2024
File No.: 33.P000059.25

Robert Thorp, Superintendent
New London-Springfield Water System Precinct
72 Old Dump Road
New London, NH 03257

Re: New London-Springfield Water System Precinct – Expanded Evaluation of the Colby Point Well Field, New London, New Hampshire

Dear Robert:

Pursuant to our discussion last week, Emery & Garrett Groundwater Investigations (EGGI), a Division of GZA GeoEnvironmental, Inc. (GZA) is pleased to submit to you our Work Scope Proposal relative to conducting additional groundwater exploration and testing at the existing Colby Point Well Field for the New London-Springfield Water System Precinct in New London, New Hampshire. This investigation would serve to assess the potential for developing additional groundwater resources from the existing well field on Colby Point, a narrow peninsula protruding from the north shore of Little Lake Sunapee (**Figure 1**).

INTRODUCTION

For this proposal, Emery & Garrett Groundwater Investigations (EGGI), a Division of GZA (GZA) is submitting herein a technical work scope for conducting a groundwater resources investigation designed to maximize groundwater withdrawals from the existing Colby Point Well Field. The Colby Point Well Field consists of six production wells on a relatively small footprint (1.7 acres) in the central area of the peninsula. Three of the Production Wells (#1, #2, and #5) are located on the eastern shore of the peninsula, while the remaining three lie in close proximity closer to the western shore (**Figure 1**). The fine-grained geologic formation in which the wells are screened limits groundwater withdrawals from the collective well field despite the available recharge via induced infiltration from Little Lake Sunapee.

EGGI completed a town-wide groundwater exploration program in 2022 which included preliminary recommendations for increasing groundwater withdrawals from Colby Point. This investigation will expand that earlier work to incorporate testing of the existing wells, geophysical surveys, and the installation of test borings, so that an assessment can be made of the most feasible steps available to increase groundwater withdrawals. EGGI will coordinate its activities with both Underwood Engineers, the engineers for the Precinct, and Barrie Miller’s Well & Pump Corporation, the firm that has maintained the Production Wells for many years.

OUTLINE OF WORK SCOPE – HYDROGEOLOGIC SERVICES FOR EXPANDED EVALUATION OF THE COLBY POINT WELL FIELD

EGGI's proposal for developing groundwater resources at any project site is divided into several phases. This phased approach is designed so that our clients can have the opportunity to continually review the progress and results of each phase prior to beginning the next. The work phases proposed are presented in outline form below:

Task 1 – Review of Production Well Design and Assessment of Known Hydrogeologic Information from Colby Point

Earlier reports summarizing groundwater exploration efforts on Colby Point will be reviewed to further characterize the subsurface geologic strata. Those same reports, along with other information available through the NLSWSP, and well maintenance records contain information regarding the construction and performance of the six Production Wells. These records contain fundamental information that will help characterize the aquifer and the pumping system. Such information will provide the basis for focusing the later testing efforts on specific tasks to help improve well performance.

Task 2 – Testing of Six Individual Production Wells to Evaluate the Productivity of Each Under Current Operating Conditions

EGGI will work with the NLSWSP to design a testing program for evaluating each of the six production wells. To do this, only one well will be allowed to pump at a time and a selected pumping rate will be held constant for two to three hours while water levels are monitored in the Production Well and nearby monitoring locations. Available monitoring wells will be located and tested to ensure that a hydraulic connection still exists between the monitoring well and the aquifer. If such a connection, does not exist, then EGGI will attempt to re-develop the wells so they can be used during the testing program. Water levels will be recorded with automated water level recorders in up to nine locations (six Production Wells and two to three monitoring wells, if available). EGGI will coordinate with NLSWSP to make sure that during the testing (which will discharge water to waste), the Precinct can continue to provide service to all of its customers.

Task 3 – Collection of Subsurface Data Using Geophysical Surveys

The ability to withdraw groundwater from an aquifer is largely controlled by two characteristics: the permeability of aquifer material (largely controlled by grain-size distribution) and the saturated thickness of the aquifer. Therefore, groundwater exploration efforts are generally focused in those areas having the thickest and most transmissive unconsolidated deposits. Geophysical surveys will be used to help identify those areas that are the most favorable for potentially developing additional groundwater in the immediate study area.

EGGI owns and operates all of its own geophysical equipment and plans to deploy two methods to evaluate the subsurface beneath Colby Point: electrical resistivity surveys and passive seismic techniques. Electrical resistivity surveys provide a cost-effective method for investigating the *subsurface* conditions of both unconsolidated deposits (i.e., sand and gravel aquifers) and transmissive bedrock structures. Electrical resistivity surveys are used to assess how subsurface materials retard the flow of electricity. The contrast in electrical properties between bedrock and the saturated overburden makes it possible to estimate the saturated thickness of unconsolidated

aquifers along the survey line. Furthermore, water-bearing fracture zones in the underlying competent bedrock typically have a lower resistivity than competent (or non-fractured) bedrock, so the potential for deeper bedrock wells beneath Colby Point will also be evaluated.

Passive seismic geophysical surveys can be used in a similar fashion to provide the estimated depth to bedrock beneath a single point. On Colby Point, the technique can be used effectively in areas where long electrical resistivity lines cannot be laid out, due to obstructions or property permission. The areas identified with the thickest overburden will be targets for later test well drilling. It is assumed that the Precinct will obtain permission from the Colby Point property owner to conduct tests.

Task 4 – Exploratory Test Well Drilling – Preliminary Yield and Quality Testing

A track-mounted, exploratory test well drilling rig will be subcontracted to install three to four overburden test wells beneath the available site footprint. This type of drilling advances four-inch-diameter steel casing through the unconsolidated overburden and allows for the collection of undisturbed formation samples at any desired depth, thereby allowing a detailed stratigraphic profile of subsurface materials to be created. The detailed stratigraphic record can allow a better assessment of existing Production Wells and their construction, if installed in the immediate vicinity of a Production Well or can be used to design an efficient Production Well in a different location. The information collected during test well installation will be coupled with existing subsurface information to create a more comprehensive picture of the subsurface materials comprising the aquifer. Note that a steel protective pipe, with locking cap, will be left in place and be visible above ground.

Once a test boring has penetrated the overburden, EGGI will design a PVC monitoring well (two-inches or three-inches in diameter) to be built inside the boring with the well screen situated in the most favorable interval. Subsequent to well construction, EGGI will develop the test wells to remove the fine material clogging the well screen; this process will serve to improve water flow to the borehole, thereby increasing the well efficiency. Once constructed and developed, EGGI will perform short-term productivity and water quality testing.

The installation of bedrock exploratory test wells will not be part of this investigation. If favorable bedrock test well drilling targets are identified beneath Colby Point, EGGI will present those potential bedrock test well drilling targets to the NLSWSP, but the drilling and testing of bedrock wells is much more expensive and will require significantly more site preparation. Therefore, any potential bedrock exploration program would be performed under a separate contract.

Task 5 – Prioritize Recommendations for Supplementing Existing Groundwater Withdrawals from the Colby Point Well Field – Final Report

Once all of the subsurface information has been gathered, the Production Wells tested, and the construction of the existing Production Wells is well understood, EGGI will fully evaluate the potential means of increasing groundwater withdrawals from the Colby Point Well Field. All of our recommendations will be outlined in a Final Report submitted and presented at a meeting of the NLSWSP. The recommendations may include:

- **Re-designing existing Production Wells** – It may be possible to modify the construction of existing Production Wells to make them more efficient. This might be accomplished through well screen and/or gravel pack modifications or deepening of a Production Well.
- **Replacement of Existing Production Wells** – Existing Production Wells that might be damaged or designed too conservatively might be replaced in the same location or very close by. If the efficiency of a Production Well can be improved, then greater volumes of groundwater can be extracted while utilizing the same amount of limited available drawdown.
- **Installation of New Production Wells** – The limited footprint which the NLSWSP have to work within certainly restricts the potential for new Production Well locations, but the geophysical surveys and test well drilling may highlight areas where a new Production Well can be justified. Ultimately, some means of withdrawing groundwater from a greater area within the footprint likely provides the best hope for increasing overall withdrawals.
- **Groundwater Withdrawals via Unconventional Well Construction** – Non-traditional approaches to well construction have been effective in many areas where aquifers are composed of fine material and drawdown is limited. Two of the most common approaches that might be considered for use on Colby Point include horizontal well construction and caisson wells. Both methods allow much greater areas of screen to be utilized so leakage from the formation into the well can be spread over a greater area of the formation. In horizontal well construction, the well penetrates the ground at a low angle and can then be directed along the most productive and thickest areas of the aquifer for hundreds of feet, thereby creating a long line of screen, rather than a single vertical well. In caisson well construction, screened area can be increased by simply providing a much larger diameter well (i.e., ten feet or more). The large-diameter caisson construction also allows for the installation of horizontal well screens that can extend out into the formation in any/all directions which can dramatically increase the total area of well screen over a large area.

The biggest disadvantages to non-traditional well construction techniques are the much greater cost for the initial construction and the uncertain regulatory environment for testing and approval of the new Production Well.

- **Possible Bedrock Production Well** – If the geophysical surveys indicate that a favorable bedrock well drilling target exists beneath available footprint, EGGI will make recommendations regarding that potential as well. If additional groundwater can be developed from deeper bedrock source, EGGI will coordinate conversations with NHDES regarding the permitting procedure for a new bedrock Production Well in the well field and whether that would require a new Large Groundwater Withdrawal Permit.

BASIS OF BILLINGS AND BUDGET

Billings for EGGI's/GZA's professional services will be based on lump sum (or per unit cost for water quality). Our budget to complete the Phase I work described in our Scope of Services is summarized in the table below.

TASK DESCRIPTION	COST
Task 1 – Review of Production Well Design	\$4,500
Task 2 – Testing of Six Individual Production Wells to Evaluate the Productivity of Each Under Current Operating Conditions	\$12,900
Task 3 – Collection of Subsurface Data Using Geophysical Surveys	\$16,000
Task 4 – Exploratory Test Well Drilling – Preliminary Yield and Quality Testing	\$30,000
Task 5 – Prioritize Recommendations for Supplementing Existing Groundwater Withdrawals from the Colby Point Well Field – Final Report	\$13,500
COST:	\$76,900

This budget is based on the anticipated Scope of Services described above, which represents our present judgment as to the level of effort required, including the assumptions listed above. Actual charges may vary, either upward or downward, depending upon the execution of the work. All services will be charged as incurred, on a monthly basis.

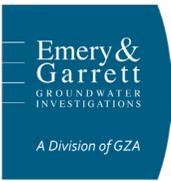
Invoices for our services will be emailed to Robert Thorp, NLSWSP rob.nlswp@tds.net. Should your email or mailing addresses be different than shown herein, please notify the undersigned so that appropriate changes can be made.

SCHEDULE

EGGI/GZA is prepared to initiate work on the project upon receiving your written authorization to proceed. The completion date for the work is highly dependent on NLSWSP obtaining appropriate permissions to work on the property, the timing of the Production Well testing to avoid interference with normal system operations, and subcontractor availability for the test well drilling.

CONDITIONS OF ENGAGEMENT

This proposal and attached Terms and Conditions for Professional Services (06/24-Edition/05-9010) will form the basis for engagement between the two parties.



ACCEPTANCE

This proposal may be accepted by signing in the appropriate spaces and returning one complete copy (with attachments) to us. An executed proposal must be received prior to initiation of the services described above. Issuance of a purchase order explicitly acknowledges acceptance of the Scope of Services and Conditions of Engagement. This proposal is valid for a period of 30 days from the date of issue.

We appreciate the opportunity to work with you on this project. Please contact us if you have any questions regarding this proposal.

Very truly yours,

EMERY & GARRETT GROUNDWATER INVESTIGATIONS, A DIVISION OF GZA

James M. Emery, PG
Principal/District Office Manager/Senior Hydrogeologist

JME:rlk

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Attachments:

Figure 1 – Existing Production Wells and Wellhead Easement – Colby Point Well Field
Terms and Conditions for Professional Services (06/24-Edition/05-9010)

This Proposal for Groundwater Exploration and Existing Source Evaluation and the attached Terms and Conditions for Professional Services (06/24-Edition/05-9010) are hereby accepted and executed by a duly authorized signatory, who by execution hereof warrants that he/she has full authority to act for, in the name of, and on behalf of the New London-Springfield Water System Precinct.

By: _____ Title: _____
for New London-Springfield Water System
Precinct

Typed Name: _____ Date: _____

Billing Address (if different from above): _____

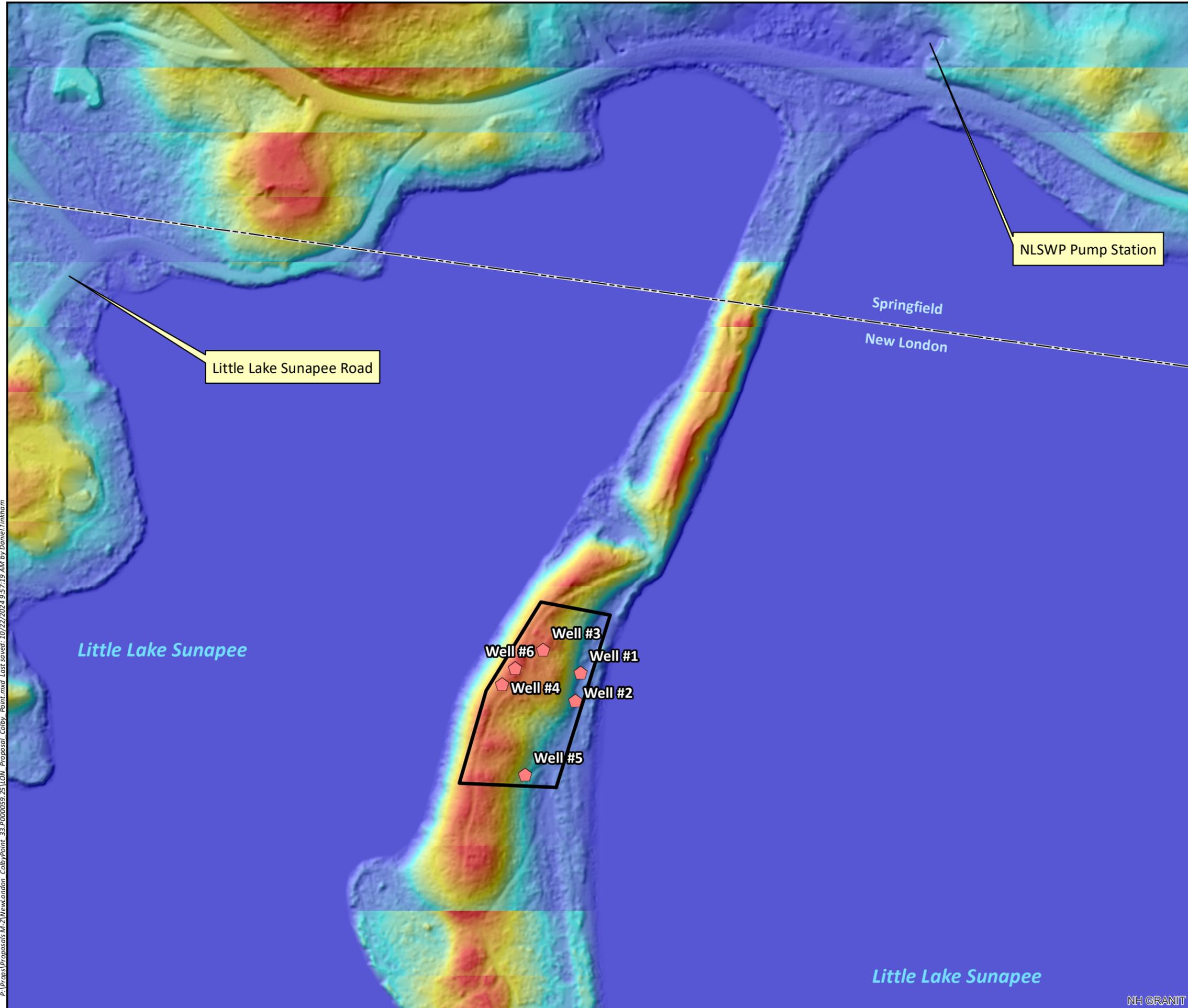


FIGURE 1
 Existing Production Wells and
 Wellhead Easement
 Colby Point Well Field
 New London-Springfield Water Precinct
 New Hampshire

Legend

- Colby Point Production Wells
- Current Easement for the Colby Point Well Field

LiDAR Bare Earth Elevation
 (meters above sea level)

High : 375.569
 Low : 371.133

- Town Boundary

N

Scale is 1:2,400
 1 inch = 200 feet

0 20 40 80 Meters

0 100 200 400 Feet

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TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

© 2024 by GZA GeoEnvironmental, Inc.

These Terms and Conditions, together with GZA's Proposal, make up the Agreement between GZA and You, Client, named above. If the attached GZA Proposal is styled as a Master Services Agreement, then these Terms and Conditions will apply to any and all services ordered by you and performed by GZA.

BEFORE SIGNING THE PROPOSAL, BE SURE YOU READ AND UNDERSTAND THE PARAGRAPHS ENTITLED "INDEMNIFICATION" AND "LIMITATION OF REMEDIES" WHICH DEAL WITH THE ALLOCATION OF RISK BETWEEN YOU AND GZA.

- 1) **Services.** GZA will perform the services set forth in its Proposal and any amendments or change orders authorized by you (the "Services"). Any request or direction from you that would require extra work or additional time for performance or would result in an increase in GZA's costs will be the subject of a negotiated amendment or change order. All Services performed by GZA will be governed by this Agreement, even if performed prior to your execution of the Proposal.
- 2) **Term.** If the attached GZA proposal is styled as a Master Services Agreement, then the term of this Agreement will begin on the date of execution of the proposal (the "Effective Date"), and either party may terminate this Agreement for convenience upon thirty (30) days' written notice, provided that GZA will be paid for all services performed through the date of termination.
- 3) **Standard of Care; Warranties.**
 - a) GZA will perform professional Services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality. GZA's sole responsibility with regard to Services which do not meet the foregoing standard of care is to reperform such Services, at GZA's expense, but only if you provide GZA written notice of such non-conformity within ninety (90) days after completion of the Services.
 - b) **NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY GZA'S PROPOSAL OR BY ANY OF GZA'S REPORTS OR OTHER CONDUCT.**
 - c) GZA assigns to you any manufacturers' warranties of equipment or materials purchased from others, to the extent they are assignable, and your sole recourse will be against the manufacturer. Full risk of loss of materials and equipment will pass to you upon delivery to the Site, and you will be responsible for insuring and otherwise protecting them against theft and damage.
- 4) **Payment.**
 - a) Except as otherwise stated in the Proposal, you will compensate GZA for the Services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
 - b) Any retainer specified in GZA's Proposal shall be due prior to the start of Services and will be applied to the final invoice for Services.
 - c) GZA will submit invoices periodically, and payment will be due within 20 days from invoice date. You will notify GZA in writing of any invoice disputes within 10 days of the invoice date, and if no written notice of dispute is received, the invoice will be deemed approved in full. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. GZA may terminate the Services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all Services through termination, plus termination costs. You will reimburse GZA's costs of collecting overdue invoices, including reasonable attorneys' fees (including costs for time expended by in-house counsel, which will be charged to you at the prevailing market rate for attorneys of similar experience practicing in the jurisdiction). Any amounts paid by you to GZA will be applied first to interest and costs incurred by GZA, and then to the principal balance.
- 5) **Your Responsibilities.**
 - a) If the Services involve entry onto a third-party property or otherwise require access to property you do not own or control, you will secure the access agreements, approvals, permits, licenses and consents necessary for performance of the Services, without GZA becoming a party to or otherwise being required to sign any such agreements, approvals, permits, licenses and consents. If you are the owner or operator of the Site, you will provide GZA with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the Site (including, if applicable, asbestos containing materials ["ACM"]) and other information that may be pertinent to the Services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to GZA. GZA is entitled to rely on the accuracy and completeness of documents and information you provide. You acknowledge that the quality of the services provided by GZA is directly related to the accuracy and completeness of the information and data that you furnish to GZA.
 - b) If you use the services of a contractor or construction manager at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the contractor or construction manager provisions obligating the latter:
 - i) to defend, indemnify and hold harmless, to the fullest extent permitted by law, GZA, its affiliates and subsidiaries, and each of their officers, directors, members, partners, agents, insurers, employees, and subconsultants (the "GZA Indemnitees") and you, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, the construction manager, or any of their subcontractors or any engineer engaged by them;
 - ii) to name you and GZA as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor or construction manager, or any of their subcontractors, and to ensure that such policies are primary and noncontributory with regard to the above indemnity obligations; and
 - iii) to require that all of their subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
 - c) In the event that you are unable to secure such provisions in the agreement(s) with the contractor or construction manager, you shall promptly (but in any event prior to the commencement of the Services) notify GZA and GZA shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections. Failure to provide such notice will be a material breach of this Agreement.
 - d) To the extent you are entitled to indemnification (either contractual or at common law) or are otherwise indemnified by the contractor or construction manager and/or their subcontractors, you agree to waive any claim (including without limitation indemnification or insurance claims) against GZA.
- 6) **Right of Entry; Site Restoration.** You grant GZA and its subcontractor(s) permission to enter the Site to perform the Services. If you do not own the Site, you represent and warrant that the owner has granted permission for GZA to enter the Site and perform the Services; you will provide reasonable verification on request; and you will indemnify the GZA Indemnitees for any claims by the Site owner related to alleged trespass by GZA or its subcontractors. Although GZA

- will exercise reasonable care to limit damage to landscaping, paving, systems and structures at the Site, you acknowledge that some damage may occur even with the exercise of due care and you agree to compensate GZA for any restoration it is asked to perform, unless otherwise indicated in the Proposal.
- 7) **Underground Facilities.** GZA's only responsibility under this Agreement will be to provide proper notification to the applicable state utility "Call-Before-You-Dig" program. You further agree to assume responsibility for and to defend, indemnify and hold harmless GZA with respect to personal injury and property damages due to GZA's interference with subterranean structures including but not limited to utilities, conduits, pipes, and tanks:
- that are not correctly shown on any plans and information you or governmental authorities provide to GZA; or
 - that are not correctly marked by the appropriate utility.
- 8) **Reliance.** The services, information, and other data furnished by you shall be at your expense, and GZA may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the Services provided by GZA is directly related to the accuracy and completeness of the information and data that you furnish to GZA. **GZA'S REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO GZA. YOU SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE GZA INDEMNITEES FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEYS' FEES, ARISING OUT OF OR RESULTING FROM ANY USE, REUSE, OR MODIFICATION OF THE DOCUMENTS WITHOUT WRITTEN VERIFICATION, COMPLETION, OR ADAPTATION BY GZA AND SUCH LIMITED LICENSE TO YOU SHALL NOT CREATE ANY RIGHTS IN THIRD PARTIES.** However, in GZA's sole discretion, which may be withheld for any reason whatsoever, if you request that GZA extend reliance to a third party, then such reliance will be conditioned upon the third party's acceptance of such reliance on GZA's standard reliance terms and you will be obligated to pay GZA a reliance fee calculated as 10% of GZA's original fee for the report upon which reliance is being extended.
- 9) **Lab Tests and Samples.** GZA is entitled to rely on the results of laboratory tests using generally accepted methodologies. GZA may dispose of samples in accordance with applicable laws 30 days after submitting test results to you unless you request in writing for them to be returned to you or to be held longer, in which case you will compensate GZA for storage and/or shipping beyond 30 days.
- 10) **GZA Professionals.** GZA employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, Certified Hazardous Materials Managers, or Certified Industrial Hygienists, collectively referred to in this section as "GZA Professionals"), whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the Services of GZA or other contractor/consultant(s), which audit may require additional Services, even though GZA and such GZA Professionals have each performed such Services in accordance with the standard of care set forth herein. You agree to compensate GZA for all Services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.
- 11) **Hazardous Materials; GZA "Not a Generator".** Before any hazardous or contaminated materials, including, if applicable, ACMS (the "Wastes") are removed from the Site, you will sign manifests naming you as the generator of the Wastes (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any Wastes are taken. GZA will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any Wastes at or removed from the Site. GZA will not have responsibility for or control of the Site or of operations or activities at the Site other than its own. GZA will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any Wastes at or removed from the Site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold the GZA Indemnitees harmless for any costs or liability incurred by GZA in defense of or in payment for any legal actions in which it is alleged that GZA is the owner, generator, treater, storer or disposer of any Wastes.
- 12) **Limits on GZA's Responsibility.** GZA will not be responsible for the acts or omissions of contractors or others at the Site, except for its own subcontractors and employees. GZA will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall GZA's professional activities nor the presence of GZA or its employees and subcontractors be construed to imply that GZA has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by GZA of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.
- 13) **Changed Conditions.**
- You recognize the uncertainties related to the Services (including, without limitation, environmental and geotechnical Services), which often require a phased or exploratory approach, with the need for additional Services becoming apparent during the Services. You also recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.
 - If changed or unanticipated conditions or delays make additional Services necessary or result in additional costs or time for performance, GZA will notify you and the parties will negotiate appropriate changes to the scope of Services, compensation and schedule.
 - If no agreement can be reached, GZA will be entitled to terminate the Services and to be equitably compensated for the Services already performed. GZA will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part, or any other causes beyond GZA's reasonable control, and you will compensate GZA for any resulting increase in its costs.
- 14) **Documents and Information.** All documents, data, calculations and work papers prepared or furnished by GZA are instruments of service and will remain GZA's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to GZA. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to GZA. Any technology, methodology or technical information learned or developed by GZA will remain its property. Provided GZA is not in default under this Agreement, GZA's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.
- 15) **Electronic Media.** In accepting and utilizing any drawings, reports and data on any form of electronic media generated by GZA, you covenant and agree that all such electronic files are instruments of service of GZA, who shall be deemed the author and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by GZA and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer

of these electronic files to others or reuse or modifications to such files by you without the prior written consent of GZA will be at the user's sole risk and without any liability to GZA.

- 16) **Confidentiality; Subpoenas.** Information about this Agreement and GZA's Services and information you provide to GZA regarding your business and the Site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as GZA reasonably believes is necessary: (a) to perform the Services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws, regulations, court orders and professional obligations. GZA will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. Information available to the public and information acquired from third parties will not be considered confidential. You will reimburse GZA for responding to any subpoena or governmental inquiry or audit related to the Services, at the rates set forth in the applicable Proposal, amendment or change order (including, without limitation, for outside counsel expenses incurred by GZA and/or time expended by in-house counsel, which will be charged to you at the prevailing market rate for attorneys of similar experience practicing in the jurisdiction). Notwithstanding the foregoing, GZA shall be entitled to use your name and a general description of the Services in promotional materials.
- 17) **Insurance.** During performance of the Services, GZA will maintain workers' compensation, commercial general liability, automobile liability, and professional liability/contractor's pollution liability insurance. GZA will furnish you certificates of such insurance on request.
- 18) **Indemnification.** You agree to hold harmless, indemnify, and defend the GZA Indemnitees against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the Services, except to the extent they are caused by GZA's negligence or willful misconduct. The duty to defend will be triggered upon a claim, suit, fine and/or penalty being alleged or threatened, and will only terminate when and to the extent GZA's proportion of negligence is finally adjudicated by a court of competent jurisdiction. If the foregoing indemnification is determined to be void or unenforceable as a matter of law, then it shall be automatically reformed to apply the original intent of the clause to the maximum extent permissible by law.
- 19) **Limitation of Remedies.**
 - a) To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of GZA and its affiliates, parents and subsidiaries and subcontractors and each of their employees, insurers, principals, officers, directors, partners and agents (collectively referred to in this paragraph as "GZA") for all claims arising out of this Agreement or the Services is limited to \$50,000 or, if greater, 10% of the compensation received by GZA under this Agreement.
 - b) You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.
 - c) Any claim against GZA related in any way to the services provided pursuant to this Proposal, or the terms herein, is waived unless suit is commenced in a proper jurisdiction within one year of substantial completion of GZA's services. This waiver may not be construed to extend any applicable statute of limitations.
 - d) GZA will not be liable for lost profits, loss of use of property, delays, contractual penalties or other special, indirect, incidental, consequential, punitive, exemplary, liquidated, or multiple damages. This includes but is not limited to fines and/or penalties and/or sanctions imposed by any local, state, or federal government, agency, or regulatory body.
 - e) GZA will not be liable to you or the Site owner for injuries or deaths suffered by GZA's or its subcontractors' employees.
 - f) You will look solely to GZA for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any GZA principal, officer, employee or agent. To the extent damages are covered by property insurance or any other insurance, both you and GZA waive all rights against each other and against the contractors, consultants, agents, and employees of the other, for damages, except such rights as they may have to the proceeds of such insurance as set forth in this Agreement. You or GZA, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.
- 20) **Disputes.**
 - a) All disputes between you and GZA shall be subject to non-binding mediation.
 - b) Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
 - c) The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
 - d) No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitations period or the one year waiver period described in 18(c) above would expire if suit were not filed prior to such forty-five (45) days after service of notice. However, where non-payment of an invoice has occurred and GZA sends you a final demand letter for payment, your failure to respond within ten (10) days of receipt (or, for certified mail, the date of the first attempt to deliver the letter to your address of record if you ultimately do not accept receipt of the letter) of such letter will be deemed to be a waiver of your right to enforce this mediation clause and GZA may immediately file suit to enforce the terms of this Agreement.
 - e) You agree to pay reasonable attorneys' fees and all other costs and expenses (including, but not limited to reasonable investigative expenses and expert and consultant expenses) which may be incurred by GZA in the enforcement of this Agreement in the event that (a) it is finally adjudicated by a court of competent jurisdiction that you have breached this Agreement; or (b) where you allege that GZA has breached this Agreement or otherwise acted negligently and it is finally adjudicated by a court of competent jurisdiction that GZA did not in fact breach this Agreement or act negligently. If for any reason it is adjudicated that the foregoing provision is in violation of applicable law, is subject to a state statute automatically converting this clause to be reciprocal between the parties, is contrary to public policy or is unconscionable or a contract of adhesion, then the foregoing clause will be null and void and of no effect. Under no circumstances shall the foregoing clause be replaced with a reciprocal clause.
 - f) You shall make no claim against GZA for professional negligent acts, errors, omissions and/or alleged breach of contract either directly, indirectly, as a counterclaim or crossclaim, or in a third party claim, unless you have first provided GZA with a written certification executed by an independent professional practicing in the same discipline as GZA and licensed in the jurisdiction in which GZA provided you its Services. This certification must (i) identify the name and license of the certifier, (ii) specify each and every act or omission that the certifier contends is a violation of the standard of care expected of professional

performing professional services under similar circumstances; and (iii) state in complete detail the basis for certifier's opinion that each such act or omission constitutes a violation of the standard of care. This certificate must be provided to GZA no less than thirty (30) days prior to the submission of a formal claim.

21) **Miscellaneous.**

- a) This Agreement and all claims relating thereto shall be governed by the substantive and procedural laws of the Commonwealth of Massachusetts, as they presently exist or may hereafter be amended, without regard to principles of conflict of laws.
- b) The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the Services under this Agreement and the termination of the contract for any reason.
- c) Any amendment to these Terms and Conditions must be in writing and signed by both parties. No modification of these Terms and Conditions will be binding against GZA unless specifically approved in writing by a principal of GZA.
- d) Having received these Terms and Conditions, your oral authorization to commence Services, your acceptance of performance of the Services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
- e) This Agreement supersedes any contract terms, purchase orders or other documents issued by you, even if signed by an authorized representative of GZA.
- f) Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
- g) Your failure or the failure of your successors or assigns to receive payment, reimbursement, insurance proceeds or grant funds from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to GZA under this agreement.
- h) These Terms and Conditions shall govern over any inconsistent terms in GZA's Proposal.
- i) Any provision of this Agreement later held to be unenforceable for any reason shall be deemed void, and all remaining provisions shall continue in full force and effect on the parties, who agree that the Agreement shall be reformed to replace such voided provision with a valid and enforceable provision that comes as close as possible to expressing the intention of the voided provision.
- j) The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.
- k) Any reports generated by GZA will be subject to GZA's standard report limitations for that particular type of report.
- l) To the extent applicable to GZA's Services, you acknowledge and agree that GZA cannot anticipate the effects of climate change/extreme weather on any report, design or other document produced by GZA, unless such analysis is specifically within the scope of GZA's Services.
- m) You agree that during the performance of GZA's Services and for a period of twelve (12) months completion of those Services, you will not encourage, induce, or otherwise solicit, or actively assist any other person or organization to encourage, induce or otherwise solicit, directly or indirectly, any employee of the GZA or any of its affiliates to terminate their employment with GZA or any of its affiliates, or otherwise interfere with the advantageous business relationship of GZA or any of its affiliates with their employees. You agree that if you violate this non-solicitation provision, you will pay GZA liquidated damages in an amount equal to the total earnings of the solicited employee during the last twelve (12) months of their employment with GZA.
- n) This Agreement does not create any third-party beneficiaries and is intended for the benefit of the parties hereto and their respective successors and permitted assigns, and is not for the benefit of, nor may any provision hereof be enforced by, anyone else.

22) **Asbestos Abatement Services (If Applicable).** If the Services include asbestos abatement services, then the following terms and conditions will apply and will supersede any conflicting terms contained elsewhere in this Agreement.

- a) You acknowledge that conditions can vary from those encountered at the times and locations of explorations and data collection, and that the limitation on available data may result in some level of uncertainty with respect to the interpretation of those conditions, despite due professional care. GZA therefore cannot guarantee specific results such as the identification or removal of all asbestos or other contamination.

23) **Microbial Services (If Applicable).** If the Services include Microbial services, then the following terms and conditions will apply and will supersede any conflicting terms contained elsewhere in this Agreement. For purposes of this Agreement, Microbial is defined as any and all fungal and/or bacterial growth including but not limited to mold, mildew, yeast, fungus, fungi, bacteria, spores, odors, particulates, vapors, gas, or other emissions produced by or arising out of or toxins emanating therefrom.

- a) You recognize that meeting the standard of care does not establish an assurance that corrective procedures will be permanent. Because Microbial infestations are created by near-omnipresent living microscopic spores which grow very quickly and are influenced by nanoclimatological conditions that are very difficult to detect and sources of water intrusion, elevated moisture or relative humidity over which GZA has neither control or responsibility, GZA cannot and does not claim that its Services will eliminate the risk of a Microbial infestation recurring.
- b) You acknowledge that the Services entail risk of personal injury and property damage (including cross-contamination) that cannot be avoided, even with the exercise of due care. You also acknowledge that environmental conditions can vary from those encountered at the times and locations of explorations and data collection, and that the limitation on available data may result in some level of uncertainty with respect to the interpretation of these conditions, despite due care. GZA therefore cannot guarantee specific results such as the identification of all contamination or other environmental conditions or problems nor their resolution.
- c) You acknowledge that Microbial infestations may be hidden from view and concealed in locations that are difficult to discover. Accordingly, you agree that despite GZA's efforts, some Microbial locations may remain undetected. In such situations, you agree that you will have no claim against GZA provided GZA followed the applicable standard of care and all applicable laws and regulations pertaining to the Work.
- d) You further agree that when GZA performs Services intended to minimize the risk of Microbial infestations, GZA shall not be liable for damages resulting from Microbial contamination including but not limited to fungal or bacterial infestations and water damage or dry or wet rot. You agree to waive any Microbial infestation claim(s) against GZA and you agree to indemnify, defend and hold the GZA Indemnitees harmless from any claim alleging that GZA's Services caused or aggravated a Microbial infestation or did not prevent a Microbial infestation from recurring.