

26 sept., 2011

Georgetown

Penn Brook School

**Geotech Proposals Review**

	<b>GZA</b>	<b>GSI</b>	<b>GeoInsight</b>
review existing info	\$1,000.00	\$250.00	\$350.00
drilling contractor and labor	\$9,200.00	\$4,100.00	\$5,650.00
sieve analysis (2)	\$150.00	\$170.00	\$150.00
proctor	\$350.00	\$220.00	\$240.00
report	\$4,700.00	\$1,500.00	\$1,550.00
Phase 1 env. Site assessment	\$3,500.00	\$2,000.00	\$2,200.00
	<b>\$18,900.00</b>	<b>\$8,240.00</b>	<b>\$10,140.00</b>

Geo could be 1900

**WORK SCOPE FOR GEOTECHNICAL INVESTIGATIONS**

**PROJECT NAME:** Penn Brook Elementary School; 68 Elm St., Georgetown, MA  
Feasibility Study

**DRA PROJECT NUMBER:** 11013.00

**I. Site and Project Description**

Existing Elementary School

See attached site plans which show APPROXIMATE existing conditions, and locations of proposed borings.

Scope of work is a Feasibility Study for renovations of the existing building, possible expansion, and possible new construction followed by demolition of the existing building.

**II. General Requirements**

- A. The geotechnical investigation shall be performed by a qualified engineering firm engaged in such work on an ongoing basis and shall be in conformance with 780 CMR 1802.2 through 1802.6. All subsurface exploration, analyses, and reports shall be prepared/performed under the direct supervision of a professional engineer registered in the State of Massachusetts who shall sign all reports.
- B. The drilling contractor is to be retained by the geotechnical engineer and the drilling cost shall be included with the proposal.
- C. Proposals must be submitted to Drummey Rosane Anderson, Inc. by the close of business on Sept. 17, 2011. Proposals received by facsimile or email will be accepted. The contract will be awarded on or about Sept. 22, 2011.
- D. The final geotechnical investigation report must be received by Oct. 1, 2011.
- E. All firms submitting proposals must meet the following criteria:
  - 1. The firm shall have been in business providing geotechnical engineering for a minimum of three years.
  - 2. The firm must perform all geotechnical work with its own forces. Testing borings may be subcontracted.
  - 3. All test boring inspections shall be performed by qualified technicians under the direct supervision of a professional engineer registered in the State of Massachusetts.

4. The firm shall demonstrate proof of insurance by providing certificates of insurance for general and professional liability insurance.
- F. Price proposals shall stipulate the following:
1. Daily rate for test borings and inspection with a not-to-exceed budget allotment for the number of days estimated to complete the subsurface exploration program.
  2. No reimbursable expenses shall be allowed. The cost for mileage and expenses shall be included with the daily rate stipulated for test boring inspections.
  3. Prices for soil laboratory testing, geotechnical analyses, and report preparation shall be lump sum.

### III. Subsurface Explorations

- A. Soil borings: Perform soil borings at the locations indicated on the attached drawing by hollow stem auger or wash casing drilling techniques. Soil samples shall be retrieved at five foot intervals or strata changes in accordance with ASTM D1586. Soils shall be classified in the field by an experienced geotechnical technician using the Burmister soil classification system. Subsurface conditions at each boring shall be recorded on boring logs prepared for each boring which shall indicated sampling intervals, blow counts, groundwater depths, strata changes, and any other pertinent observations. Number of borings shall be not less then the number indicated on the attached plan(s).

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Advance borings to minimum depths of 20 feet below existing ground surfaces into competent bearing strata or refusal. If unsuitable soil conditions are encountered at depth, extend borings at least five feet into competent bearing strata, as evidenced by two consecutive spilt spoon samples.

Rock coring is not anticipated to be required for this project. If, in the judgment of the geotechnical engineer, rock coring appears warranted due to shallow refusal conditions, then the geotechnical engineer shall advise the Client of the need for rock coring and a unit price for rock coring shall be negotiated at that time. Rock coring shall not be performed until receiving authorization to proceed.

- B. The geotechnical engineer shall be responsible for contacting DIGSAFE and obtaining clearance to perform the explorations at the site.

**IV. Environmental Screening and Soil Laboratory Tests**

- A. The headspace of all split spoon soil sample jars shall be screened for total volatile organic compounds (VOC's) using a photoionization detector. If high concentrations of total VOC's are detected, the geotechnical engineer shall make recommendations for additional investigations.
- B. Perform two particle gradation analyses on soil samples within potential borrow sources per ASTM D422.
- C. Perform two modified proctor compaction tests on soil samples obtained from auger tailings within potential borrow sources per ASTM D1557.
- D. If additional soil laboratory analyses appear warranted, based on subsurface conditions encountered such as soft cohesive soils, then the geotechnical engineer shall make recommendations for additional soil laboratory analyses. The unit prices for such soil laboratory testing services should be included as an attachment to the unit price proposal.

**V. Engineering Evaluation and Report**

- A. The geotechnical engineer shall prepare a report in accordance with 780 CMR 1802.6 which summarizes the results of subsurface explorations and the engineer's interpretation, analyses, and recommendations for foundation design and earthwork construction. At a minimum, the report shall contain the following:
  - 1. Summary of subsurface exploration program and subsurface conditions encountered, including all strata encountered, groundwater observations, refusal depths, and/or bedrock encounter.
  - 2. Recommendations for spread footing foundations with net allowable bearing pressure for granular soils based on settlement considerations and net allowable bearing capacity of cohesive soils based on shear strength. Provide estimates of total and differential settlements under proposed loading conditions.
  - 3. If spread footings are not appropriate, provide recommendations for appropriate alternatives.

## Work Scope for Geotechnical Investigations

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4. Evaluate the susceptibility of the site to liquefaction. Assess the site's seismic site factors in accordance with the Massachusetts State Building Code.
  5. Provide recommendations for foundation drainage and floor slab underdrain systems and dampproofing, if warranted.
  6. Provide recommendations for foundation underpinning and/or lateral earth support systems during construction. Provide recommendation concerning the design and monitoring of such systems.
  7. If rock excavation is anticipated, provide recommendations with respect to the type of fragmentation to be used, pre-blast surveys, seismic monitoring, and protection of adjacent structures/utilities.
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# GEOTECHNICAL SERVICES INC.

▲ Geotechnical Engineering ▲ Environmental Studies ▲ Materials Testing ▲ Construction Monitoring ▲

September 17, 2011

Mr. Paul S. Brown, AIA, LEED  
Drumme Rosane Anderson, Inc.  
141 Herrick Rd.  
Newton Centre, MA 02459

Advanced via Email: [PBrown@draws.com](mailto:PBrown@draws.com)

**RE: Proposal for Geotechnical Engineering Services  
Penn Brook Elementary School  
Georgetown, MA  
GSI Proposal No. 231-11**

Dear Mr. Brown:

Geotechnical Services, Inc. (GSI) is pleased to submit this proposal to provide a geotechnical evaluation for the Penn Brook Elementary School in Georgetown, MA.

### PROJECT UNDERSTANDING

We understand that a geotechnical site analysis is required as part of a feasibility study for the renovation of the existing building, possible expansion and possible new construction of a new school building and demolition of the existing structure.

### PROPOSED SCOPE OF WORK

Based on our understanding of the project and review of the project scope of work requirements letter, GSI proposes to undertake the following tasks:

1. Visit the project site and observe the existing conditions and determine its potential impact on the subsurface exploration plan to be implemented. Establish accessible locations for the test borings and mark them stakes and/or with spray paint for Dig Safe utility clearance (this is a legal requirement). Contact Dig-Safe and obtain Application Number. Dig-Safe is to complete its work within a period of three days upon notification.

It is understood that rights of entry and access to the property will be provided to us. It is also understood that all test boring locations as planned will be accessible by a track-mounted or ATV drilling equipment.

Information on the location of any underground utilities within the area of work will need to be furnished to us. We will contact Dig-Safe prior to mobilization of drilling equipment to the site, but we cannot assume responsibility for damage to underground features not indicated to us in advance.

2. Arrange to have a qualified drilling contractor drill six (11) test borings within the approximate locations shown on the attached Boring Locations Plan. GSI will provide technical oversight as the drilling contractor implements the subsurface exploration program. Each test boring will to be advanced to a depth of 20-ft or to refusal. If shallow refusal is encountered in the test borings (e.g., within 10-ft of the surface grade) an additional test boring will be drilled within 5-ft of the original test boring to confirm refusal. During advancement of the borings, soil samples will be retrieved at the ground surface and subsequently at 5-ft intervals with a split-spoon sampler. Standard Penetration Tests (SPTs) will be performed at sampling intervals in general accordance with ASTM D1586. We anticipate the subsurface investigation to be completed in two (2) days. All holes will be backfilled and compacted with the spoils. Excess spoils from the test borings and will be left on site. We will make every attempt to minimize any damage and disruption caused by the drilling operations; however, we have not budgeted to return to the site for additional cleanup purposes.

The subsurface exploration program will be conducted under the direct supervision of a geotechnical engineer or geologist from our office. The engineer/geologist will be responsible for coordinating all

aspects of the work and soil exploration layout. Soil samples recovered during the exploration program will be visually classified in the field referencing the "Burmister System." Each sample collected will be screened for environmental contamination using a photo ionization detector (PID).

3. Laboratory Tests: Collect two soil samples from the drill cuttings for particle size analysis (ASTM D422) and compaction testing (ASTM D1557).
4. Make analyses related to the geotechnical engineering aspects of foundation design, site development and construction, and prepare an electronic copy of a preliminary phase engineering report (PDF format), which will include the following items as applicable to the project and site:
  - A. Test boring logs indicating soil and rock conditions and water levels encountered.
  - B. Location plan of subsurface explorations.
  - C. Recommended foundation type with foundation design criteria including allowable bearing pressure, foundation depth, static lateral earth pressures and other information required for final design and preparation of contract drawings and specifications.
  - D. Earthquake engineering considerations such as site coefficient, liquefaction susceptibility of foundation soils, seismically induced settlements and dynamic lateral earth pressures.
  - E. Estimates of settlement for structural elements at recommended loadings.
  - F. Recommended design approach for lowest floor slab, whether slab-on-grade or structural slab.
  - G. Requirements for foundation and floor drainage (or waterproofing).
  - H. Provide preliminary pavement design criteria.
  - I. Comments on geotechnical aspects of construction, such as excavation and filling, controlled blasting, protection of adjacent structures and utilities, slope stability, dewatering, and special requirements for protecting strength of undisturbed soils at foundation elevation, written primarily for the engineer having responsibility for preparation of contract drawings and specifications.
  - J. Suitability of on-site soils for use as compacted fill.
  - K. Treatment of backfill for utility trenches, walls and footings.
  - L. Provide a brief summary of the environmental monitoring test results and recommendations for further analysis, if needed.

**PROPOSED BUDGET**

Our estimated cost for each task will be for a fee not to exceed \$6,240 as follows:

TASK NO.	STAFF ASSIGNMENT	TASK TOTAL
1	Boring Layout and DIG SAFE	\$250
2	Subsurface Investigation ATV or Track Rig (2 days) GSI Field Engineer (2 days)	\$3,200 \$900
3	Laboratory Testing 2-Grain Size Analyses (ASTM D422) 2-Compaction Tests (ASTM D1557)	\$170 \$220
4	Geotechnical Engineering Report	\$1,500
<b>Total Geotechnical Services Budget</b>		<b>\$6,240</b>

The above budget includes the cost for reimbursable items and expenses. Our services will be provided in accordance with the attached Terms and Conditions. Additional services requested by your office, may be provided in accordance with the attached Rate Schedule or as a negotiated lump sum. We will contact you for your approval prior to commencing with any additional services.

The scope of work does not include the preparation of contract drawings or an assessment of the presence of oil or hazardous materials at the site, the characterization of excavated soil or groundwater that may be generated as a



result of planned construction activity, and an assessment of the impact that contamination could have on the proposed construction.

**CLOSING**

We trust that this proposal is consistent with your needs at this time. You may formally enter into an agreement with us to accomplish the previously described scope of work by signing the enclosed copy of the proposal. We thank you for allowing us this opportunity to offer you our services and look forward to working with you on this project. Should you have any questions or require further assistance, please do not hesitate to contact our office.

Very truly yours,  
**GEOTECHNICAL SERVICES, INC.**

  
Glen V. Zolade, P.E.  
Project Manager

Harry K. Wetherbee, P.E.  
Principal Engineer

Attachments

**PROPOSAL ACCEPTANCE FORM**

This proposal and the Terms and Conditions of engagement 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 and on behalf of the client.

\_\_\_\_\_  
(Authorizing Signature)

\_\_\_\_\_  
(Typed Name and Title)

\_\_\_\_\_  
(Authorizing Authority)

\_\_\_\_\_  
(Date)



# GEOTECHNICAL SERVICES, INC.

**COMPENSATION:** Fees for engineering services will be based upon the time worked on a given project and computed in accordance with the attached rate schedule. Fees for in-house computer services, mileage charges, expenses, and time spent traveling in the interest of work will be assessed in accordance with the attached rate schedule.

**BILLING AND PAYMENT:** CLIENT recognizes that timely payment of GSI's invoices is a material part of the consideration GSI requires to perform the services indicated in this AGREEMENT. CLIENT shall pay GSI for services rendered in U.S. funds drawn upon U.S. banks, in accordance with the rates and charges set forth herein. Routine invoices will be submitted by GSI from time to time, but no more frequently than [every two (2) weeks], and shall be due and payable within [thirty (30)] calendar days of invoice date. If CLIENT objects to any portion of an invoice, CLIENT shall so notify GSI within [fourteen (14)] calendar days of the invoice date, identify the cause of the objection, and pay when due that portion of the invoice not in dispute.

CLIENT shall pay an additional charge of [one-and-one-half (1.5) percent (or the maximum percentage allowed by law, whichever is lower)] of the invoiced amount per month for any payment received by GSI more than [thirty (30)] calendar days from the date of the invoice, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment thereafter shall first be applied to accrued interest and then to the principal unpaid amount.

**COLLECTION COSTS:** If CLIENT fails to make payment when due and GSI incurs any costs in order to collect overdue sums from CLIENT, the CLIENT agrees that all such collection costs incurred shall immediately become due and payable to GSI. Collection costs shall include, without limitation, legal fees, collection agency fees and expenses, court costs, collection bonds, and reasonable GSI staff fees at standard billing rates for GSI's time in efforts to collect. This obligation of the CLIENT to pay GSI's collection costs shall survive the terms of this agreement or any earlier termination by either party.

**SUSPENSION OF SERVICES:** If CLIENT fails to make payments when due or otherwise is in breach of this agreement, then GSI may suspend performance of services upon 5 days written notification to CLIENT. GSI shall have no liability whatsoever to CLIENT for any costs or damages as a result of such suspension caused by any breach of this agreement by CLIENT.

**HOLDING HARMLESS:** CLIENT understands that "holding GSI harmless" as referred to in these Terms and Conditions, would, among other things require CLIENT to compensate GSI for any time spent or expenses incurred by GSI in defense of any claim for which CLIENT has agreed to indemnify GSI, in accordance with GSI's prevailing fee schedule and expense reimbursement policy relative to recovery of direct project costs.

**SAMPLES:** Soil, rock, and water samples obtained from the site which have not been consumed in testing become the property of the CLIENT, once the project account has been paid in full. Such samples will be held for thirty (30) days after payment, and will be disposed of thereafter unless delivery to CLIENT is requested in writing. It is CLIENT'S responsibility to select and arrange for disposal procedures which encompass removing the contaminated samples from GSI's custody and transporting them to a disposal site.

**RESPONSIBILITY TO NOTIFY GSI:** CLIENT hereby warrants that, if he knows or has any reason to assume or suspect that hazardous materials may exist at the project site, has done his best to inform GSI of such known or suspected hazardous materials' type, quantity and location.

**DOCUMENTS:** All documents generated by GSI in the course of rendering service to CLIENT will remain the property of GSI. CLIENT agrees that all documents and/or plans provided by GSI in connection with services rendered will be utilized solely by CLIENT for their intended purpose. GSI will not intentionally divulge documents or information regarding its services to parties other than CLIENT unless requested in writing by CLIENT.

**SUBSURFACE EXPLORATIONS:** CLIENT should be aware that some damage to the terrain, vegetation, structures, or equipment on the site may occur in the normal course of work. CLIENT will not hold GSI liable for such damages and will make compensation to GSI if GSI is required to restore the land to its former condition. GSI will take reasonable precautions to limit damage to the site and to any subterranean structures. GSI will not be held liable for damages or injury, including consequential damages such as the loss of use or profit, resulting from interference with subterranean structures which are not called to our attention or are incorrectly located on plans furnished by CLIENT or others in connection with the work to be performed.

**FAILURE TO ENCOUNTER HAZARDOUS MATERIALS:** CLIENT understands that GSI's failure to discover hazardous materials through appropriate and mutually agreed-upon sampling techniques does not guarantee that hazardous materials do not exist at the site. Accordingly, CLIENT waives any claim against GSI, and agrees to defend, indemnify and save GSI harmless from any claims or liability for injury or loss arising from GSI's failure to detect the presence of hazardous materials through techniques commonly employed for the purpose.

**RIGHT OF ENTRY:** Unless otherwise agreed, CLIENT will furnish right-of-entry upon the site for GSI or its subcontractors to perform assessments or explorations as deemed necessary by GSI.

**STANDARD OF CARE:** GSI strives to provide its professional services in accordance with the care and skill ordinarily used by members of GSI's profession practicing under similar circumstances at the same time and in the same locality. GSI makes no warranties, express or implied, under this Agreement.

**JURISDICTION/CHOICE OF LAW:** The laws of the State of New Hampshire shall govern the rights and obligations of the parties under this Agreement and any disputes arising from this Agreement. Jurisdiction for any legal action arising from this Agreement shall be in the Goffstown District Court or the Hillsborough County Superior Court in the State of New Hampshire.

**CONFLICTS WITH PROPOSAL/ENTIRE AGREEMENT:** Should any element of these Terms and Conditions be deemed in conflict with any element of the proposal or contract to which they apply, then the wording of the Terms and Conditions shall govern. These Terms and Conditions and the proposal or contract to which they apply shall be deemed the entire Agreement between the parties. All prior agreements, discussions, representations, warranties and covenants are merged herein. There are no warranties, representations, covenants or agreements, expressed or implied, between the parties except for those expressly set forth in this Agreement.

GSI-4

## PROFESSIONAL SERVICES TERMS AND CONDITIONS – Geotechnical Investigations

**HIDDEN CONDITIONS:** GSI shall notify CLIENT of any hidden conditions encountered by GSI which will affect the scope of GSI's work and/or its compensation under this Agreement. GSI is not responsible or liable for any cost resulting from an increase in the scope of its work or compensation under this Agreement associated with any hidden conditions encountered or discovered by GSI during the prosecution of its work.

**MONITORING OF CONSTRUCTION:** Should CLIENT for any reason not retain GSI to monitor construction, or should CLIENT unduly restrict GSI's assignment of personnel to monitor construction, or should GSI for any reason not perform construction monitoring during the full period of construction, GSI shall not have the ability to provide a complete service. Should GSI for any reason not have the ability to perform a complete service, and thus not have the capability for adequate control of implementation of the complete engineering function, CLIENT waives any claim against GSI, and agrees to indemnify, defend and save GSI harmless from any claim or liability for injury or loss arising from problems during construction that allegedly result from findings, conclusions, recommendations, plans or specifications developed by GSI.

**JOBSITE SAFETY:** Neither the professional activities of GSI, nor the presence of GSI or its employees or subconsultants at a construction site, shall relieve the General Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means and methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the Work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. GSI and his or her personnel have no authority to exercise any control over the construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The Client agrees that the General Contractor is solely responsible for jobsite safety, and warrants that this intent shall be made evident in the Client's agreement with the General Contractor. The Client also agrees that the Client, GSI and GSI's subconsultants shall be indemnified and shall be made additional insured under the General Contractor's general liability policy.

**LIMITATION OF LIABILITY:** CLIENT agrees to limit GSI's liability to CLIENT and all third parties arising from GSI's professional acts, errors or omissions, such that the total aggregate liability of GSI to all those named shall not exceed \$50,000 or GSI's total fee for the services rendered on this project, whichever is greater. CLIENT further agrees to require of all of their subcontractors an identical limitation of GSI's liability for damages suffered by the CLIENT or its subcontractors arising from GSI's professional acts, errors or omissions.

**ASSIGNMENT:** Neither party to this agreement shall transfer, sublet or assign any rights under or interest in this agreement (including but not limited to monies that are due or monies that may be due) without the prior written consent of the other party.

**CONSEQUENTIAL DAMAGES:** Notwithstanding any other provision of the agreement, neither party shall be liable to the other for any consequential damages resulting incurred due to the fault of the other party, regardless of the matter of this fault or whether it was committed by the CLIENT or GSI, their employees, agents, subconsultants or subcontractors. Consequential damages include, but are not limited to, loss of use and profit.

**INDEMNIFICATION:** GSI agrees, to the fullest extent permitted by law, to indemnify and hold CLIENT harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) to the extent caused by GSI's negligent acts, errors or omissions in the performance of GSI's professional services under this contract and those of GSI's subconsultants or anyone for whom GSI is legally liable.

CLIENT agrees to the fullest extent permitted by law, to indemnify and hold GSI harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) to the extent caused by CLIENTS negligent acts, errors or omissions and those of CLIENT's subconsultants or anyone for whom CLIENT is legally liable, and arising from the project that is the subject of this agreement. GSI is not obligated to indemnify CLIENT in any manner whatsoever for CLIENT's own negligence.

**GEOTECHNICAL INVESTIGATION:** CLIENT understands that the education, experience, expertise, and capabilities of those who provide geotechnical engineering services and those who provide geoenvironmental services differ significantly. Those involved with a geotechnical engineering project may not notice indications of environmental concerns and, if they do, they may not report them. The same applies to personnel involved with geoenvironmental projects, with respect to geotechnical issues. Accordingly, CLIENT shall, to the fullest extent permitted by law, waive any claim against GSI, and indemnify, defend, and hold GSI harmless from any claim or liability for injury or loss arising from GSI alleged failure to report or report fully on environmental issues in instruments of geotechnical service or on geotechnical issues in instruments of geoenvironmental service. CLIENT also shall compensate GSI for any time spent or expenses incurred by GSI in defense of any such claim. Such compensation shall be based upon GSI prevailing fee schedule and expense reimbursement policy. (The term "any claim" used in this provision means "any claim in contract, tort, or statute alleging negligence, errors, omissions, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or other acts giving rise to liability.")

**TIME BAR TO LEGAL ACTION:** All legal actions by either party against the other for breach of this agreement or any addendum to it, or for failure to perform in accordance with the applicable standard of care, or that are essentially based upon such breach or such failure, shall be barred after two (2) years have passed from the time the claimant knew or should have known of its claim, and under no circumstances shall be initiated after four (4) years have passed from the date by which GSI substantially completes its services. Substantial completion shall be defined to mean completion of monitoring services as called for hereunder, unless GSI's services shall be terminated earlier. After four (4) years have passed from the date of substantial completion, CLIENT agrees to indemnify, defend, and hold GSI harmless from any claim or liability or injury or loss allegedly arising from GSI's failure to perform in accordance with the applicable standard of care. In addition, CLIENT agrees to compensate GSI for any time spent or expenses incurred by GSI in defense of any such claim, with compensation to be based upon GSI's prevailing Rate Schedule and expense reimbursement policy.

# GEOTECHNICAL SERVICES, INC. - RATE SCHEDULE, 2011

**A. PROFESSIONAL STAFF**

Principal Engineer	125/hr
Senior Geotechnical Consultant	125/hr
Professional Engineer	85/hr
Materials Engineer	75/hr
Staff Geotechnical Engineer	70/hr
Senior Engineering Technician	50/hr
Field Engineer	50/hr
Environmental Scientist	85/hr
Licensed Site Professional	135/hr
Draftsperson	45/hr
Word Processing	35/hr
Engineering Technician I	40/hr

**B. CONSTRUCTION MONITORING SERVICES**

Level I Field Technician	130/½ day
	240/full day
Steel Inspector (AWS Visual)	75/hr
Roofing Inspector	40/hr
Fireproofing Inspector	40/hr

**C. LABORATORY TESTING SERVICES**

Soils

Sieve Analysis (ASTM C-136 & C-117)	85/ea
Hydrometer Analysis (ASTM D422)	85/ea
Organic Content	100/ea
pH Determination	50/ea
Topsoil Nutrient Analysis	200/ea
Proctor ( Standard or Modified)	110/ea
Atterberg Limits	95/ea
California Bearing Ratio	350/ea
Consolidation Testing(Taylor Method)	450/ea
Falling/Constant Head Permeability	250/ea
Triaxial Permeability	325/ea
Unconfined Compressive Test	150/ea

Concrete and Aggregates

Concrete Cylinder Compression	15/ea
Mix Design Review	250/ea
Concrete Core Compression Tests	50/ea
Masonry Prisms	35/ea
Mortar Cubes	35/ea
LA Abrasion	250/ea
Petrographic Analysis	cost + 20%

Asphalt

Density Tests	150/ea
Asphalt Extraction Tests	200/ea
Mix Review	250/ea

**D. SUBSURFACE EXPLORATIONS**

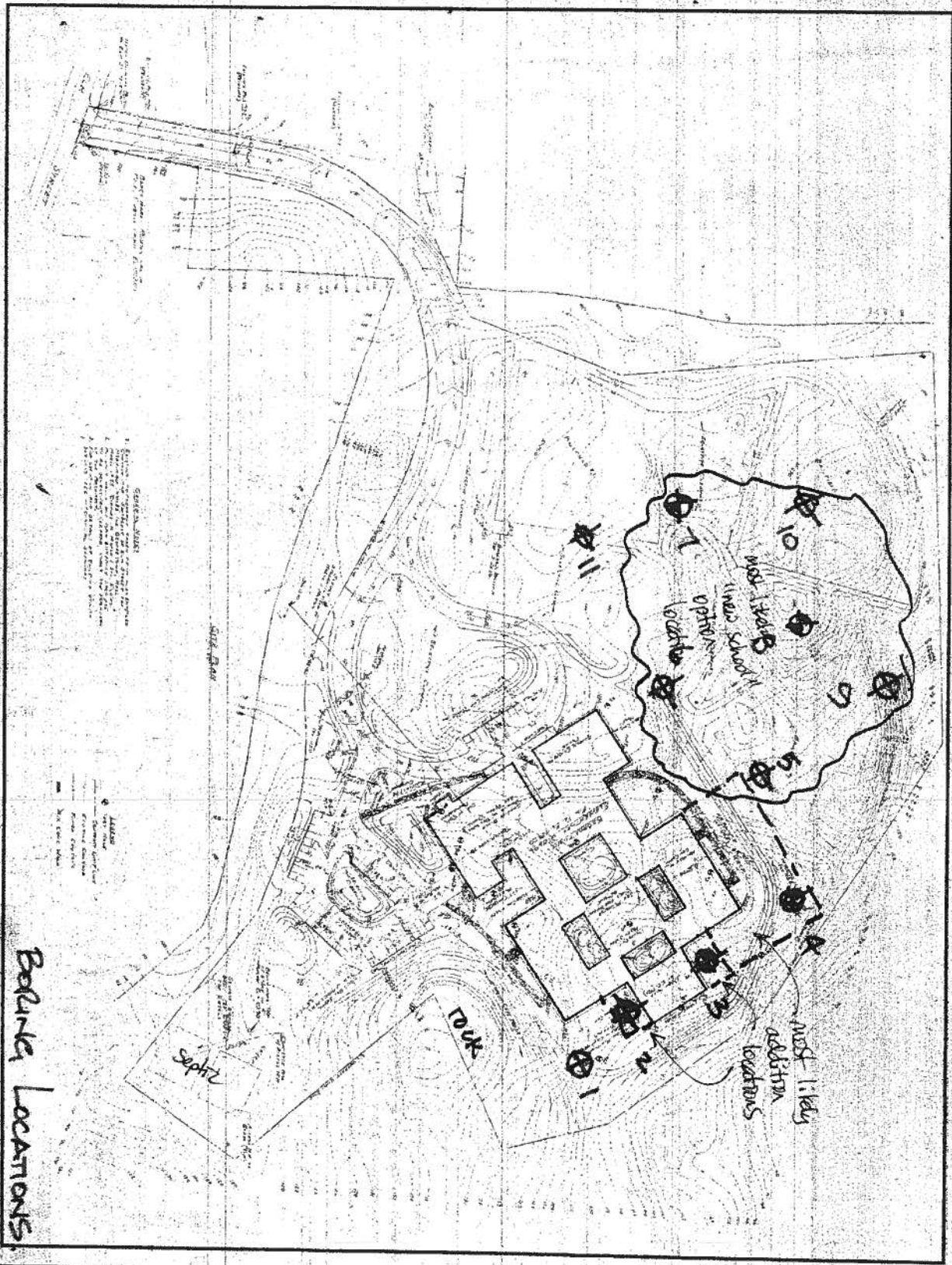
SUBCONTRACTOR COST + 20%

**E. EQUIPMENT/MISCELLANEOUS**

Transportation of Materials to Lab	30/hr
Nuclear Density Gage	35/day
Photo Ionization Detector	50/day
Vibration Monitor	50/day
Guelph Permeameter	50/day
Groundwater Sampling Pump	50/day
Mileage	0.55/mi
UT Steel Testing Apparatus	100/day
Groundwater Monitor Wells	18/ft
Monitor Well Covers	100/ea
Overtime	50%
Low-Voltage Holiday Detector	35/day
Dry Film Thickness Gage	25/day
Vibration Monitor	50/day
Windsor probe test	100/shot
Swiss Hammer	50/day
Transit	50/day
Coring Rig and Crew	500/day
James Electric Resistivity	75/day
Static Cone Penetrometer	25/day
Dynamic Cone Penetrometer	50/day

- Rates and mileage charges are assessed portal to portal from Haverhill, MA; or Goffstown, NH; whichever is closer to the project site.
- Overtime surcharge for technical staff is 50%.
- Markup for reimbursable expenses is 20%.
- A surcharge of 50% applies to all same day service.
- Sundays and Holiday service are surcharged 100%.
- Interest rate of 1% per month may be applied to all overdue accounts.
- Test reports are subject to review by Materials Engineer @ \$75/hr.





Building Locations

1	Building
2	Addition

SITE PLAN



GEORGETOWN  
ELEMENTARY SCHOOL



DRUMMEY ROSANE ANDERSON  
newton, tower falls, mass.

DRA

**Paul Brown**

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**From:** Glen V. Zoladz, P.E. [gzoladz@geotechserve.com]  
**Sent:** Tuesday, September 27, 2011 8:13 AM  
**To:** Paul Brown  
**Subject:** RE: Emailing: 263-11 Penn Brook Elementary

Hi Paul,  
GSI can perform a Phase I ESA for a fee of \$2,000.

Regards,  
Glen

-----Original Message-----

**From:** Paul Brown [mailto:PBrown@draws.com]  
**Sent:** Friday, September 23, 2011 5:11 PM  
**To:** 'Glen V. Zoladz, P.E.'  
**Subject:** RE: Emailing: 263-11 Penn Brook Elementary

Thanks.  
PB

-----Original Message-----

**From:** Glen V. Zoladz, P.E. [mailto:gzoladz@geotechserve.com]  
**Sent:** Friday, September 23, 2011 4:41 PM  
**To:** Paul Brown  
**Subject:** RE: Emailing: 263-11 Penn Brook Elementary

Paul,  
I will need to get back to you on this one. I need to check with my boss to see what the fee would be for this.

---

-----Original Message-----

**From:** Paul Brown [mailto:PBrown@draws.com]  
**Sent:** Friday, September 23, 2011 3:30 PM  
**To:** 'Glen V. Zoladz, P.E.'  
**Subject:** RE: Emailing: 263-11 Penn Brook Elementary

Hi Glen:  
Thanks,  
Can you tell me,  
What would it cost to add "Environmental site assessment consisting of a Phase I Initial Site Investigation conforming to 310 CMR 40.00" to your scope of work?  
Thanks,  
PB

Paul S. Brown, AIA, LEED  
Project Manager  
Drummey Rosane Anderson, Inc., Architects  
141 Herrick Rd.  
Newton Centre, MA 02459  
t: 617-964-1700 x142  
f: 617-969-9054



# GeoInsight®

Environmental Strategy & Engineering  
*Practical in Nature*

September 19, 2011

GeoInsight Proposal 6555-000

Paul S. Brown, AIA, LEED  
Project Manager  
Drummey Rosane Anderson, Inc., Architects  
141 Herrick Rd.  
Newton Centre, Massachusetts

RE: Geotechnical Investigation and Feasibility Study  
Proposed Penn Brook Elementary School Additions  
68 Elm Street  
Georgetown, Massachusetts

Dear Mr. Brown:

GeoInsight, Inc. (GeoInsight) is pleased to submit this proposed scope of work (SOW) in response to a Request for Geotechnical Services (RFP) received from Drummey Rosane Anderson, Inc., Architects (DRA) on September 9, 2011. This RFP addresses a geotechnical investigation program for a proposed feasibility study for the Penn Brook Elementary School (PBES) located in Georgetown, Massachusetts (the Site). Our SOW includes coordinating a geotechnical investigation, overseeing the assessment activities, characterizing subsurface conditions, and then providing foundation and sitework recommendations pertinent to the proposed additions to the existing school building. Included in this SOW is our understanding of the project and qualifications, an outline of the proposed exploration, an estimated fee, and our schedule. We have provided GeoInsight's Statement of Geotechnical Qualifications (as a separate document) for review by DRA and PBES.

## PROJECT INFORMATION

GeoInsight understands that the proposed work will be performed on behalf of PBES. We understand the proposed project consists of a feasibility study for renovations of the existing school building that includes possible expansion and possible new construction followed by demolition of the existing school building. Dimensions of the proposed expansion or the planned new building are not known at this time. We were provided with an undated document entitled "Work Scope for Geotechnical Investigation" prepared by DRA and a Site Plan (date not visible) prepared by DRA. The provided Site Plan identified proposed boring locations.

Detailed structural information has not been furnished; however, we assume that bearing wall and individual column loads will not exceed 1.5 kips per linear foot and 50 kips, respectively. We have assumed that soil-supported ground floor loads (dead load plus live load) in the building will not

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200 Court Street, 2nd Floor  
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exceed 200 pounds per square foot. The finished floor elevation for the structure has not been firmly established; however, we assume that less than two feet of earthwork fill (and no cut) will be required to bring the areas of new development to the desired grade.

Based upon our current understanding of the RFP requirements and experience with projects similar in scope, we prepared the following SOW.

## **SCOPE OF WORK**

### **Task 1 - Investigation Coordination/Dig Safe Clearance**

GeoInsight will contract with a qualified geotechnical drilling firm to plan and schedule an intrusive geotechnical investigation for the Site. We will provide the contractor with copies of pertinent information regarding the SOW, including PBES protocols (if any) for contractors working at the Site. We will coordinate the investigation with PBES and assume that the PBES (or persons identified by PBES) will be responsible for assisting us with any access approval and information regarding buried utilities that may exist. We also request that DRA or PBES provide us with copies of any existing as-built information or geotechnical data for the Site, if available. GeoInsight or its drilling subcontractor will visit the Site to pre-mark investigation locations, as required by Dig Safe Systems, Inc. (Dig Safe) of Massachusetts. Then Dig Safe, municipal officials, and PBES authorities will be formally notified prior to drilling to identify public utilities and structures at the Site.

GeoInsight assumes that buried utility lines may not be marked by Dig Safe in the immediate vicinity of the proposed boring locations. Therefore, we request that information regarding any buried utilities or structures be provided to us in advance of the investigation by PBES. GeoInsight and/or its subcontractor will not be responsible for damage to any subsurface utilities or structures not clearly identified by Dig Safe or PBES authorities.

### **Task 2 - Investigation Activities**

The intent of the investigation program will be to structurally assess soil conditions below the proposed areas of new development. As requested, the proposed geotechnical investigation will be performed in conformance with 780 Code of Massachusetts Refutations 1802.2 through 1802.6, and each subsurface exploration, and associated analyses and reports shall be prepared/performed under the direct supervision of a professional engineer registered in the State of Massachusetts. The investigation program is anticipated to consist of borings advanced in accordance with the Standard Penetration Test (American Society for Testing and Materials [ASTM] D-1586). The borings will be performed using hollow-stem augers and a truck-mounted drilling rig to access the drilling locations. We propose to drill up to eleven Standard Penetration Test (SPT) borings within the requested locations to depths of 20 feet each below the existing ground surface. Our proposed scope of drilling services is based upon the work taking not more than two days of drilling.

We strongly recommend that at least one boring be taken to bedrock refusal for the purposes of



seismic classification for the Site. If we are able to accomplish this goal within the two days drilling, then there will not be an increase to our cost. Our approach assumes that a shallow footing system will be suitable for the new development areas and that at least medium dense soils will be present. If low strength soils are instead encountered, the depths of the borings will increase and either the total number of borings will have to be reduced (to keep to a two-day drilling cost estimate) or an extra day of drilling and oversight will be required to properly characterize conditions.

GeoInsight assumes the boring locations will not require special permits or access and that the drilling activities can occur during normal daytime hours during the normal workweek. Borings will be backfilled upon completion with cuttings and the surface patched with soil, asphalt, or concrete to generally match the existing conditions. If excess soil cuttings are produced that cannot be disposed of on the Site, they will be containerized for subsequent removal, a cost that is not included in this SOW.

GeoInsight and its subcontractors will exercise reasonable care to minimize Site disturbance and disruption to normal Site activities to the extent practicable. Restrictive work zones will be established around the drilling rig to discourage encroachment by unauthorized personnel during work activities. Upon completion of the work, the drilling contractor will be instructed to broom sweep the investigation areas.

During drilling, GeoInsight will screen soil samples in the field for the presence of volatile organic compounds (VOCs) and also make observations for visual or olfactory evidence of potential environmental impacts. If obvious impacts are identified, we will contact DRA and make recommendations for collection of representative soil samples for environmental analyses. The purpose of the analyses would be to facilitate management and disposal of soils during Site development activities.

GeoInsight will provide a qualified geotechnical engineer or geologist, working under the direct supervision of a professional engineer registered in the State of Massachusetts, to directly oversee the investigation and technically assess subsurface and Site conditions. As part of the oversight, GeoInsight will: examine subsurface materials encountered; oversee, observe, and record investigation activities; prepare descriptive boring logs for each investigation location; and prepare an as-drilled location plan that will include dimensions to the borings as measured from the existing building. The description of soil samples reported on boring logs will be performed in accordance (ASTM D-2488) with a Modified Burmister Classification System. It should be noted that conditions encountered during our oversight may warrant adjustment in our SOW, and we will endeavor to promptly communicate those conditions to DRA and PBES representatives to promote efficiency of our data collection activities. However, it is occasionally necessary for us to use our best professional judgment and make decisions that make the best use of the drilling investigation time in the absence of immediate direction from our client.



### **Task 3 – Laboratory Testing**

As requested, we propose to perform two grain size distribution tests and two modified proctor compaction tests or representative samples of material encountered during the investigation. The grain size distribution tests will be performed based upon ASTM D-422 on soil samples obtained within potential borrow source zones and ASTM D-1557 modified proctor compaction tests will be performed on soil samples obtained from auger tailings within potential borrow source zones. We assume that we will be provided with the location(s) of potential borrow sources to obtain soil samples for laboratory testing during our field operations. Otherwise, we will collect the samples from locations where future footing excavations may generate excess material.

Since the Site's subsurface conditions are not precisely known, it is not possible to accurately determine at this time all the types of analyses and related studies that may be advantageous to perform. If additional soil laboratory tests appear warranted based upon the subsurface conditions encountered, then we will contact DRA and make recommendations for collection of representative soil samples for further laboratory testing. We will conduct future approved laboratory tests in general accordance with ASTM or other widely accepted standards.

### **Task 4 - Geotechnical Evaluation and Report**

Following completion of the investigation program, GeoInsight will evaluate SPT soil boring results and prepare a bound report describing our findings. The report will include a general description of the Site setting, discussion of the proposed building construction, description of the investigation performed and conditions encountered, boring logs, and an as-drilled location plan. Based upon the geotechnical investigation data, recommendations will be provided regarding an appropriate foundation system and subgrade preparation for proposed development area.

The recommendations section of the report will also address, as applicable:

- overall geotechnical feasibility for Site development, including identifying whether certain areas were more favorable for development than others;
- identification of acceptable bearing surfaces;
- estimates of total and differential settlements;
- depth of footing burial for frost protection;
- rock removal precautions and preparation of rock bearing surfaces;
- existing foundation underpinning and/or lateral earth support systems during construction;
- Site-specific allowable bearing capacities of suitable soils;
- foundation preparation and general sitework recommendations;
- structural borrow specifications and installation requirements;
- suitability of on-Site materials for reuse;
- alternate foundation options, if unsuitable soils are encountered;
- slab subgrade preparation and estimated modulus of subgrade reaction;



- discussion of seismic factors (in accordance with the Massachusetts State Building Code) and an evaluation of liquefaction potential;
- recommendations for pavement subgrade preparation;
- preparation and support of new utility structures and appurtenances; and
- construction water management and building envelope water control (including perimeter and sub-slab drainage, as applicable).

GeoInsight will submit an electronic version of the report to DRA, as well as three paper copies. Our costs for evaluation and reporting assume that a shallow footing solution will be acceptable for the Site. The assessment of specific Site environmental conditions or the presence of pollutants in the soil, rock, or ground water of the Site, is beyond the proposed scope of the exploration proposed. Our services do not include the preparation of design drawings and/or specifications. We can provide these supplemental services under a separate authorization, if desired.

### **PROJECT TEAM**

The geotechnical investigation program for the planned feasibility study will be delivered by a team of three GeoInsight staff, with support from our drafting and clerical staff. The investigation and report preparation will be performed under the supervision of Mr. Michael C. Penney, a Massachusetts registered Professional Engineer with over 25 years of experience with geotechnical projects in New England. Mr. Balaji Balachandran, a New Hampshire registered Professional Engineer will act as the Project Manager/Engineer for the project, and Mr. Jonathan Meunier will act as the project geologist. Resumes for these staff members can be provided at your request.

### **ADDITIONAL ACTIVITIES**

If requested, GeoInsight is available to assist DRA with the following additional services that may compliment our geotechnical consulting:

- review of foundation drawings;
- preparation and/or review of technical specifications;
- design of sub slab depressurization systems (for radon or VOCs);
- design of dewatering or water-proofing systems;
- design of underpinning or earth-retention systems;
- environmental assessment and monitoring, including preparation of Soil Management Plans, Dewatering Discharge Plans (National Pollutant Discharge Elimination System Construction Notice of Intent);
- compliance with the Massachusetts Contingency Plan; and/or
- construction oversight.



**PROJECT SCHEDULE**

Based upon our present schedule we can meet the project report deadline of October 1, 2011 subject to receiving the written authorizations by September 20, 2011. The field services are budgeted to take two days to complete. We have tentatively schedule a driller for the work in order to meet the schedule. We can provide preliminary verbal results and recommendations within a few days after the field services have been completed in order to expedite the design process.

**PROJECT COSTS**

Based upon the information and assumptions listed in this SOW, GeoInsight prepared a not-to-exceed cost estimate for the SOW described in this letter. As described previously, our cost estimate assumes that a spread footing system will be acceptable for the planned feasibility study. If a deep foundation system is necessary, additional drilling may be required and the investigation and our report preparation cost will increase. We assume GeoInsight will subcontract directly with the drilling contractor. Our estimated fees are as follows:

<b>Task 1 - Investigation Coordination/Dig Safe Clearance</b>	<b>\$340</b>
<b>Task 2 – Investigation Activities</b>	
Drilling Contractor (two days of drilling)	<b>\$3,670</b>
Drilling Oversight (two days of drilling)	<b>\$1,980</b>
<b>Task 3 – Laboratory Testing</b>	
Two grain size distribution tests	<b>\$150</b>
Two Modified proctor compaction tests	<b>\$240</b>
<b>Task 4 - Geotechnical Evaluation and Report</b>	<b>\$1,550</b>
<b>Total Fee</b>	<b>\$7,930</b>

Our estimated fee assumes that the Site is accessible to a truck mounted rig and that we are able to obtain sufficient geotechnical information to support the planned feasibility study in two working days (for drilling). The proposed fee does not include obtaining rock core. Compensation for additional services that may be requested by DRA will be based upon the actual time spent and tests performed in accordance with our standard Fee Schedule (attached). GeoInsight will not exceed our estimated fee without an extension of the scope of services by your office.

**ACCEPTANCE**

GeoInsight proposes that our enclosed Standard Terms and Conditions govern the work performed under the SOW. We propose that the SOW, the Fee Schedule, and the Standard Terms and Conditions shall constitute the entire Agreement between GeoInsight and DRA. If the proposed SOW, project costs, and contractual terms are acceptable, we request that one





GeoInsight appreciates the opportunity to be of service to DRA and PBES, and we look forward to working with you to make this project successful. If you have questions about this proposal or any other matter, please contact us at (603) 314-0820.

Sincerely,  
GEOINSIGHT INC.

Balaji Balachandran, P.E.  
Project Engineer

Michael C. Penney, P.E., L.S.P.  
Senior Associate/Senior Engineer

Attachments

**AUTHORIZATION BY: DRUMMEY ROSANE ANDERSON, INC., ARCHITECTS for**

**RE:** Geotechnical Investigation and Feasibility Study  
Proposed Penn Brook Elementary School Additions  
68 Elm Street  
Georgetown, Massachusetts 01833-2598

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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**STANDARD TERMS AND CONDITIONS**

"This Agreement" as used herein shall mean these Terms and Conditions, the written Scope of Work (SOW), and any Addenda thereto prepared by GeoInsight, Inc. (GeoInsight) and signed by the Client and, if and as applicable, the Fee Schedule attached to the SOW. All representations, statements, and agreements made between the parties are merged into this Agreement, which alone fully and completely expresses their respective obligations.

**1. BILLING AND PAYMENT** - Charges for the Services performed shall be invoiced as stated in the SOW. If the Client objects to all or any portion of an invoice, the Client shall notify GeoInsight in writing of the objection within ten (10) business days from the date of receipt of the invoice, state the reasons for the objection, and pay the portion of the invoice that is not disputed. Late payments shall be first applied to accrued interest and then to unpaid principal. Interest charges shall not apply to any disputed portion of any invoice resolved in favor of the Client. If Client fails to make payment when due, GeoInsight may, following written notice, suspend or terminate performance of Services under this Agreement, including, but not limited to, withholding completed reports and other work product. Unless payment is received within 10 days of the date of the written notice, termination can occur without further notice. If Services are suspended or terminated under this provision, GeoInsight shall incur no liability of any kind whatsoever to Client or others because of such suspension, including any form of direct, indirect or consequential damages or assessed penalties, for any reason including, but not limited to, missed regulatory deadlines. If legal action is taken by GeoInsight to recover from the Client invoiced amounts that are not paid, reasonable attorneys' fees, court and/or arbitration costs, and related expenses shall be paid to GeoInsight in addition to invoice amounts awarded or paid.

**2. RESPONSIBILITIES** - The Client shall be responsible and indemnify and hold GeoInsight harmless for any and all liabilities and damages arising from the accumulation, transportation, treatment, storage, and/or disposal of any hazardous wastes or hazardous materials already existing on the site that are generated from Services performed. GeoInsight will indemnify and hold the Client harmless for any and all liabilities and damages arising from accumulation, transportation, treatment, storage, and/or disposal of any wastes originating from hazardous materials GeoInsight brings onto the site.

**3. DUTY TO DISCLOSE** - The Client shall disclose in writing to GeoInsight prior to commencement of work under the SOW, all of the following information, unless otherwise provided in the SOW: (a) site emergency response procedures, if previously established; (b) any potential fire, explosion, health, safety or other hazards that may be associated with work at the site; and (c) all known information and reports regarding environmental conditions at the site, including but not necessarily limited to information regarding the presence of hazardous substances, hazardous materials, hazardous wastes, or other toxic or noxious materials at the site. Client acknowledges that pursuant to the federal Occupational Safety and Health Act (OSHA) and under various comparable state laws, Client may be classified as an "employer" with respect to work conducted at the site pursuant to the SOW, and Client may be subject to OSHA or other laws or regulations governing worker safety and health.

**4. HAZARDOUS MATERIALS RISK RECOGNITION** - The Client recognizes that there are inherent risks associated with use of exploration methods used in hazardous materials projects. The Client recognizes that the technical knowledge base and state of practice used by GeoInsight and other environmental consultants is continually developing and evolving, particularly with respect to the fate and effects of hazardous materials and that, accordingly, standards applicable to the Services may change because of improvements in the state of practice by environmental consultants. The Client recognizes that certain laws and regulations governing hazardous materials and waste sites purport to require achievement of

results that cannot be accomplished in an absolute sense (such as the construction of entirely impermeable liners).

**5. UNANTICIPATED EVENTS** - For purposes of this Agreement, an "Unanticipated Event" shall mean (i) strikes, lockouts, riots, unavoidable accidents, acts of God or of the public enemy, or unavailability of transportation; (ii) any lawful order issued by the United States government or any other federal, state, or local governmental authority; (iii) any other unforeseen or unexpected contingency, the nonoccurrence of which was expressly or impliedly assumed in the SOW; or (iv) any other cause beyond the parties' reasonable control. If GeoInsight is not able to initiate or complete the Services in accordance with schedules set forth in the SOW because of any Unanticipated Event, then both parties shall have the right either to terminate or renegotiate their obligations under this Agreement. Under no circumstances shall GeoInsight be required to maintain its work force in standby status for a period in excess of five (5) calendar days without compensation in accordance with the Fee Schedule that applies to the SOW.

**6. CONFIDENTIALITY AND RELEASE REPORTING** - Each party to this Agreement and their agents shall retain and treat as confidential, and shall not disclose to any third party, any information or data furnished by the other party that is designated in writing as confidential at the time of transmission and is obtained or acquired in connection with this Agreement. This Agreement and any Addenda thereto are confidential business information between GeoInsight and the Client and shall not be disclosed to other parties without a written release that expressly grants such disclosure. Information that is reasonably considered to be of a non-confidential nature, or that is in the public domain, or was lawfully already in the possession of either party at the time it was provided by the other party, or is required by law to be disclosed by an administrative agency, court, or other entity, or that relates to emergency situations that dictate private or public disclosure is not subject to this provision. All documents, data, calculations, and work papers prepared or furnished by GeoInsight are instruments of service and will remain GeoInsight's property. Any technology, methodology, or technical information learned or developed by GeoInsight will remain its property.

Notwithstanding the provisions of the paragraph above, both parties agree that each shall be entitled to disclose and/or permit to be inspected and/or reproduced information about Services performed under this Agreement when required to do so pursuant to local, state, or federal law or by governmental or court order or subpoena, provided that both parties agree to use best efforts to promptly notify the other of receipt of any such order or subpoena or of advice from counsel of such local, state, or federal statutory requirements. If any governmental agency or court requires either party to disclose and/or permit to be inspected and/or reproduced, any information designated in writing as confidential pursuant to this section, each party is hereby authorized to request that said governmental agency or court treat such information as confidential and not for public disclosure.

Notwithstanding anything to the contrary expressed in the preceding paragraphs, both parties recognize that Services performed under this Agreement may result in the discovery of certain environmental conditions which, in GeoInsight's professional judgment, pose an imminent and substantial threat to public health or the environment ("Immediate Threat[s]"). GeoInsight will promptly report any such Immediate Threats it discovers and its assessment of the significance of the Immediate Threat to the Client so that the Client can report the Immediate Threat to the proper regulatory authorities. If the Client fails to report an Immediate Threat to the proper authorities and GeoInsight believes that it has an independent legal or ethical responsibility to report an Immediate Threat, GeoInsight shall so inform the Client, citing the regulatory or ethical requirement in writing. If the Client continues to fail to report the Immediate Threat, GeoInsight may, under the advice of counsel, report the Immediate Threat to the authorities and shall have no liability to the Client for making any such reports.



**7. TERMINATION** - Either party can terminate this Agreement or an Addendum to this Agreement for cause if the other party breaches this Agreement or as provided in this section. Termination shall be effective ten (10) days after receipt of a written Notice of Termination. In the event of termination for cause, the parties shall have their remedies at law and in equity, subject to the rights and obligations spelled out in this Agreement. Upon receipt of a Notice of Termination, GeoInsight shall discontinue its Services as soon as practicable within the 10-day period and shall make every reasonable effort to procure termination of existing subcontracts upon such terms as can be negotiated. After termination, the Client shall pay GeoInsight for Services performed prior to termination within thirty (30) days of the final invoice for such Services. Upon receipt of payment for Services performed, GeoInsight shall deliver to the Client all materials and data obtained or prepared by GeoInsight under this Agreement.

The parties can terminate this Agreement upon mutual agreement to do so. Such agreement to terminate shall be documented in a writing signed by the parties, and the Client shall compensate GeoInsight as previously described. The Client and GeoInsight recognize that professional standards and ethics and codes of ethics govern GeoInsight's Services under this Agreement. If circumstances arise which, in GeoInsight's opinion, require additional services or preclude it from continuing performance of Services under the Agreement for professional or ethical reasons, GeoInsight shall promptly advise the Client orally of the circumstances and reasons and, if warranted, provide the Client with recommendations. The parties shall immediately attempt to arrive at a mutually satisfactory solution to the circumstances. If resolution cannot be attained to the satisfaction of both parties, either party may terminate this Agreement, subject to the provisions of this section.

**8. BINDING ARBITRATION** - If any controversy or claim arises out of or relates to this Agreement, or breach thereof, the parties shall attempt to resolve this dispute through good faith negotiation. If this dispute cannot be settled through negotiation, the parties shall submit to binding arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. This provision shall not apply to any controversy or claim arising from non-payment of invoices under Paragraph 1 where the amount in controversy is at or below the jurisdictional level for Small Claims proceedings under applicable state law.

**9. INDEMNIFICATION** - Each party shall defend, indemnify, and hold harmless the other party and its directors, officers, and employees from and against any and all liabilities and damages (including, but not limited to, reasonable fees and charges of attorneys and court and arbitration costs) that may hereafter be suffered by one of the parties in connection with any claim, action, or right of action (at law or in equity) because of any injury (including death), or damage to person or property to the extent arising out of any negligent, grossly negligent, or wrongful act or actions, omissions, or failure to act on the part of the other party in connection with performance of the Services.

GeoInsight's liability under this section shall not exist with respect to any alleged damage or injury to subterranean structures (including, but not limited to, pipes, tanks, telephone cables, and utilities) or to any existing subterranean or subsurface conditions, or any alleged injury or damage arising from or out of structures or conditions which were (1) known or should have been known to the Client, (2) not shown on the plans furnished by the Client to GeoInsight in connection with the Services or otherwise disclosed to GeoInsight in writing, or (3) not known by either party and would not reasonably have become known to GeoInsight in the exercise of due care.

GeoInsight's liability and obligations under this section shall not exist with respect to the past or present presence of hazardous materials, or the future presence of hazardous materials identified during these Services to be present and not removed or managed according to

GeoInsight's recommendation(s). The Client shall defend, indemnify, and hold harmless GeoInsight, its directors, officers, and employees from and against any and all liabilities and damages (including, but not limited to, reasonable fees and charges of attorneys and court and arbitration costs) that arise out of such hazardous materials. The Client waives all rights, claims, and causes of action against GeoInsight in any way related to the Services and arising in contract, tort, strict liability, or otherwise for damages to the extent such damages are not covered by the insurance coverage summarized below.

Designs, reports, data, and other work product delivered to the Client are for the Client's use only for the limited purposes disclosed to GeoInsight. 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 Client agrees to indemnify and defend GeoInsight against any resulting liabilities from such unauthorized use.

**10. COMPLIANCE WITH LAW** - GeoInsight and the Client will use reasonable care to comply with applicable laws in effect at the time the Services are performed hereunder that, to the best of their knowledge, information, and belief, apply to their respective obligations under this Agreement. The Client recognizes that laws and regulations governing environmental and related matters are continually evolving and that changes may occur during and after performance of the Services that may materially affect the results, interpretations, and implementation thereof. The Client shall pay any additional charges incurred by GeoInsight for modifications to the SOW necessary to comply with laws, ordinances, or regulations issued after the execution of this Agreement.

In accordance with individual states' general laws and regulations (collectively "State Programs"), the performance of the Services contained in this Agreement may require GeoInsight to act as a state-certified or registered professional ("Professional") with certain professional obligations owed to the public, including, in some instances, an independent duty to disclose and report the existence of certain environmental conditions or threats of releases to the state. In the event the Professional's obligations under the State Program conflict with the interests of the Client, the Client accepts that the Professional is bound by law to comply with the requirements of the State Program. The Client recognizes that the Professional shall be immune from all civil liability resulting from any alleged conflict between the interests of the Client and the investigation, reporting, and disclosure requirements placed upon the Professional pursuant to the State Program.

Client also acknowledges that a federal, state, or local agency may audit GeoInsight's Services and may require additional site activities although the GeoInsight Professional has performed the Services in accordance with the standard of care set forth herein. The Client agrees to compensate GeoInsight for all services performed in response to such an audit and its requirements at the then-current GeoInsight Standard Fee Schedule. If additional services are required, Client and GeoInsight will enter into good faith negotiations regarding the scope and terms of the additional services. If agreement cannot be reached, either party may terminate this Agreement in accordance with the terms of Paragraph 7.

Any provision of this Agreement held in violation of any law or ordinance shall be deemed stricken, and all remaining provisions shall continue valid and binding upon the parties. The Client and GeoInsight shall, in good faith, attempt to revise any invalid or unenforceable provisions of this Agreement to obtain provisions that are valid and enforceable and that come as close as possible to expressing the intention of the original provisions.

**11. MISCELLANEOUS** - This Agreement shall not be modified except by a writing signed by the parties. Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party. The laws of the State of New Hampshire will govern the validity of this Agreement, its interpretation and performance, and remedies for its breach. This



Agreement shall be binding on the successors, heirs, administrators, and assigns of both parties.

**12. NOTICES, SIGNATURES, AND AUTHORIZED REPRESENTATIVES** - The addressee identified in the SOW and the signatory to the SOW are the authorized representatives of the Client and GeoInsight for the execution of this Agreement. Each Addendum, if any, shall set forth the names and addresses of the

respective authorized representatives of the parties for the administration of that Addendum. Any information or notices required or permitted under this Agreement or any Addendum shall be deemed to have been sufficiently given if delivered either personally, by mail, by telephone facsimile, or by explicitly acknowledged email to the identified authorized representative(s) or any other authorized representative(s) identified in an applicable Addendum.

### SUMMARY OF INSURANCE COVERAGE GEOINSIGHT, INC.

GeoInsight, Inc. maintains the following insurance coverage:

TYPE	LIMITS
Worker's Compensation	Statutory
Employer's Liability	
Bodily Injury by Accident	\$500,000
Bodily Injury by Disease	\$500,000 Each Employee
Bodily Injury by Disease	\$500,000 Policy Limit
Commercial General Liability including Contractual Liability, Broad Form Property Damage, and Completed Operations	\$1,000,000 (Combined Single Limit) \$2,000,000 (General Aggregate)
Automobile Liability, including Bodily Injury/Property for Owned, Hired, and Non-Owned Vehicles	\$1,000,000 (Combined Single Limit)
Professional Liability (Errors and Omissions)	\$5,000,000
Contractor's Pollution Liability	\$5,000,000
Excess Liability (Umbrella Form)	\$11,000,000



## **FEE SCHEDULE**

Effective Date: June 1, 2010

<b>I. PROFESSIONAL SERVICES</b>	Hourly Rate
Principal	\$173.00
Regional Manager	\$170.00
Senior Consultant	\$160.00
Senior Associate	\$155.00
Associate Professional Staff	\$140.00
Senior Professional Staff	\$125.00
Information Specialist	\$115.00
Professional Staff V	\$115.00
Professional Staff IV	\$100.00
Professional Staff III	\$94.00
Professional Staff II	\$80.00
Professional Staff I	\$70.00
Senior Technician	\$80.00
Technician III	\$70.00
Technician II	\$65.00
Technician I	\$60.00
Senior Data Manager	\$85.00
CADD III	\$80.00
CADD II	\$70.00
CADD I	\$60.00
Project Administrator	\$60.00
Technical Typist	\$50.00

## **II. OUTSIDE SERVICES AND DIRECT EXPENSES**

To provide services as cost-effectively as practicable, the fee schedule rates for professional staff services do not include costs for outside services (subcontractors) and direct expenses. A fee of 5 percent will be assessed to all labor to cover phone, copy, and fax charges. A handling charge of 15 percent will be added to charges for outside services and other direct expenses. Mileage will be billed at the current U.S. Internal Revenue Service reimbursement rate plus a 15 percent handling charge.

## **III. FIELD EQUIPMENT AND SUPPLIES**

A separate fee schedule for field equipment and supplies is available.

## **IV. EXPERT TESTIMONY**

Expert testimony at trial or depositions will be billed at two times the standard fee schedule rate.

**Paul Brown**

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**From:** Michael C. Penney [MCPenney@geoinc.com]  
**Sent:** Monday, September 26, 2011 11:28 AM  
**To:** Paul Brown  
**Cc:** Balaji Balachandran; Carl Franceschi  
**Subject:** RE: Penn Brook Elementary School Geotech

Paul –

We could perform a standard Phase I ESA (ASTM 1527 All Appropriate Inquiry) for approximately \$1,900 to \$2,200 for the site based upon the nature of the property and surroundings.

Note that this price is dependent upon information provided by the owner (history, compliance documents, permits, drawings, etc.), and does not include sampling of any internal building materials for PCBs, asbestos, lead based paint, or air for radon.

Depending upon what the objectives of the Phase I ESA are, if we encountered conditions indicative of the need to go forward with a Phase II, we could stop the Phase I, perform Phase II activities, and then prepare a single report that combines both to save some money.

Hope that is helpful.

Mike

---

**From:** Paul Brown [mailto:PBrown@draws.com]  
**Sent:** Friday, September 23, 2011 3:03 PM  
**To:** Michael C. Penney  
**Cc:** Balaji Balachandran; Carl Franceschi  
**Subject:** RE: Penn Brook Elementary School Geotech

Hi Michael:

What would it cost to add "Environmental site assessment consisting of a Phase I Initial Site Investigation conforming to 310 CMR 40.00" to your scope of work?

Thanks,  
PB

Paul S. Brown, AIA, LEED  
Project Manager  
Drummeys Rosane Anderson, Inc., Architects  
141 Herrick Rd.  
Newton Centre, MA 02459  
t: 617-964-1700 x142  
f: 617-969-9054  
c: 617-909-3530

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**From:** Michael C. Penney [mailto:MCPenney@geoinc.com]  
**Sent:** Friday, September 16, 2011 4:26 PM  
**To:** Paul Brown  
**Cc:** Balaji Balachandran  
**Subject:** Penn Brook Elementary School Geotech

Paul –

Attached: our proposed geotechnical scope of work and a two pdfs that make up a short quals/info package.

**GZA**  
**GeoEnvironmental, Inc.**

*Engineers and  
Scientists*

September 14, 2011  
RFP No. 01.P000363.12

Drummeay Rosane Anderson, Inc., Architects  
141 Herrick Rd.  
Newton Centre, MA 02459

Attention: Mr. Paul Brown

Re: Proposal for Geotechnical Engineering Services  
Penn Brook Elementary School Expansion  
68 Elm Street  
Georgetown, Massachusetts

Dear Mr. Brown:

In accordance with your request, GZA GeoEnvironmental, Inc. (GZA) is pleased to submit the following proposal for geotechnical engineering services at the above-referenced site to Drummeay Rosane Anderson, Inc., Architects (DRA, Client). Our objective will be to evaluate subsurface conditions at the site as they affect foundation and pavement design and construction, and to develop geotechnical engineering design and construction recommendations.

#### **BACKGROUND**

Our understanding of the project is based on:

- The "Work Scope for Geotechnical Investigations" ("Work Scope") you provided for the project on September 9, 2001; and
- A cursory review of online subsurface information and historical plans.

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The site is currently occupied by the Penn Brook Elementary School, constructed sometime between 1971 and 1979. Prior to that time, a smaller building was located on the site.

Current grades are relatively flat (within about 5 feet). Based on the plan included in the "Work Scope" and historical topographic plans, it appears that cuts and fills were required at the time of the original school construction to achieve the current site grading. A rock outcrop is noted on the Work Scope plan to the west of the existing school.

Based on the Work Scope plan, the proposed new school building will be north of the existing school, in an area mostly occupied by playing fields. There is also a proposed addition area of about 30,000 square feet on the southeast and northeast sides of the existing building. We understand that the new building and additions are not expected to have basements.

Based on MassGIS data, we anticipate that subsurface conditions will consist of fill over glacial till over bedrock. Bedrock is expected within 25 feet of ground surface.



133 Federal Street  
3<sup>rd</sup> Floor  
Boston  
Massachusetts  
02110  
Ph: 617-963-1000  
FAX 617-482-6868  
<http://www.gza.com>

**SCOPE OF WORK**

We propose the following scope of work to achieve the stated objective:

**Task 1: Review Existing Information/DigSafe**

In addition to the review of readily available on-line information reviewed in preparing this proposal, we will review plans (if available from DRA) of existing and previous topography, utilities and the proposed building layout. It is important to review previous to current topographic plans to help understand the thickness of potential fill thicknesses. This information will be utilized in developing the final exploration locations and depths.

Prior to the start of drilling, the proposed exploration locations will be marked in the field, and our subcontractor will notify DIGSAFE and the Georgetown Water and Sewer Department. However, since DIGSAFE will not mark utilities within private properties, we will rely on the existing conditions plans to be provided by you for as-built utility locations. We also request that a school representative, familiar with subsurface utilities review the proposed boring locations. We have assumed that no permits are required to conduct the drilling.

**Task 2: Test Borings**

We will engage a drilling subcontractor to perform 11 borings at the approximate locations shown on the plan included in the "Work Scope". These locations will be adjusted to avoid wooded areas and other areas of difficult access. Our budget assumes the drilling can be completed in four rig days.

We anticipate that the borings will be carried to depths of 20 to 25 feet, or refusal if encountered at a shallower depth. We anticipate that 3 to 4 rig days will be required to complete the test borings. Two drill rigs will be used simultaneously to reduce GZA's on-site field observation time. Our base price does not include rock coring, and we have included an additional footage rate for rock coring in the event that multiple shallow (less than 10 feet) refusals are encountered.

Borings will be advanced using hollow-stem auger and/or cased drilling techniques using a truck-mounted drill rig. Standard Penetration Tests and split spoon samples will be obtained continuously to a depth of about 6 feet and at approximately 5-foot intervals thereafter. Completed boreholes will be backfilled with drill cuttings. Although our subcontractor will use care in accessing the borehole locations, there may be some localized rutting depending on surface conditions. No restoration of the school grounds is included in this proposal. Excess drill cuttings will be left on site in an area designated by the Client. We have assumed that water from an exterior faucet of the existing building or a fire hydrant (provided the school arranges the necessary permit) will be available to our drillers throughout the drilling program.

A GZA field representative will observe the explorations, classify soil samples and prepare logs. Groundwater levels (if encountered) will be measured during drilling. In addition, soil samples will be screened for total volatile organic compounds (VOCs) using a photoionization detector; results will be noted on the boring logs. Exploration locations will be tape measured from existing topographical features. Ground surface elevations at the exploration locations will be based on an existing conditions plan provided by Client.

**Task 3: Geotechnical Laboratory Testing**

GZA will perform gradation analyses on two soil samples from the explorations to confirm visual classifications and to assess soil for possible re-use on site. In addition, one to two bulk soil samples of granular fill will be collected from drill cuttings and submitted for Modified Proctor tests. The bulk samples will be obtained from multiple shallow auger holes within a similar location. No further geotechnical laboratory testing is proposed based on anticipated soil conditions.

**Task 4: Geotechnical Engineering/Report**

We will evaluate subsurface conditions and prepare a letter report summarizing our recommendations for foundation type and capacity, building slab and pavement subgrade preparation, seismic design parameters, lateral earth pressures for foundation walls, pavement design, temporary and permanent groundwater control, reuse of on-site and off-site materials. Boring logs, geotechnical laboratory results and an exploration location plan will be appended to the report.

**BASIS OF BILLINGS**

Billings for GZA's professional services for the above described scope of work will be at the following lump sum fees and unit prices:

<u>Task</u>	<u>Lump Sum Charges</u>
1. Review Existing Information, Drilling Preparation	\$ 1,000
2. Subsurface Exploration Program	
Drilling Subcontractor & GZA labor: 4 rig days @ \$2,300/rig day*	\$ 9,200
Rock Coring (if required) @ \$30/ft	
3. Geotechnical Laboratory Testing	
Sieve Analyses 2 @ \$75 each	\$ 150
Modified Proctor 2 @ \$175 each	\$ 350
4. Geotechnical Analyses/Report	\$ 4,700
<b>Total</b>	<b>\$ 15,400</b>

\*The following assumptions were made in developing the above drilling costs:

- Drilling performed weekdays 7 am to 3 pm; add \$500/rig day (\$2,000 for 4 rig days) for Saturday or Sunday drilling;
- Two rigs are used throughout the drilling program to reduce GZA labor time on site. If only 1 rig can be used, cost increases by \$500/rig day;
- Boring locations are accessible with a truck mounted drill rig.

These fees are based on the stated scope of work which represents our judgment as to the level of effort required. It must be recognized, however, that unforeseen conditions that become evident during the course of the studies may alter or increase the effort required. Our fee does not include an allowance for meetings with Client to discuss our results. Attendance at meetings, if requested, will be billed at \$500 each.

Invoices for our services will be mailed to the address presented above. Should your billing address be different, please provide that information on the last page of this agreement.

**SCHEDULE**



We are prepared to perform the drilling within one week of receipt of an executed agreement and access to the site and weather permitting. DigSafe notification requires 72 business hours, after the borings are marked in the field. Laboratory tests, geotechnical analyses and report preparation will require approximately two weeks to perform after completion of the drilling. Therefore, our report will be provided within 3 to 4 weeks of receipt of a signed agreement. However, we can provide you with a design memorandum with key recommended geotechnical parameters (i.e. foundation type, bearing capacity, seismic site class) within two days of completing the explorations.

In the event that weekend work is required, we have tentatively scheduled drilling for the weekend of September 24-25, 2001, provided we are in receipt of an executed agreement by end of business Monday September 19, 2001.

**CONDITIONS OF ENGAGEMENT**


Conditions of engagement are described in the attached Terms and Conditions (DRA 3/89) previously negotiated with DRA.

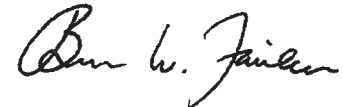
**ACCEPTANCE**


This proposal may be accepted by signing in the appropriate spaces and returning one copy to us. Issuance of a purchase order implicitly acknowledges acceptance of the Terms and Conditions (DRA 3/89). This Proposal for Services and Terms and Conditions shall constitute the entire agreement between the parties.

We appreciate the opportunity to submit this proposal. This proposal is valid for a period of 30 days from the date of issue.

Very truly yours,  
GZA GEOENVIRONMENTAL, INC.

  
Jennifer Lenz  
Assistant Project Manager

  
Bruce W. Fairless, P.E.  
Consultant/Reviewer

  
Mary B. Hall, P.E.  
Principal

Attachment: Terms and Conditions (DRA 3/89)

6ZA-5

Drumme Rosane Anderson, Inc. Architects  
RFP No. 01.P000363.12

September 14, 2011  
Page 5

This Proposal for Services and the Terms and Conditions 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, and on behalf of Client.



**DROMMEY ROSANE ANDERSON, INC. ARCHITECTS**

By: \_\_\_\_\_ Title: \_\_\_\_\_

Typed Name: \_\_\_\_\_ Date: \_\_\_\_\_

PA\2012\01.P000363.12mbh\01 p000363.12 penn brook school p01.docx

## STATEMENT OF TERMS AND CONDITIONS

The terms and conditions set forth herein are incorporated, by reference, in the Proposal for Services dated August 7, 2008 (Number 01.P000309.09) directed to Drummey Rosane Anderson, Inc. (the "Client"). The Proposal should be reviewed carefully, and Client may choose to consult with an attorney.

GZA GeoEnvironmental, Inc. ("Company") and Client agree as follows:

Section 1. 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 (the "Site"), under the terms and conditions set forth herein. Company's Services will be performed on behalf of and solely for the exclusive use of Client for the purposes set forth 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 work described in the Proposal and with underground work in general. Company reserves the right to refuse to undertake services 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.

Section 2. Billing and Payment. Client will pay Company for services performed in accordance with the rates and charges set forth in the Proposal. Invoices for Company's services will be submitted on a periodic basis, or upon completion of Services, as Company shall elect. If Client objects to any invoice submitted by Company, Client shall advise Company in writing within ten (10) days of receipt of invoice.

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Client will bill its own client at least monthly on account of Company's services, or at such other intervals as Client's contract with its client provides. Client shall pay Company within fourteen (14) days of receipt of payment from its own client on account of Company's services. Receipt of such payment by Client will be a precondition to any obligation of Client to pay Company for the invoiced services, except that if and to the extent that the failure of Client's own client to make such payment is determined to have been justified by Client's default, breach or negligence, and not by any default, breach or negligence of Company, then Client shall pay Company the amount due Company notwithstanding the failure to the Client's own client to make such payment.

Amounts not paid when due shall bear interest from such due date at the rate of one point five (1.5) percent per month or at the maximum lawful interest rate, whichever is less. If Client fails to pay any invoice in full within sixty (60) days after invoice (whether or not such payment has been received from Client's client), Company may suspend services until such payment is made, without incurring any liability to Client or waiving any rights against Client on account of such suspension.

Client will exercise due diligence in collecting amounts due from its own client on account of Company's services, providing that if Client is required to institute arbitration or other legal action against its client to collect such amounts, Company will pay a proportional share of the legal fees and other costs incurred by Client in the prosecution of such action.

Section 3. Insurance. Company maintains Workers Compensation Insurance with respect to its employees with statutorily required limits. Company maintains public liability and property damage insurance policies. Certificates of Insurance evidencing such coverage will be provided to Client upon written request.

Section 4. 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 making of test borings and other explorations as described in the Proposal. Should Client not own the Site, Client warrants and represents by acceptance of the Proposal that it has authority and permission of the Site Owner and any Site occupant to grant Company this right of entry. Company may require evidence of such authority in a form reasonably satisfactory to Company.

Section 5. Subsurface Explorations

(a) Normal Disturbance – Client acknowledges that the use of exploration equipment may affect, alter or damage the terrain, vegetation and buildings, structures, improvements and equipment at, in or upon the Site. Client accepts such risks. Company will not be liable for any effect, alteration or damage arising out of such explorations except that caused by Company's negligent acts. The cost of restoration of the Site because of any such damage has not been calculated nor included in Company's fees.

(b) 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 by public utilities and public agencies and plans and information about the Site provided by Client. 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 if 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).

Section 6. Samples

(a) General – Company will dispose of all soil, rock, water and other samples 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 in such case

Company will ship such samples to the location designated by Client, at Client's expense. Company may upon written request arrange for storage of samples at one of Company's offices, at mutually agreed storage charges. Company will not give Client prior notice of intention to dispose of samples.

(b) Disposal of Hazardous Samples – If samples collected from the Site contain substances defined as “hazardous” by Federal, state or local statutes, regulations, codes, or ordinances, Company shall have the right to: 1) dispose of samples by contract with a qualified waste disposal contractor; or 2) in accordance with Client's written directions, ship such samples by an appropriately licensed transporter to a licensed disposal site. Client shall pay all costs and expenses associated with the collection, storage, transport and disposal of samples. If Client requests, in writing, that any such sample be retained for a period in excess of thirty (30) days, Company will store such samples at Client's expense, and Client will pay an additional fee as charged by Company in accordance with its standard laboratory schedule for storage of samples of a hazardous nature.

#### Section 7. Construction Observation Services; Duties

(a) General – Company, upon Client's written request, will provide personnel to observe and report to Client on specific aspects or phases of Client's project construction. Company's observation Services do not include any supervision or direction of work of any contractor or subcontractor, or their respective employees, agents or servants. Company will not be responsible for any contractor's or subcontractor's compliance with the provisions of any contract nor for the observation or supervision of any contractor's or subcontractor's use of personnel, machinery, equipment, safety precautions or procedures.

(b) Construction Site Safety – Company, by entering into an agreement with Client or by performing construction observation services, does not undertake any liability or responsibility for the development, supervision, or enforcement of any job or site safety requirement; nor for any failure of any contractor, subcontractor, or other third person or entity present on the Site to comply with the Occupational Safety and Health Act (Federal OSHA), or with any regulations or standards promulgated thereunder, or with any state, county, or municipal law, regulation, or ordinance of similar import or intent.

Section 8. Documents. All reports, boring 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, except if there are contrary provisions in the Owner/Architect agreement, the Owner/Architect agreement terms shall govern. Client will notify Company of such contrary provisions at the time of executing this Proposal. All reports and other work prepared by Company for Client shall be utilized solely for the intended purposes and Site described in the Proposal. Client shall have a license to copy and use the same in

connection with such proposes and Site. Company will retain all pertinent documents for a period of three (3) years following the submission of Company's report to Client. Such documents will be available to Client upon request at Company's office during office hours on reasonable notice, and copies will be furnished by Company to Client for the total cost of reproduction of the same.

Section 9. Client's Duty to Notify Company of Hazards. Client represents and warrants that it will provide Company with any and all information known to 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 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 condition known to Client to exist in, on, under or in the vicinity of the Site which might present 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.

Section 10. Hazardous Materials; Pollutants; Asbestos. If unanticipated potentially hazardous materials, pollutants or asbestos are encountered during the course of the work, Company shall have the right 1) to suspend its work immediately and 2) to terminate the work described in the Proposal, upon ten (10) days of Company's written notice of intent to terminate, unless Company and Client agree upon a 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. Client shall remain liable for and shall pay all fees and charges incurred under the provisions of the Proposal through the date of termination, notwithstanding Client and Company not having reached a new, mutually satisfactory, revision of their agreement

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Section 11. Confidentiality. Company will not disclose information regarding the Proposal, Company's Services or its Report, except 1) to Client, 2) parties designated by Client, or 3) as provided in Section 12 below. Information which is in the public domain or which is provided to the Company by third parties is excepted from the foregoing undertaking.

Section 12. Public Responsibility. Client acknowledges that the Client or the Site owner, as the case may be, is now and shall remain in control of the Site for all purposes 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 as the Site from time to time which may present a potential danger to public health, safety or the environment.

Notwithstanding the provisions of Section 11 and the foregoing, Company will comply with judicial orders or governmental directives, and federal, state, county and local laws, regulations and ordinances, and applicable codes regarding the reporting to the

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 Client or to any other person or entity for reports or disclosures made in accordance with such statutory or other lawful requirements.

Section 13. Governing Law; Severability; Modifications; Assignment. Company maintains offices in several states. The agreement between Company and Client as set forth in the Proposal and in these Terms and Conditions shall be governed by and enforceable in accordance with the law of the jurisdiction in which Company's specific office issuing the Proposal is located. Such location shall be deemed the place of contracting.

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 modifications must be acknowledged in writing by Company. These conditions shall take precedence over any inconsistent or contradictory provisions 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.

Section 14. Pollutants. 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. Company hereby states, and Client acknowledges by acceptance of the Proposal, that Company may not have any professional liability or other coverage insuring Company for acts, errors and omissions, and Company may be unable to obtain such insurance at reasonable cost, for claims arising out of the performance of services, including but not limited to, investigation, assessment or evaluation of hazardous materials or pollutants or the detection, abatement, removal or replacement of products, materials or processes containing asbestos.

#### Section 15. Risk Allocation

(a) Standard of Care – Client agrees that Company's services are on behalf of and for the exclusive use of Client for the purposes set forth in the Proposal for Services. Client recognizes that Company's services require decisions which are not based upon pure science but rather upon judgmental considerations, including without limitation the economic feasibility of alternative designs. Company will perform services in accordance with generally accepted practices of consulting engineers, geologists, and environmental scientists undertaking similar studies in the same locale under like or identical circumstances. Client agrees that such services will be rendered without any other warranty, express or implied.

(b) General Indemnity – Company agrees to indemnify and hold harmless Client, its officers, agents, and employees, from and against all claims, costs, suits, damages, liability, or expense, including reasonable attorney’s fees incurred in connection therewith, arising from personal injury, property loss or damage, and injury to Client and others (including personnel of Client and of Company, their contractors and subcontractors), arising out of negligent acts or omissions of Company in the performance of its work, but only for that proportion of such claims, costs, suits, and damages which reflects the percentage of negligence of Company compared to the total negligence of all persons, firms, or corporations which results in said damages.

GZA GeoEnvironmental, Inc. is an  
Equal Opportunity – Affirmative Action Employer  
M/F/V/H

\\drat&c'sdoc.doc

**Paul Brown**

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**From:** Mary Hall [Mary.Hall@gza.com]  
**Sent:** Monday, September 26, 2011 9:08 AM  
**To:** Paul Brown  
**Subject:** RE: Proposal for Services - penn brook school

Paul –  
Adding a Phase I to our scope would be \$3,500.

Mary

\*\*\*\*\*  
Mary B. Hall PE  
Principal  
GZA GeoEnvironmental, Inc.  
133 Federal Street, 3rd Floor  
Boston, MA 02110

direct 617.963.1001  
fax 617.482.6868  
cell 781.760.6427



Please consider the environment before printing this e-mail.

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**From:** Paul Brown [mailto:PBrown@draws.com]  
**Sent:** Friday, September 23, 2011 3:05 PM  
**To:** Mary Hall  
**Cc:** Carl Franceschi  
**Subject:** RE: Proposal for Services - penn brook school

Hi Mary:  
What would it cost to add "Environmental site assessment consisting of a Phase I Initial Site Investigation conforming to 310 CMR 40.00" to your scope of work?  
Thanks,  
PB

Paul S. Brown, AIA, LEED  
Project Manager  
Drummey Rosane Anderson, Inc., Architects  
141 Herrick Rd.  
Newton Centre, MA 02459  
t: 617-964-1700 x142  
f: 617-969-9054  
c: 617-909-3530

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**From:** Mary Hall [mailto:Mary.Hall@gza.com]  
**Sent:** Wednesday, September 14, 2011 8:44 AM