

June 13, 2023

Mr. Tony Guigli Project Manager Building Department 333 Washington Street Brookline, MA 02445

Re: Michael Driscoll School Project

Designer Services Contract Amendment No. 23

Dear Mr. Guigli,

LeftField has reviewed Designer Contract Amendment No. 23 presented in Jonathan Levi Architects' Fee Proposal, dated June 6, 2023, for additional Geo-environmental Engineering Services associated with the Phase 2 Site Work and the Geothermal Wells installation. In July 2022, the Town was presented with an estimate of remaining work for McPhail Associates. The work for Phase 2 was estimated at \$100,000.00. This work has now been presented to be \$183,500.00 with is \$83,500.00 over McPhail's 2020 projected fee. The additional Geo-environmental work is associated with the Phase 2 Site Work and the installation of the Geothermal Wells. The work includes subsurface explorations, soils management plan, dewatering and remediation and permitting, LSP services and construction monitoring of dewatering and geothermal wells installation.

The total fee proposal is for \$201,850.00 which includes McPhail's work in the amount of \$183,500.00 and JLA's administrative costs of \$18,360.00. The scope of services are required and while the cost exceeds what was projected in 2020, the cost appears to be in line with the services requested. Therefore, LeftField recommends that the Town of Brookline accept Designer Contract Amendment No. 23 in the amount of \$201,850.00.

Should you have any questions regarding this recommendation of approval, please contact me.

Sincerely,

Lynn Stapleton

Lynn Stapleton, AIA, LEED AP B D + C

Cc: Jim Rogers, LeftField, LLC
Adam Keane, LeftField, LLC

Philip Gray, Jonathan Levi Architects

CONTRACT FOR DESIGNER SERVICES AMENDMENT NO. 23

WHEREAS, the TOWN OF BROOKLINE ("Owner") and JONATHAN LEVI ARCHITECTS LLC. (the "Designer") (collectively, the "Parties") entered into a Contract on August 31, 2018, ("Contract") for Designer Services for the New Construction of the Michael Driscoll Elementary School, Abatement and Demolition of the Existing School, Site Improvements and All Associated Work at the 64 Westbourne Terrace, Brookline, MA 02446; and

WHEREAS, the scope of this work is summarized in the attached Jonathan Levi Architects' (JLA) Proposal, dated June 6, 2023, and is based on McPhail Associates' Proposal, dated May 16, 2023, for Geo-environmental Engineering Services; and

WHEREAS, Contract Amendment No. 2 was approved by the Town of Brookline on January 17, 2020; and

WHEREAS, Contract Amendment No. 3 was approved by the Town of Brookline on March 18, 2020; and

WHEREAS, Contract Amendment No. 4 was approved by the Town of Brookline on March 26, 2020; and

WHEREAS, Contract Amendment No. 5 was approved by the Town of Brookline on March 26, 2020; and

WHEREAS, Contract Amendment No. 6 was approved by the Town of Brookline on May 12, 2020; and

WHEREAS, Contract Amendment No. 7 was approved by the Town of Brookline on June 9, 2020; and

WHEREAS, Contract Amendment No. 8 was approved by the Town of Brookline on August 11, 2020; and

WHEREAS, Contract Amendment No. 9 was approved by the Town of Brookline on August 11, 2020; and

WHEREAS, Contract Amendment No. 10 was approved by the Town of Brookline on October 13, 2020; and

WHEREAS, Contract Amendment No. 11 was approved by the Town of Brookline on March 9, 2021; and

WHEREAS, Contract Amendment No. 12 was approved by the Town of Brookline on April 13, 2021; and

WHEREAS, Contract Amendment No. 13 was approved by the Town of Brookline on September 14, 2021; and

WHEREAS, Contract Amendment No. 14 was approved by the Town of Brookline on September 14, 2021; and

WHEREAS, Contract Amendment No. 15 was approved by the Town of Brookline on October 12, 2021; and

WHEREAS, Contract Amendment No. 16 was approved by the Town of Brookline on October 12, 2021; and

WHEREAS, Contract Amendment No. 17 was approved by the Town of Brookline on November 9, 2021, and

WHEREAS, Contract Amendment No. 18 was approved by the Town of Brookline on December 13, 2021, and

WHEREAS, Contract Amendment No. 19 was approved by the Town of Brookline on December 14, 2021, and

WHEREAS, Contract Amendment No. 20 was approved by the Town of Brookline on February 8, 2022, and

WHEREAS, Contract Amendment No. 21 was approved by the Town of Brookline on September 13, 2022, and

WHEREAS, Contract Amendment No. 22 was approved by the Town of Brookline on December 13, 2022, and

WHEREAS, effective as of June 13, 2023, the parties wish to amend the contract, as amended:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. The Owner hereby authorizes this Contract Amendment No. 23 for the total value of \$201,850.00. This Amendment is based on McPhail Associates' Proposal, dated May 16, 2023, for additional Geo-environmental Services for \$183,500.00 and includes JLA's 10% administrative mark-up of \$18,350.00. The Designer is herein authorized to commence the services outlined in this Amendment, pursuant to the terms and conditions set forth in the Contract, as amended.
- 2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services		Previous nendments	T	unt of his dment	otal of All nendments
Feasibility Study/Schematic Design Phase	\$1,179,260	\$ 500	\$	0	\$ 1,179,760
CA #2 - Design Development Phase	\$ 0	\$ 1,814,766	\$	0	\$ 1,814,766
CA #2 - Construction Documents Phase	\$ 0	\$ 2,540,672	\$	0	\$ 2,540,672
CA #2 - Bidding Phase	\$ 0	\$ 290,363	\$	0	\$ 290,363
CA #2 - Construction Phase	\$ 0	\$ 2,540,672	\$	0	\$ 2,540,672
CA #2 - Completion Phase	\$ 0	\$ 72,590	\$	0	\$ 72,590
CA #3 - Geotechnical Engineering – Geothermal Test Well	\$ 0	\$ 117,673	\$	0	\$ 117,673
CA #3 -Acoustical Engineering – Noise Sound Measurements	\$ 0	\$ 5,500	\$	0	\$ 5,500
CA #4 – HAZMAT Consulting	\$ 0	\$ 138,512	\$	0	\$ 138,512
CA #5 – Geo- Environmental & Geotechnical, Subsurface	\$ 0	\$ 340,725	\$	0	\$ 340,725

CA #6 – Utilities – Hydrant Flow Test	\$ 0	\$	1,375	\$	0	\$	1,375
CA #7 – Supplemental Geo- Engineering & Geotechnical	\$ 0	\$	50,050	\$	0	\$	50,050
CA #8 – Site Surveying	\$ 0	\$	2,750	\$	0	\$	2,750
CA #9 – Supplemental Geo- environmental Engineering	\$ 0	\$	42,900	\$	0	\$	42,900
CA #10–Supplemental Geo- environmental Engineering	\$ 0	\$	19,800	\$	0	\$	19,800
CA #11–Supplemental Geo- environmental Engineering	\$ 0	\$	13,200	\$	0	\$	13,200
CA #12–Supplemental Survey Building Height Certification	\$ 0	\$	1,320	\$	0	\$	1,320
CA #13 – Solar Study	\$ 0	\$	2,090	\$	0	\$	2,090
CA #14–Supplemental Geo- Environmental Engineering	\$ 0	\$	19,800	\$	0	\$	19,800
CA #15–Supplemental Geo- Environmental Engineering	\$ 0	\$	48,400	\$	0	\$	48,400
CA #16–Geothermal System Engineering & Construction Administration CA #17–Vibration	\$ 0 \$ 0	\$ 	79,244	\$ 	0	\$ 	79,244
Monitoring Services							
CA #18–Additional Survey CA #19-Additional Geo-	\$ 0	\$	1,523.78	\$	0	\$	1,523.78
Environmental Construction Monitoring & Testing	\$ 0	\$	26,070.00	\$	0	\$	26,070.00
CA #20-Additional Geo- Environmental Construction Monitoring & Testing	\$ 0	\$	74,800.00	\$	0	\$	74,800.00
CA #21-Rain Garden Redesign and Geothermal Alternate	\$ 0	\$	10,780.00	\$	0	\$	10,780.00
CA #22-Change to Terrazzo	\$ 0	\$	12,500.00	\$	0	\$	12,500.00
CA #23-Geo-environmental	\$ 0	\$	0	\$ 201,	850.00	\$ 2	201,850.00
Total Fee	\$1,179,260	\$8,	376,287.78	\$ 201,	850.00	\$9,	757,397.78

This Amendment is for the Geo-environmental work associated with the Phase 2 Site Work and the installation of the geothermal wells. The work includes subsurface exploration, soils management plan, dewatering and remediation permitting, LSP services and construction monitoring.

3. The Construction Budget shall be as follows:

 Original Budget:
 \$ 92,909,563

 Amended Budget
 \$100,173,166

4. The Project Schedule shall be as follows:

Original Schedule: Phase 1 Substantial Completion – 11/4/2022

Phase 2 Substantial Completion – 8/31/2024

Amended Schedule <u>Phase 1 Substantial Completion - 5/31/2023</u>

Phase 2 Substantial Completion – 8/31/2024

Phase 1 – New Building, Roadways and Sidewalk Work

Phase 2 – Abatement & Demolition of Existing Building, Geothermal Wells & Site Improvements

5. This Amendment contains all the terms and conditions agreed upon by the Parties as amendments to the original Contract, as amended. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract, as amended, shall be deemed to exist, or bind the Parties, and all other terms and conditions of the Contract, as amended, remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER:

Date: June 13, 2028

	(print nan	ne)		
	(print title	:)		
By:				
, <u> </u>	(signature	:)		
Date:				
DESIG	SNER:			
Jonat	han Lev	vi		
	(print nar	ne)		
Princip	oal _I			
	(print title) .		
By:	~~	\rightarrow		
	(signature) I =		

≥

τ α ×

Ε

e t b o

Mr. Jim Rogers Principal LEFTFIELD Project Management 225 Franklin Street, 26th Floor Boston, MA 02110

Re: Fee Proposal, Geoenvironmental Services

Driscoll School, Brookline MA

Dear Jim,

Attached please find a proposal from McPhail for Geoenvironmental services to be performed as a subconsultant to JLA.

Fee

As described in Article 4.11 of the Contract for Designer Services, the services associated with this proposal are to be invoiced on a lump sum basis as Extra Services, plus the 10% standard markup specified in Articles 9.1 and 9.1.1.

Task 1: Subsurface Exploration & Soil Management Pla	
Task 2: Dewatering and Remediation General Permit	\$15,000
Task 3: LSP Profiles for Proposed Soil Disposal Facilitie	\$15,000
Task 4: Construction Dewatering Monitoring Services	\$41,500
Task 5: Construction Monitoring	\$42,000
<u>Subtotal</u>	\$183,500
10% markup	\$18,350
Total	\$201,850

Please do not hesitate to contact me if you would like us to clarify or modify our assumptions, or if there is anything represented here which does not conform to your expectations.

Sincerely,

Philip Gray Principal

Jonathan Levi Architects



May 16, 2023

Jonathan Levi Architects 266 Beacon Street Boston, MA 02116

Attention: Mr. Mark Warner

Reference: Driscoll School Phase 2; Brookline, Massachusetts

Proposal for Geoenvironmental Engineering Services

Ladies and Gentlemen:

We are pleased to present our proposal for providing geoenvironmental engineering services for the above-referenced project.

Background

As part of the Phase 2 construction at the new Michael Driscoll School, demolition of the existing Michael Driscoll School is planned to begin at the end of the 2022 to 2023 school year. The area of the existing building is planned to be redeveloped as outdoor play space including a soccer field, basketball court and jungle gym. In addition to the removal of the building and its foundations, additional soil is planned to be removed from the site as part of the regrading of the area. Up to about 13 feet of soil may be removed along the northern portion of the site, but a large majority of the area will require soil to be excavated to depths of between 1 and 5 feet.

Subsurface exploration programs were completed by McPhail Associates, LLC between 2018 and 2022 for both geotechnical and geoenvironmental purposes for construction of the new school building as part of the Phase 1 redevelopment. However, no geoenvironmental explorations were completed in the area of the Phase 2 site.

Two (2) Massachusetts Department of Environmental Protection (DEP) listed releases have historically been identified at the 64 Westbourne Terrace property. Specifically, the release associated with Release Tracking Number (RTN) 3-14448, which is located to the west of the existing Driscoll School building, pertains to a release of No. 4 fuel oil to soil which was encountered during the removal and subsequent replacement of one (1) fuel oil underground storage tank (UST) on July 31, 1996. As identified by the DEP online database, RTN 3-14448 was closed out by others via a Class A-2 Response Action Outcome (RAO) in April 1997 and a Permanent Solution has been achieved for the release. The release associated with RTN 3-36385 pertains to reportable concentrations of tetrachloroethylene (PCE) in soil, as well as a separate release of gasoline/petroleum-related compounds in soil and groundwater. As part of the implementation of a Release Abatement Measure (RAM) Plan during the Phase 1 construction, an isolated pocket of PCE-impacted soil and a separate area of gasoline-impacted soil were removed from the site. A Downgradient Property Status (DPS) Opinion was filed with the DEP on behalf of the Town of Brookline for the gasoline release on May 11, 2023, which attributed the gasoline release



to a former gasoline filling station associated with RTN 3-4373 located upgradient across Washington Street. As a result of the submittal of this DPS Opinion, the Town of Brookline is not subject to subsequent deadlines under the MCP for submittals with regard to the petroleum/gasoline contamination. The PCE release is anticipated to achieve regulatory closure via filing of a Permanent Solution Statement with No Conditions. McPhail is in the process of filing that report with the DEP on behalf of the Town of Brookline and we anticipate that will be completed by or before the end of May 2023.

Geoenvironmental Engineering Services

Excess soil will be generated from the Phase 2 construction of the proposed playing fields which will require off-site disposal. Based on the information which included a cut/fill analysis completed by J. Derenzo Company and provided to us by Left Field, approximately 10,000 cubic yards of excess soil will require removal and off-site reuse. Prior to general excavation, we recommend that site soil be pre-characterized to the planned depth of excavation for off-site reuse/disposal in accordance with current DEP Policy and Guidance. Accordingly, we propose to prepare a Soil Management Plan (SMP) to provide recommendations for handling, management, on-site reuse and off-site reuse or disposal of excavated site soils.

Additional work to be included as part of Phase 2 project includes installation of a network of vertical closed-loop geothermal wells servicing ground source heat pumps to heat and cool the new building. Construction dewatering is anticipated in order to install the geothermal wells at the site. It will be necessary to discharge construction dewatering effluent into the town storm drainage system if on-site recharge is not feasible.

The proposed scope of services contained herein includes the following five (5) tasks:

- Task 1 Subsurface Exploration & Soil Management Plan
- Task 2 Dewatering and Remediation General Permit
- Task 3 LSP Profiles for Proposed Soil Disposal Facilities
- Task 4 Construction Dewatering System Testing
- Task 5 Construction Monitoring

Task 1 – Subsurface Exploration & Soil Management Plan

Based on the above-reference cut/fill analysis provided to us, it is anticipated that up to 10,000 cubic yards of excess soil may be generated from within the area of the new playing fields during development of the subject site. Prior to general excavation, it is recommended that site soils be pre-characterized to the planned depth of excavation for off-site disposal in accordance with current DEP Policy.



The intent of pre-characterizing the site soils for off-site disposal is to allow the earthwork contractor to conduct a mass excavation and load truck trailers directly for the transportation of excess soils off-site (i.e. "load and go" method). Otherwise, stockpiling and testing of soils on-site would be required to be conducted concurrent with earthwork activities. Based on the size of the proposed project site, this method of soil characterization would significantly hinder the Contractor's earthwork production, therefore precharacterization is recommended.

Off-site disposal of regulated material is currently governed by the DEP's "Interim Remediation Waste Management Policy for Petroleum Contaminated Soils", Policy #WSC-94-400, dated April 21, 1994, DEP Policy #COMM-97-001 entitled "Reuse and Disposal of Contaminated Soils at Massachusetts Landfills", dated August 15, 1997, "Similar Soils Provision Guidance" dated September 4, 2014, WSC#-13-500; and "Interim Policy on the Re-Use of Soil for Large Reclamation Projects," Policy#COMM-15-01, dated August 28, 2015. Analytical requirements set forth by the above referenced policies include chemical analysis for total petroleum hydrocarbons, volatile organics, RCRA-5 metals or MCP-14 metals, semivolatile organic compounds (SVOCs), PCB's, pH, reactivity, conductivity and flashpoint. Additional analysis for the presence of TCLP (leachable) metals may be required based upon the levels of total metals identified.

In general, regulated and less than RCS-1 receiving facilities require that disposal characterization be performed at a frequency of 1 sample for every 500 cubic yards of fill material and 1 sample for every 1,000 cubic yards of natural soil. It is anticipated that laboratory testing of 20 samples will be required to characterize the estimated 10,000 cubic yards of excess soil for construction of the proposed fields.

It is anticipated that 17 exploration locations will be required to complete the precharacterization; however, four (4) of these locations are located within the footprint of the existing Driscoll School building that is planned to be demolished. Therefore, we propose to complete 13 geoenvironmental borings, spaced in a grid pattern across the exterior portions of the proposed Phase 2 site in order to obtain representative samples of the soil for laboratory analysis. Each boring would extend between 5 and 15 feet below the ground surface. Anticipated depths are based on the cut/fill analysis provided to us by Left Field on October 5, 2022. It is anticipated that the remaining four (4) sampling locations can be completed during the demolition phase and that test pit explorations to collect samples can be completed by the demolition contractor for McPhail. If the locations inside the building footprint cannot be excavated by the demolition contractor, an additional day of drilling will be required.

Once the laboratory results of the precharacterization testing have been received from the testing laboratory, the results of our explorations would be presented in a Soil Management Plan which would provide recommendations for off-site reuse or disposal of soil from the subject site.

It is anticipated that the geoenvironmental borings will require three (3) rig-days to complete the 13 explorations.



Our proposed scope of geoenvironmental engineering services for Task 1 will include the following:

- 1. Subcontract with a qualified drilling subcontractor to perform the borings described above and clear utilities with Dig-Safe.
- 2. Provide a field engineer to observe the borings, to obtain representative soil samples, to monitor the groundwater levels within the completed explorations, to prepare detailed field logs, to make modifications to the subsurface exploration program depending upon actual conditions encountered, and to determine the existing ground surface elevation at each borehole utilizing vertical control indicated on the site survey.
- 3. Prepare a detailed subsurface exploration plan and exploration logs.
- 4. Provide a field engineer to obtain representative soil samples and to prepare field logs for the test pits.
- 5. Screen soil samples obtained from the borings, for the presence of total volatile organics (TVOC) utilizing a photoionization detector (PID).
- 6. Prepare and submit 20 soil samples obtained from the explorations for laboratory analyses for the off-site disposal parameters as referenced above. Additionally, chemical testing for the presence of TCLP metals will be performed, as required, based upon our review of the initial chemical testing as referenced above. It is anticipated that approximately 50% of the samples will require TCLP Lead testing.
- 7. Review the soil chemical test results with respect to the applicable reporting thresholds contained in the MCP.
- 8. Prepare a Soil Management Plan (SMP) based on the results of the soil characterization. The SMP will classify the soil across the site to the proposed depth of excavation. In addition, the SMP will contain appropriate figures indicating where different soil classifications exist and relevant summary tables. Finally, the SMP will identify the appropriate types of receiving facilities for the excess soil.

The lump sum fee to complete **Task 1** is **\$70,000**, which includes the estimated fee of \$8,500 for the drilling contractor, which assumes the project is prevailing wage rates, and an allowance of \$41,500 for the soil chemical testing.

Based on our experience preparing SMPs, it is recommended that an allowance of \$4,000 should be carried to include one (1) extra day of borings and an allowance of \$6,000 for chemical testing which may be required to delineate between soil disposal precharacterization categories, dependent on the results of the chemical testing.



<u>Task 2 - Dewatering and Remediation General Permit</u>

As stated above, discharge of groundwater off-site requires a discharge permit. On August 2, 2022, the new Dewatering and Remediation General Permit (DRGP) was enacted by the Environmental Protection Agency (EPA). To facilitate potential dewatering activities during construction, an electronic Notice of Intent (eNOI) needs to be submitted to the EPA requesting authorization to perform temporary construction dewatering discharge under the new DRGP. Coverage under the DRGP will be effective when EPA has reviewed the eNOI, made a determination that coverage under the DRGP is authorized, and has to notify the operator in writing of its determination, unless the eNOI is placed on hold, or the discharge is authorized by EPA prior to 30 days (e.g., provisional coverage for emergency discharges). The effective date of coverage will be the date indicated in the authorization to discharge provided by EPA in writing. The following scope of work will be performed for the submittal of the DRGP eNOI:

- 1. Assist the contractor with the submittal of a DRGP application and Electronic Signature Agreement to meet administrative requirements of the DRGP.
- 2. Perform site research including review of DEP on-line databases for MCP disposal sites located in the vicinity of the Driscoll School. a review of the Massachusetts list of impaired water bodies, a review of the National Register of Historic Places on-line database, a review of the U.S. Fish and Wildlife endangered species list and Massachusetts Division of Fisheries and Wildlife on-line database, and a review of EPA online databases to determine if the subject site is located within an Environmental Justice area.
- 3. Obtain one (1) groundwater sample from an existing observation well and submit to a DEP-certified laboratory to be analyzed for the presence of the following parameters: pH, total suspended solids (TSS), turbidity, total nitrogen, total dissolved solids (TDS), total petroleum hydrocarbons (TPH), chloride, total recoverable metals (i.e. arsenic, copper, iron, lead, and cyanide, antimony, cadmium, chromium, mercury, nickel, silver, and zinc), total polychlorinated biphenyls (PCBs), Group I and Group II polycyclic aromatic hydrocarbons (PAHs), total BTEX, total phthalates, and volatile organic compounds (VOCs).
- 4. Obtain one (1) groundwater sample from the Muddy River receiving water body that would be submitted to a laboratory to be analyzed for the presence of pH, hardness, total suspended solids, and/or total dissolved solids as required by the DRGP.
- 5. Prepare and submit a DRGP eNOI, for the temporary construction dewatering discharge associated with the proposed development and appropriate applications for submittal to the US EPA and DEP.

The lump sum fee to complete **Task 2** is **\$15,000**



Task 3 - LSP Profiles for Proposed Soil Disposal Facilities

This task item includes providing geoenvironmental engineering services associated with the preparation of LSP profiles for the off-site disposal of excavated soil. The proposed scope of service includes:

- 1. Prepare profiles for the disposal facilities which will include an opinion letter written by a Licensed Site Professional (LSP), the chemical test data, a sampling location plan, and a table summarizing the chemical test data.
- 2. Prepare Bills of Lading and/or Material Shipping Records to record the disposal of the excess excavated material, as required by the MCP and DEP's soil management policies.

The lump sum fee to complete **Task 3** is **\$15,000**, which assumes that a maximum of six (6) LSP disposal profiles will be required to be prepared.

<u>Task 4 - Construction Dewatering Monitoring Services</u>

As discussed in Task 2, a permit for temporary construction dewatering discharge during installation of the geothermal well field will need to be obtained from the EPA in the event that on-site recharge is not feasible and off-site discharge of construction dewatering is required. Once the dewatering treatment system is set up in accordance with the requirements of the permit, off-site discharge of construction dewatering effluent may commence.

To satisfy the DRGP permit requirements during discharge, chemical testing of the influent and effluent to the discharge treatment system will be required twice during the first week of dewatering discharge. The samples will be analyzed on a rushed turnaround. Assuming the results meet the permit requirements, the system effluent will be tested monthly thereafter with standard ten (10) business day turnaround. The site-specific permit requirements for testing the influent and effluent of this project are currently unknown, but it is likely that the scope of chemical testing will include pH, TSS, turbidity, total nitrogen, TDS, TPH, PP-13 metals, chloride, VOCs, and SVOCs. We will adjust the scope and associated cost of chemical testing depending upon the actual testing scope specified by the EPA once the final permit authorization has been issued.

Also, beginning on the effective date of the authorization to discharge, the operator shall begin reporting monitoring data using Discharge Monitoring Reports (DMRs) submitted to EPA (and the State as applicable) online using the NetDMR service. McPhail proposes to assist with the compliance monitoring and preparation of the DMR in NetDMR for submittal by the Operator (typically the General Contractor).

In consideration of the above, we propose to provide the following scope of services to satisfy the dewatering discharge permit requirements during construction:



- 1. Provide the required oral and written notices to the EPA and the Town of Brookline regarding system start-up and shut-down.
- 2. Provide a field representative to perform sampling.
- 3. In accordance with the DRGP Permit, obtain samples of the influent and effluent to the discharge treatment system at the frequency described above and, in the manner, and for the parameters required by the Permit.
- 4. Upload the results of the monitoring and testing as required to NetDMR.
- 5. Provide geoenvironmental engineering consultation related to the dewatering permit on an as-required basis.

We estimate our fee for the first week of sampling to be \$13,500, which includes an allowance of \$10,500 for the chemical testing laboratory. Should the initial results meet permit requirements, subsequent rounds of sampling are estimated to cost \$4,500, including an allowance of \$3,000 for the chemical testing laboratory.

Based on the above, and assuming that construction dewatering will be required for a 7-month duration, our lump sum to complete **Task 4** is **\$41,500**. The total duration of construction dewatering is a function of the contractor's schedule, and our overall costs will be adjusted accordingly.

In addition, it should be noted that if the chemical testing indicates an exceedance of the DRGP limits, additional chemical testing will be required which will also adjust our total costs.

Task 5 - Construction Monitoring Services

During the construction period, it is recommended that McPhail be retained to monitor the geoenvironmental-related construction work for compliance with the requirements of the Contract Documents and recommendations contained in our SMP.

Specifically, we proposed to provide the following construction monitoring services:

- 1. Consultation in connection with the review of various submittals by the contractor including Construction dewatering system, soil receiving facilities, and Health and Safety Plan.
- 2. Provide a field engineer to monitor segregation of soils during excavation and loading onto trucks for off-site disposal, manage the Material Shipping Records, and perform monitoring for total volatile organics (TVOC) with Photo Ionization Detector (PID) and odors that may be generated during the excavation.
- 3. Prepare field reports summarizing the progress of the work and our observations of the geoenvironmental-related construction activities, including any deviations



by the Contractors from the requirements of the Contract Documents. Field reports would be submitted on a monthly basis.

We estimate our fee for providing the field engineer, with the associated oversight and engineering consultation, to be about \$4,000 per half-time week (20 hours on-site) and \$7,500 per full-time week (40 hours on-site).

For the purposes of this proposal, we have assumed our presence on-site will be required for two (2) full-time (40-hour) weeks and five (5) part-time (20-hour) weeks. In addition, the fee includes a PID for \$935 per month for 2 months totaling \$1,870. Therefore, predicated on the assumed time on site, our lump sum fee to complete **Task 5** is **\$42,000**.

Estimated Fee Summary

The lump sum fees for the above Tasks are summarized as follows:

Task	Description	
1	Subsurface Exploration & Soil Management Plan	\$70,000
2	Dewatering and Remediation General Permit	\$15,000
3	LSP Profiles for Proposed Soil Disposal Facilities	\$15,000
4	Construction Dewatering Monitoring Services	\$41,500
5	Construction Monitoring	\$42,000
	Total	\$183,500

Terms and Conditions

The fee for engineering services would be based on hourly billing rates for technical personnel plus any direct expenses (e.g., equipment, travel, reproduction) and subcontractors at cost plus 15 percent.

Invoicing for services would be submitted monthly and payment would be due within 30 days. The Client agrees to pay interest at the rate of 1.5 percent per month on monies outstanding in excess of 30 days and collection costs on monies outstanding in excess of 90 days.

The engineer's liability for damages due to professional negligence in performing engineering services will be limited to an amount not to exceed \$1,000,000 in accordance with the terms and conditions of our policy.

In order to provide prompt payment to our drilling subcontractor, upon receipt of written notice to proceed McPhail will submit an invoice for a retainer in the amount of \$8,500 to the



Client for the proposed cost of the drilling subcontractor. McPhail will provide payment to the subcontractor prior to receiving payment from Client to maintain the project schedule, but it is understood that Client will submit the McPhail invoice for immediate payment.

The Client agrees to provide right of entry to the site in order that the explorations can be performed. Additionally, the Client agrees to provide McPhail with available plans indicating the locations of known existing subterranean structures and utilities (collectively, Subterranean Structures), and to have personnel familiar with the site review the locations of the proposed explorations for potential conflicts with Subterranean Structures. While McPhail and our subcontractors will take reasonable precautions to avoid damage to the Subterranean Structures including notification to Dig-Safe (or local equivalent), damage to Subterranean Structures not shown on the plans provided to us would be the responsibility of the Client, and the Client agrees to indemnify and hold McPhail harmless for any and all damages to Subterranean Structures not shown on the plans provided to us or documented by personnel familiar with the site (i.e. latent subsurface condition). At the request of the Client, McPhail will retain a geophysical survey contractor and/or vacuum excavation contractor to assess for the possible presence of buried Subterranean Structures at the proposed exploration locations, as an additional service.

Upon completion of the boring, the drilling contractor will backfill the drill holes with the drilling spoils, unless otherwise indicated above. In paved areas, the ground surface treatment will be restored with cold patch asphalt or concrete.

Except as otherwise indicated herein, disturbances to the ground surface related to the subsurface exploration program will not be restored. The Client agrees to accept the above-described condition of the site after the explorations have been completed. Monitoring the long-term performance of the surface restorations is specifically excluded.

Obtaining governmental permits or approvals is not anticipated to be required and therefore is not included.

The cost of our exploration contractor is based on completion of the explorations during normal business hours and does not include any premium costs that would be applied for night or weekend work.

The disposal of soil and groundwater from the site is excluded, unless otherwise indicated above. Soil and/or rock samples will be stored for up to six (6) months without charge and will then be discarded, or returned to the client upon request, unless otherwise requested.

Since the Client agrees that McPhail has neither created or contributed to the creation of any hazardous materials, oil, or other environmental pollutants that is now or may be introduced or discovered on the project site in the future, the Client agrees to defend, indemnify, and hold harmless McPhail, its subcontractors, agents, officers, and employees from and against any and all claims for damages and all associated expenses incurred as a result of claims sustained or alleged by any person or entity other than the Client, based upon a release of environmental contaminants or pollutants, any governmental fines or penalties related to



environmental contaminants or pollutants, or any bodily injury or property damage caused by the release, removal, assessment, or investigation of hazardous materials associated with the subject project.

Our scope may not include the level and frequency of chemical testing that would be required for all soil disposal/reuse facilities should unanticipated levels of contaminants be detected (e.g., unusually high levels of metals or contaminants indicative of a Hazardous Waste as defined in 310 CMR 30.0000). Should the results of the chemical testing indicate that the soil is subject to the DEP notification criteria contained in the Massachusetts Contingency Plan 310 CMR 40.0000, additional geoenvironmental engineering services will be required, for which a work scope and estimated fees will be provided. The actual scope and fees for the additional work, if any, will be dependent upon the results of the chemical testing and required response actions.

Unless indicated above, the cost of chemical testing charged by the laboratory is predicated upon a standard turnaround time of ten (10) business days. Additionally, the costs of any additional chemical testing beyond the above scope or based on the results of the above scope of chemical testing, are excluded.

Environmental consultation associated with assisting the Owner in obtaining environmental liability insurance or pursuing Brownfields Tax Credits is excluded.

It is understood that the presence of our field representative on the site will be solely for the purpose of monitoring the earthwork operations for the above-described project. Our work does not include supervision or direction of the actual work of the contractor or their employees. The contractor should be informed that neither the presence of our field representative nor the observations and testing of our firm shall relieve them in any way from their responsibility concerning defects discovered in their work. It is also understood that McPhail will not be responsible in any way for job site safety as this will be the sole responsibility of the contractor.



Our total fee would be dependent upon the duration of our required presence on the site, which is a function of the contractor's scheduling, phasing of activities and progress. Should our presence on the site be required for a greater or lesser period, the cost of our field representative's time and our project manager's oversight would be adjusted accordingly.

Should you have any questions, please do not hesitate to contact us.

Very truly yours,	
McPHAIL ASSOCIATES, LLC	JONATHAN LEVI ARCHITECTS
Nicholas D. Hodge	
Nicholas D. Hodge	<u>BY</u>
Joseph Julil 2	
Joseph G. Lombardo, Jr., L.S.P.	DATE