EBI Consulting
environmental | engineering | due diligence

21 B Street
Burlington, MA 01803
Tel: (781) 273-2500
Fax: (781) 273-3311
www.ebiconsulting.com

February 27, 2014

Mr. Ben Rogan
Highland Development, Inc.
98 Winchester Street
Medford, MA 02155
e-mail: ben@highlanddevelopment.net

SUBJECT: PRELIMINARY REMEDIATION COST PROPOSAL
260 – 264 BEACON STREET
SOMERVILLE, MASSACHUSETTS
EBI PROJECT# 23140011

Dear Mr. Rogan:

On behalf of EnviroBusiness, Inc. (dba EBI Consulting, hereinafter "EBI"), we are pleased to submit this preliminary proposal for Remediation at 260 – 264 Beacon St., located in Somerville, MA (herein the Subject Property). Based on our previous conversations, assessment performed to date and review of accessible reports on-line and from the Massachusetts Department of Environmental Protection (MassDEP), EBI has completed our remedial design and cost estimate for the above referenced property.

The MassDEP is currently tracking response actions under Release Tracking Numbers (RTN) 3-31040 & 31228. Based on our understanding of your objectives, the existing site constraints and regulatory context, we have developed a technical approach to advance this site to permanent closure under the MCP. This proposal provides a detailed scope of work to move the project from Phase I to closure within the MCP. The intent of the remedial approach will be to reduce chlorinated solvents to a level below applicable standards. The time frame for closure is anticipated to be between 5 and 7 years.

1.0 PROJECT BACKGROUND

EBI understands that the property had been operated as a metal plating facility until its purchase by the current owner in May of 1981. Upon purchase the plating facility was closed, a new 6-inch concrete floor poured on top of the old concrete floor and the building was converted to medical office space. During a 2012 due diligence assessment, soil and groundwater impacts below the existing building were identified. Chlorinated solvents, particularly Tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene, vinyl chloride and minor petroleum constituents were identified above MassDEP Reportable Concentrations (RC's). Indoor air impacts above imminent hazard threshold criteria were identified in August 2012, triggering the implementation of a sub-slab depressurization system (DPS).

Off-site assessment was conducted by Harvard University to actively address migration onto occupied buildings addressed as 258 Beacon St. and 3 Beckwith Circle. These impacts are being addressed under RTN 3-31302. Harvard has filed for Downgradient Property Status (DPS) against 260-264 Beacon St. These two structures each contain a DPS system to contain vapor migration into their buildings. The MassDEP conducted additional off-site assessment and issued an Immediate Response Action Assessment Report in November 2013. Based on our preliminary understanding of the site conditions and project objectives, we believe that a Bioremedial approach to in-situ remediation coupled with removal of impacted soil (assumed) below the building at 260-264 Beacon St. will be a viable path for advancing this project to a cost effective RAO.

2.0 RECENT ASSESSMENT

EBI completed assessment of soil, groundwater and soil vapor between January 31, 2014 and February 11, 2014. Access agreements were completed, approved and complied with during assessment. A not to scale figure is included herein identifying the locations of sampling points. All laboratory reports and tables are included as attachments.

2.1 Soil Assessment

- Seven (7) soil samples were submitted to a laboratory for Volatile Organic Compounds (VOCs) via EPA method 8260 and RCRA 8 metals. One (1) soil sample selected and submitted for a pre-charaterization disposal suite.
- Soil samping was completed in conjunction with geotechnical borings advanced to the northwest of the on-site structure at 260-264 Beacon Street.
- Results reported concentrations of cis-1,2-dichloroethylene and TCE in sample B-3 (3-5 ft below grade) above applicable standards.
- Cadmium was reported at 3.9 ppm in sample B-3 (3-5 ft) above applicable Method 1 Risk characterization standards.
- Chromium was reported 42 ppm in sample B-2 (25-27 ft) above applicable Method 1 Risk characterization standards.
- No other compounds were reported above applicable Method 1 Risk characterization standards.

2.2 Groundwater Assessment

- Groundwater analytical suite included assessment of bacteria, remedial indicators, applicable nutrients and VOC analysis by Method 8260B. All samples were collected via EPA Low Flow parameters.
- Access to Harvard property and all results from MW-1 and MW-2 were submitted copie to Harvard within 24-hours of receipt by EBI. All MassDEP BWSC forms were completed and submitted to Harvard as required.
- No concentrations of chlorinated compounds were reported in MW-1.
- Elevated concentrations of Tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene, vinyl chloride were reported in MW-2. All compounds were above applicable standards.
- Bacteria, assays and remedial indicators were assessed in these two wells with MW-2 having reported stronger and generally more positive results than MW-1. Oxidation reduction potential (ORP) and pH were within ranges suitable for bacterial growth rate potential though lower ORP is desirable.
- Remedial indicators showed that anaerobic respiration was on going but at low concentrations. A further decrease in nitrates, sulfates and ORP is desirable.
- On-site wells, identified as AOS-1 and AOS-2, reported no VOCs above applicable standards.
- Vinyl Chloride was reported in AIS-1 and AOS-5 above applicable standards.
- TCE was reported in AIS-3 above applicable standards.
- Depth to groundwater ranged from 7.95-feet to 9.17 feet.

2.3 Soil Vapor Assessment

- Soil vapor analysis was conducted via Method TO-15 analysis at five (5) soil vapor points. Samples were collected as "Grab" samples and contained in separate 6-liter stainless steel Summa canisters.
- TCE was reported above residential screening levels in four of five samples; SG-1, SG-3. SG-4 and SG-8.

- The results from sample SG-2 was reported below residential screening levels.
- 1,3-dichlorobenzene was also reported in SG-4 and TCE was report in SG-8 above residential screening levels.

3.0 SCOPE OF WORK

EBI has developed an efficient technical approach that builds on existing site information to enable implementation of remedial objectives and comprehensive site assessment. EBI has designed this system with anticipation of the proposed structure to have an open air garage on the first floor. Other remedial options were reviewed and included Soil Vapor Extraction (SVE), Groundwater Pump and Treat with Reinjection and amendment of treated water and ISCO applications of Potassium Permanganate and Sodium Persulfate. EBI selected remedial stimulation and inoculation of Dehalococcoides bacteria as the main remedial technique based on-site and off-site conditions, low impact to the enviroment, its timely and proven remedial technology and cost effectiveness as a remedial solution. Also, because of the off-site impacts and development of the area, EBI is of the opinion that a two step remedial approach is best suited at this site.

1) Removal of the current on-site structure will allow access to the soil and groundwater assumed to be the secondary source of the solvent release. During this initial phase, impacted soil will be removed while groundwater and soil vapors are recovered and treated.
    a. As the contaminant concentrations below the current structure are unknown, EBI has categorically priced soil disposal as hazardous waste. EBI anticipates removal of 500-tons of soil. Actual volume, classification soil and disposition of soil will be dependent upon analytical results of said soil.
    b. EBI anticipates gaining approval for and operating a groundwater recovery system for 6-months within the area of the current northeast portion of the building.
    c. The dewatering system will be installed and operated with all appropriate monitoring.

2) Additional assessment will be conducted to assess the vertical and horizontal extent of the release and to install remedial additive application and monitoring wells. At this time the vertical extent and the horizontal extent to the south and southwest is unknown. With full access, assessment can be completed quickly.
    a. EBI anticipates advancing four rows of monitoring / application wells, two (2) on 260-264 Beacon and two (2) on the Harvard property, specifically within Beckwith circle.
    b. EBI anticipates the advancement of up to 40 applications points, two deep vertical monitoring wells and eight (8) additional monitoring wells for horizontal extent.
    c. Laboratory assessment of soil and groundwater for metals and volatile organic compounds (VOCs).
    d. This assessment will require Indoor air or sub-slab assessment via TO-15 analysis.

3) Assess the hydrogeologic characteristics of the water bearing zone including porosity and permeability for inclusion in the Phase II Comprehensive Site Assessment and Phase III Remedial Action Alternative reports. EBI will incorporate status reports into major phase reports when appropriate.
    a. Phase II / III by August 13, 2015
    b. Phase IV report by August 13, 2016
    c. EBI anticipates multiple reports including five Release Abatement Measure (RAM) or Immediate Response Action (IRA) Reports, one every 6-months
    d. Phase 5 / Remedy Operation Status (ROS) reports

e. Response Action Outcome (RAO) report with Risk characterization.
f. Traffic Management Plan (TMP), for accessing monitoring wells on the city sidewalk.
g. Additional reports may be required over the life of the project depending upon the life of the project.
h. EBI has included Project Management for the life of the project time into this section

4) Remedial application / inoculation of the subsurface with
   a. Prior to backfilling the excavation the subsurface area will be treated with remedial additives and dechlorinating bacteria, specifically Dehalococcoides.
   b. Remedial additives and / or dechlorinating bacteria will be applied.
   c. EBI anticipates up to three additional applications to enhance remedial action based upon monitoring data.
   d. The proposal does not include repair of the parking surface within Beckwith Circle or removal of monitoring wells.

5) Groundwater Monitoring
   a. EBI anticipates the project to require 5-7 years with bi-annual and/or quarterly groundwater assessment to be conducted.
   b. Assessment will include bacteria, assays, VOCs, dissolved gases
   c. All assessment will be conducted via EPA Low Flow methodology
   d. Assessment / monitoring of monitoring wells located in the sidewalk will require a TMP and during sampling appropriate signage.

6) Miscellaneous Costs
   a. Well Decommissioning, removal of all wells and proper decommissioning.
   b. MassDEP annual fees, assuming 9-years covering historic and future.
   c. MassDEP assessment of SARSS assessment and report with a X2 multiplier.
   d. TMP signage and fees.

5.0 LSP SERVICES AND GENERAL ENVIRONMENTAL CONSULTING

EBI's Site Investigation and Remediation group specializes in providing environmental site investigation, contaminant remediation, remedial design and regulatory-compliance services to private industry, law firms, developers, property owners, organizations, and institutions. EBI uses proven, current technologically, and innovative approaches to evaluate, manage, and meet critical project schedules and budgets. EBI has extensive experience with all elements of the MCP remediation related phases, including assessing, containing, remediating and restoring sites where soil, groundwater, sediment and surface water were impacted by releases to the environmental. Our team's project experience is included below.

TEAM EXPERIENCE TABLE

Name	Practice Area of Expertise	Years of Experience in this Area	Project Role	Professional / Education Background
Edward Giordano, LSP, PG	Project management, MCP compliance, Remediation Design, Project closures in urban environments and risk assessments	25	Project Manager, LSP	LSP/PG/BS Geology
Philip Peterson	Project Management, MCP compliance, site investigation and remediation	16	Task Manager / Project Engineer	BS Planning and MS Engineering Management
William Mallio, LSP, PG, PhD	Project Manager, MCP compliance, project closure in urban environments, QA/QC, Team Mentor	35	LSP, Senior Consultant & Scientist	LSP/PG/BS/PhD Geology
Peter Hosford, CIH, CSP	Project Manager, Risk Assessment	28	Task Manager / Senior Scientist	CIH,CSP/BS Biology, MS Occupational and Environmental Health and Safety
Brian Kilcoyne	MCP compliance, site assessment and due diligence	20	Task Manager / Senior Scientist	BA Geology
Brian White	MCP compliance, field assessments and due diligence	11	Task Manager / Project Scientist	BA Environmental Biology

6.0 ASSUMPTIONS AND LIMITATIONS

The work outlined above will be conducted in accordance with our Standard Terms and Conditions for Special Studies (Section 8.0), a copy of which is attached for your review and approval. The scope of work and the associated fees are subject to change based on the results of the assessment activities, site conditions, and/or site access issues. No additional work will be undertaken or costs incurred without written approval from you. This proposal is based upon the knowledge we have to date of the Subject Property.

It is our understanding that the Client is responsible to procure authorizations necessary for EBI to perform the Scope of Work and to gain access to the Subject Property where the Scope of Work is to be performed. EBI is not responsible for any delays caused by inclement weather, site access issues, contractor availability, etc.

The cost estimate assumes that all fieldwork can be performed safely in Occupational Safety and Health Administration (OSHA) Level D personal protection and that all proposed work can be accomplished and billed as outlined in our proposal. If the proposed work cannot be accomplished per the proposed schedule due to inclement weather, subsurface obstructions, or other factors beyond EBI's control, EBI will contact the client to discuss possible scope and budget modifications that may be warranted. Client–approved modifications to the scope of work will be billed on a time and materials basis above the cost indicated above and in accordance with the attached standard EBI labor billing rates and the unit rates below.

7.0 AUTHORIZATION TO PROCEED

If this proposed scope of work and associated costs and schedule are acceptable, please sign and return one copy of this letter agreement to the undersigned. Issuance of a purchase order or other form of notice to proceed implicitly acknowledges acceptance of EBI's proposal, cost, schedule, and terms and conditions as stated in the attached Consulting Agreement. By authorizing this proposal, the signatory warrants that he/she has full authority to commit to this agreement with EBI. Acceptance of this proposal and the attached Terms and Conditions will constitute the contractual agreement between EBI and the Client. This proposal will remain firm for a period of thirty (30) days.

EBI looks forward to the opportunity to work with you on this important project. Please note that all pages of this contract must be initialed and returned with the signed authorization prior to the start of work on this project. Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (781) 418-2316.

Sincerely,

Edward F Giordano, PG, LSP
Project Manger

Philip Peterson
Director of Remediation Services

Attachment:
A - Standard Terms and Conditions for Special Studies
B - EBI labor billing rates
C - Figures
D - Tabulated Date – 2014 Assessment
E - Laboratory Reports – 2014 Assessment

Authorization and Acceptance of Terms:

Signature Date

Name Title