

***Town of Weymouth  
Massachusetts***

Robert L. Hedlund  
Mayor

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**MEMORANDUM**

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**TO: TOWN COUNCIL**  
**FROM: ROBERT L. HEDLUND, MAYOR** *[Signature]*  
**RE: RESERVE FUND TRANSFER – ENGINEERING SERVICES**  
**DATE: MARCH 1, 2018**

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I submit the following measure for consideration by Town Council:

“That the Town of Weymouth transfer the sum of \$91,000 from the Reserve Fund (11325201-573100) for the purposes of funding costs associated with professional services to provide assessment, design, bidding and construction phases related to the abatement and demolition of the derelict municipal incinerator located at 0 Wharf Street.”

At the time of this submittal, the balance in the Reserve fund is \$564,879.56.

This measure does not require either a legal notice or a public hearing.



Referral Dte. \_\_\_\_\_ PH Dte. \_\_\_\_\_  
Comm. Referral \_\_\_\_\_ TC Vote \_\_\_\_\_  
Comm. Vote \_\_\_\_\_ TC Vote Dte. \_\_\_\_\_  
Comm. Vote Dte. \_\_\_\_\_

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# Town of Weymouth

## *Professional Engineering and Other Related Services*

### ***Hazardous Materials Abatement and Demolition of Former Municipal Incinerator located at O Wharf Street***

#### **Scope of Services**

The following professional services are proposed to provide assessment, design, bidding and construction phases related to demolition of the derelict municipal incinerator located at O Wharf Street. The incinerator was originally constructed in 1963, but has been out of service for several years. The Town now desires to have the building demolished, clean up any residual contamination and make a portion of the subject parcel available for redevelopment. The likely foreseeable use of the property is for expansion of an existing storm water detention basin for redevelopment of the adjacent parcel(s).

In addition, the Town leases the existing incinerator stack to one or more telephone and/or cable companies and desires to stabilize the base of the stack prior to demolition of the incinerator building, in accordance with applicable state, local and federal building codes, to facilitate ongoing and expanded use of the stack for additional communications equipment.

As more fully described herein, BETA (ENGINEER) proposes to provide the necessary professional and related services for a supplemental hazardous building materials survey, bidding & contract documents, bidding support services, contract administration and periodic oversight / air monitoring services. Professional services related to inspection, abatement design and monitoring of hazardous building materials are to be provided by Smith & Wessel Associates, Inc., under subcontract to BETA.

#### **Task 1 – Review Existing Project Information**

The Town has already provided certain environmental information pertaining to limited subsurface characterization and sampling/analytical results for fly ash and contents of drums and a tank located inside the building. That information will be reviewed and summarized to identify any data gaps prior to conducting the site reconnaissance under Task 2.

In addition, we will prepare a list of questions for review with Town representatives at a project kickoff meeting to occur approximately two weeks after receipt of authorization to proceed. Specifically, we will be looking for the Town to provide all other relevant information for the project, including items such as:

- Time critical dates (overall project schedule and any interim deadlines).
- Pertinent terms of your lease agreement(s), as they may relate to access to communications equipment during abatement and demolition operations.
- Any records related to the presence or removal of underground fuel oil storage tanks at the Site. Typically, such records are available from either the Board of Health or the Fire Department.

- Any plans the Town may have regarding an operations building (prefabricated?) to house any communications and other equipment related to existing and future communications equipment located on the incinerator stack.
- Redevelopment plans, including foreseeable use of the subject property after demolition of the incinerator. Such information will be essential for planning the on and off-site management of clean asphalt, brick and concrete (ABC) materials and other coated ABC and/or inert materials that may be suitable for on-site re-use under a beneficial use determination (BUD) process administered by MassDEP.

## **Task 2 – Initial Site Reconnaissance**

We will observe existing site conditions, including both exterior areas and interior building construction and structural conditions, to identify hazardous material abatement and demolition requirements. Specifically, we plan to observe the Site for the following:

- Utilities, including overhead electric and telephone, underground electric, natural gas, sewer, water, and fire protection.
- Evidence of underground fuel oil storage tanks (USTs) that would need to be removed and managed off-site. It is our understanding that at least two (2) abandoned 10,000-gallon fuel oil storage tanks exist next to the building.
- Any abandoned elevators in the building that need to be formally decommissioned in accordance with Massachusetts Department of Public Safety requirements.
- Abutters that may be impacted during demolition activities, including attention to:
  - Storm water, dust and noise management issues.
  - Vector control.
  - Staging areas for construction equipment and demolition debris.
- Site features to be protected during demolition, including the stack, adjacent roadways, groundwater monitoring wells, water gate valves, hydrants, drainage structures, sewer manholes and the like.
- Site security requirements.

## **Task 3 – Pre-Demolition Survey for Regulated Building Materials**

BETA and its Subconsultant (Smith & Wessel Associates) will conduct a comprehensive pre-demolition survey of the building, including the incinerator stack, to identify regulated and hazardous building materials that need to be segregated and managed off-site prior to demolition. Since the building is unoccupied and slated for demolition, destructive sampling will be permitted throughout the building, but not in the stack.

### **Asbestos Containing Building Materials (ACBM)**

A certified Asbestos/Lead-Based Paint Inspector will inspect accessible areas throughout the building for the presence of asbestos-containing materials (ACM), such as: pipe, duct and

boiler insulation; floor and ceiling tiles and mastics; asphaltic roofing materials, flashing and mastics; miscellaneous interior finishes; plaster; and other suspect building materials.

Asbestos bulk samples will be analyzed by polarized light microscopy with dispersion staining (PLM) at a Massachusetts-licensed laboratory. The type and percentage of asbestos in the bulk samples will be determined.

### **Lead Based Paint**

The HazMat survey will include field screening of surfaces for lead based paint (LBP). Painted surfaces will be screened for lead in paint concentrations using a NITON X-Ray Fluorescence (XRF) Spectrum Analyzer. Concentrations of lead in paint will be reported in milligrams per square centimeter (mg/cm<sup>2</sup>). Total concentrations of lead will be used to help evaluate the need for segregation of certain building components coated with LBP. Toxicity Characteristic Leachate Procedure (TCLP) samples for waste characterization of building components coated with LBP will not be collected without prior authorization of Town.

Based on the results of the testing for LBP, we will provide appropriate recommendations for handling and disposal of lead painted building components. That may include prescriptive pre-demolition methods and/or supplemental analytical testing (Toxicity Characteristic Leaching Procedure) to determine appropriate disposal options.

### **Polychlorinated Biphenyls (PCBs)**

ENGINEER and Subconsultant will identify light ballasts that may contain PCBs by reading the identification marks on top of a representative sample of light ballasts. Typically, ballasts installed after 1978 do not contain PCBs and are marked as such. Based on our findings in the sample group we will make conservative assumptions as to the number of ballasts containing PCBs by extrapolating results across the site. We will also inspect for other possible sources of PCBs, such as electrical transformers, which may be present. Through visual inspection of labels and other relevant data we will attempt to confirm or deny the presence of PCBs within the examined area. No confirmatory sampling of these items for PCBs is proposed.

Samples of suspect window caulk/glazing, expansion joint caulk and other mastics and sealants will be collected and analyzed for PCB content via EPA's SW-846 Method 3540C/8082 SOXHLET Extraction. Based on the results, additional sampling of substrates (adjacent building materials) will likely be required pursuant to TSCA regulatory requirements for off-site management of PCB Bulk Product Wastes.

### **Mercury Containing Equipment and Controls**

To determine handling and disposal procedures for components that may contain mercury, ENGINEER or Subconsultant will quantify the number of fluorescent bulbs, switches, and thermostats assumed to contain mercury throughout the buildings. Such information will be included in the Contract Documents for removal and off-site management by the Demolition Contractor. No confirmatory sampling or analysis for mercury is proposed.

### **Miscellaneous Containers of Oil and Hazardous Materials (OHM)**

BETA and its Subconsultant will make observations for other miscellaneous hazardous materials that may be present such as batteries, solvents, stored drums, storage tanks, pigeon and or bat guano, and other potentially hazardous materials. We will prepare an inventory of such OHM for inclusion in the Contract Documents. No confirmatory sampling and analysis is proposed.

## **Pre-Demolition Inspection Report**

Results of the pre-demolition building survey for regulated and hazardous building materials will be summarized in a Pre-Demolition Inspection Report for inclusion in the Contract Documents. The letter report will delineate the presence of the regulated and hazardous wastes and/or building materials, summarize the field screening and analytical laboratory test results, and present a management plan for the removal, segregation, handling and disposal of the regulated and hazardous wastes. BETA and its Subconsultant will provide estimated quantities of each regulated and hazardous material within the building to be demolished, along with specific requirements for management and disposal. An estimate of probable costs for abatement of hazardous building materials and costs for off-site management of OHM will also be separately provided to the Town, but it will not be included in the Contract Documents.

### **Task 4 – Decommissioning and Protection of Site Utilities**

Using available utility and building plans provided by the Town, BETA will prepare base drawings that will include the basic floor plan and layout of the building, including building features referenced in the Bidding and Contract Documents and exterior site utilities. We will also coordinate with the Building Commissioner and/or DPW to identify requirements for decommissioning and/or terminating all utility connections to the building.

BETA will also include provisions in the Contract Documents for protection of utilities to remain and for proper termination and disconnection of all utility services prior to demolition. The actual locations of the utility disconnections and/or capping will be coordinated with the appropriate Town Department(s) and Utility Companies.

### **Task 5 – Permitting for On-Site Re-Use of ABC Materials**

In most circumstances involving demolition of large buildings, on-site re-use of uncoated asphalt, brick and concrete (ABC) materials is covered under an existing MassDEP policy that permits the on-site processing and placement of those materials. Assuming the proposed redevelopment plan for the Site does not preclude on-site re-use of such materials, this approach will result in significant project savings.

To help further reduce project costs, on-site re-use of coated (i.e. paint, fire-proofing, damp-proofing, etc.) building materials may also be possible. If warranted, based upon initial observations of the nature of the coatings and volume of such materials that would otherwise be considered wastes and present significant disposal costs, we will prepare a Beneficial Use Determination (BUD) application for submittal to MassDEP. Assuming MassDEP issues the permit, these materials would be designated for use in backfilling basement and excavation areas after demolition of the buildings.

Under this task, we will collect and analyze representative samples coated building materials, sampling and analyses will be performed to demonstrate compliance with leachate values established by MassDEP under applicable solid waste regulations. For those coated materials meeting MassDEP requirements, we will complete the application, including supporting documentation, and submit it to the Southeast Regional Office of MassDEP.

It is anticipated that MassDEP review will be concurrent with bidding and the early stages of construction. While we are optimistic that MassDEP will approve of the re-use of the materials, it is important to note that the location of the buried materials will need to be recorded at the Registry of

Deeds and that certain restrictions or conditions related to re-use may be stipulated in MassDEP's conditional approval of the BUD application.

### **Task 6 – Assessment of Options Related to Stabilization of Chimney**

ENGINEER will review available plans of the original construction and perform an inspection of the existing construction at the base of the incinerator stack. Based upon current state, local and federal building code requirements, we will provide the Town with options to isolate and stabilize the chimney prior to demolition of the incinerator building. Options are anticipated to include:

- Supplemental bracing and foundation support at the existing base of the chimney, assuming demolition of the connector between the building and the stack; and
- Retaining a portion of the connector between the incinerator building and the stack for location of communications equipment. This option would include identification of architectural, structural, mechanical, electrical and plumbing needs to support ongoing use of the connector to house the communications equipment.

This task includes the assessment and cost estimates for each option, presented in a concise letter report to the Town. It also includes a technical meeting to review the options and address any questions you may have.

**Once the Town decides how to proceed, ENGINEER will provide an amendment for additional design services under separate authorization.**

### **Task 7 – Technical Specifications & Bidding (Contract) Documents**

ENGINEER will make use of its standard boilerplate contract documents, including the form of contract agreement, special bidding/subcontracting provisions and other related contract provisions. ENGINEER will obtain current wage rates and prepare technical specifications, the Notice to Bidders, bid sheets, special provisions, measurement for payment sections, and other information needed for solicitation of bids and execution of the work. In addition, we will include ENGINEER's Standard Construction Terms and Conditions in the Contract Documents.

On and off-site recycling and on-site re-use of building materials will be reviewed with the Town prior to finalizing the Contract Documents. All materials that are not designated for on-site re-use will be managed off site. In basement areas where either crushed asphalt, brick and concrete (ABC) or off-site material is to be used for backfill, ENGINEER will coordinate location, placement and compaction requirements with the Town.

Particular attention will be given to development of an appropriate compensation plan in the bidding documents. That starts with a breakdown of the bid items that typically include a combination of lump sum and unit rate items, along with corresponding measurement and payment (M&P) sections that detail the work associated with each bid item. The proposed bid sheet and M&P sections will be drafted for review with the Town prior to finalizing the bid documents.

Upon substantial completion of the bidding (contract) documents, ENGINEER will provide up to twenty (20) sets of bidding documents in the form of compact discs or thumb drives, along with an two (2) hard copies, to the Town for distribution to prospective Bidders.

### **Task 8 – Bidding Phase Assistance**

- Attend and participate in the Pre-Bid Site Walk, including technical assistance during the pre-bid meeting and review of the scope of work for discussion with prospective Bidders. In addition, ENGINEER will assist the Town with addressing questions posed by prospective Bidders and will be responsible for compiling and distributing notes from the pre-bid meeting to attendees.
- Over the course of the bidding period, ENGINEER will assist the Town in responding to Bidder inquiries and distributing clarifications, addenda and other documents, on an as-needed basis. ENGINEER will prepare addenda that are technical in nature and will distribute the addenda through the Town Administrator's office.
- Assist the Town with review and compilation of the bids and, if requested, provide a written recommendation for award.

Bidding phase services will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with the respective Contractors.

### **Task 9 – Construction Phase Services**

ENGINEER will be responsible for overall administration of the construction contract, including the subtasks listed below.

#### **Contract Administration**

ENGINEER will assist Town in administration of the construction contract, including but not limited to:

- Communications with Construction Contractor;
- Receipt and review of payment requisitions, change order requests (CORs) and requests for information (RFIs);
- Monitoring construction for compliance with the Contract Documents;
- Issuance of notices to Contractor, including Construction Change Directives (CCDs), Change Orders and other pertinent communications; and
- Other administrative functions assigned to ENGINEER in the General Conditions of the Contract Documents.

#### **Submittals Review**

Over the course of the project, ENGINEER will provide technical and administrative support to facilitate timely review of various submittals required by the Contract Documents. Such submittals are expected to include:

- Certificates of Insurance;
- Receiving facility operating permits;
- Waste shipping records/manifests and bills of lading, if any;
- Project schedule;
- Catalog cuts, equipment brochures, material samples, etc.;
- Waste disposal documentation;
- Weigh slips; and
- Other miscellaneous submittals.

### **Pre-Construction Meeting**

A pre-construction meeting will be scheduled at least one week before construction is to commence. The meeting date will be noted in the Notice of Award and will be coordinated with the Town Administrator. ENGINEER will summarize specific contract requirements and review the Contractor's project schedule and sequence of work activities. Health and safety issues required by OSHA and a schedule for periodic progress meetings will also be discussed. Minutes of that meeting will be prepared and distributed to attendees by ENGINEER.

### **On-Site Observation & Air Monitoring Services**

During critical stages of construction, ENGINEER and Subconsultant will provide on-site observation services to promote compliance with the provisions and technical specifications of the Contract Documents. Subconsultant will provide full time air monitoring during active abatement activities, as required under MassDEP regulations, along with periodic on-site observation services during the following specific construction activities:

- Removal of regulated oil and hazardous waste containers;
- Construction of structural support measures to be undertaken by Contractor to stabilize the stack prior to demolition;
- Excavation and removal of the abandoned underground fuel oil storage tanks;
- Observation of individual work zones for asbestos abatement and air monitoring in accordance with applicable regulations and terms of the Non-Traditional Asbestos Abatement Work Plan (NTWP);
- Segregation and handling of asbestos containing materials and other regulated wastes;
- Placement of either processed asphalt, brick and concrete rubble (ABC) for fill or clean fill from an approved off-site source;
- Demolition of the building and appurtenances;
- Processing and placement of BUD materials;
- Terminations and/or capping of subsurface utilities; and
- At other times deemed appropriate and/or randomly selected, to promote compliance with the Contract Documents.

Site observations during construction will be documented and distributed to designated Town representatives and/or the Contractor, as appropriate.

**Note:** The Contractor is solely responsible for his/her construction methods, means and safety, as well as for compliance with all local, state and federal laws and regulations governing the work.

### **Progress Meetings**

We anticipate weekly progress meetings initially, and as required thereafter, over the course of the project to review compliance with the project schedule, any changes in the work, and other construction-related issues. Such meetings will be scheduled, to the extent possible, to coincide with the on-site observation services.

### **Waste Management and Granular Materials Records**

The Contractor will be required to submit copies of all waste manifests, bills of lading (if any), weight slips, and other shipping documentation for both wastes and granular materials outlined in the contract documents. Over the course of the work, ENGINEER will compile and summarize such documentation, along with documentation of both on and off-site re-use /

recycling of salvageable building materials. A concise summary of the waste management records will be submitted to the Town upon completion of the project. The weight and/or trucking slips for granular materials will be used to review payment requisitions.

### **Contingent Tasks**

The following tasks are not included in the base scope of services, but may be authorized under formal amendment:

- Design, bidding and construction phase services related to repurposing the existing connector or constructing a new prefabricated operations building to support the existing and proposed future communications equipment located on the existing stack.
- LSP services, if warranted, to address any subsurface releases of oil or hazardous materials (OHM) in the vicinity of the abandoned fuel oil storage tanks.

## **ARTICLE 4 – COMPENSATION & PAYMENT**

Compensation to the ENGINEER will be made based upon time and expenses incurred. Labor shall be charged using hourly rates in our on-call services contract for various personnel classifications involved. The estimated not-to-exceed budget for the base services under this project, not including the contingent tasks, is \_\_\_\_\_, as summarized below:

<b><u>Task #</u></b>	<b><u>Description</u></b>	<b><u>BETA Labor</u></b>	<b><u>Subcontractor Costs</u></b>	<b><u>Direct Expenses</u></b>	<b><u>Task Totals</u></b>
	<b>Project Management / Meetings</b>				
	<b>Task 1 – Review Existing Information</b>				
	<b>Task 2 - Site Reconnaissance</b>				
	<b>Task 3 – Pre-Demo HazMat Survey</b>				
	<b>Task 4 – Site Utilities</b>				
	<b>Task 5 – Environmental Permitting</b>				
	<b>Task 7 – Contract Documents</b>				
	<b>Task 8 – Bidding Phase Services</b>				
	<b>Task 9 – Construction Phase Services</b>				
	<b>Subtotals.....</b>				