

# **INTERIM REMEDIAL ACTION PLAN**

**FORMER SUMMIT THREAD POWERHOUSE SITE**

**13 WATROUS STREET**

**EAST HAMPTON, CONNECTICUT**

**Prepared for:**

**Town of East Hampton  
20 East High Street  
East Hampton, Connecticut**

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**1.0 INTRODUCTION**

AECOM USA, Inc. (formerly Metcalf & Eddy, Inc.) was contracted by the Town of East Hampton ("Town") to prepare this Interim Remedial Action Plan (IRAP) for the proposed interim remediation activities to be conducted at the former Summit Thread Powerhouse property (site) located at 13 Watrous Street, East Hampton, Connecticut. The property is to be remediated in accordance with the Connecticut Remediation Standard Regulations (CTDEP, January 1996) and the Toxic Substance Control Act (TSCA).

The primary funding sources for the proposed interim remedial activities as described in this IRAP include a Town-wide Assessment Grant (Grant No. BF-97183201-0) and a site specific Clean-up Grant (Grant No. BF-97157601-0), both of which are administered through the U.S. Environmental Protection Agency (EPA). The EPA site-specific Clean-up Grant includes a requirement for a \$40,000 match (or in-kind services) from the Town. The EPA Recent assessment activities completed at this site, as well as completed of this IRAP are being completed under the Assessment Grant and the physical remediation proposed in this IRAP will be completed under the site specific Clean-up Grant. Grant requirements also include that, the site is entered into the CTDEP Voluntary Remediation Program defined in the Regulations of Connecticut State Agencies (RSCA) Section 22a-133x.

The three primary activities to be completed as part of this IRAP include:

1. Soil remediation at a specific area located in the southern portion of the site that contains concentrations of PCBs exceeding 50 milligrams per kilogram (mg/kg):
2. Construction of a fence along the southern portion of the property boundary to eliminate public access to the site; and
3. Removal and off-site disposal of sediment from three catch basins located adjacent to the site, along Watrous Street.

Details regarding pertinent site history and specific tasks and procedures associated with implementing this IRAP are provided herein.

## **1.1 Site Setting**

The former Summit Thread Powerhouse site is located at 13 Watrous Street (the “Site”), in the Village Center section of East Hampton, CT. It is bordered by the former Clark and Watrous Company to the north, Watrous Street to the west, Railroad Avenue to the south and residential properties and Starr Place to the east. A site location map is provided as Figure 1.

## **1.2 Site History and Use**

The former Summit Thread Powerhouse building was originally built in 1910 to serve as a coal fired boiler powerhouse for the Summit Thread Company. The northern portion of the building was used as an open coal pocket for coal storage. The 1925 Sanborn Fire Insurance Map depicts railroad tracks traversing the western perimeter of the property. The southern section of the building was roofed and contained the actual boiler. On-site spills and chemical releases as a result of these operations are likely to have occurred. In addition, the deposition of ash and coal fragments from the powerhouse, as well as nearby industrial plants, is likely to have affected the on-site soil quality.

In 1943, the building changed ownership to the Artistic Wire Products Company. Artistic Wire Products Company also owned the manufacturing buildings to the north of the property (formerly Summit Thread). The specific manufacturing activities in the northern portion of the site are unknown. The southern portion of the building was used as storage.

Prior to the Town acquiring the property, it was owned by Ghezzi Motors Inc., an auto body and repair shop. Historic photographs and accounts document the storage of junk cars and parts throughout the exterior and interior locations of the site. It is likely that automobile repair activities took place both inside and outside of the facility. Automobile fluid is likely to have historically leaked from these automobiles at multiple locations.

The Town acquired the property in 2002 and added it to the list of potential brownfield sites located in the Village Center. It was included in the Environmental Site Overview Report (T&B 2005) with 22 other potentially contaminated former industrial sites in the Town.

### **1.3 Previous Investigations**

Previous environmental investigations conducted at the site have included a Phase I Environmental Site Assessment (ESA) in 2005, a Phase II ESA conducted in 2005 , a Remedial Investigation conducted in 2008, and a Pre-Remediation Investigation (PRI) in 2009. An overview of each of these investigations is provided below.

#### **1.3.1 Phase I ESA, 2005**

A Phase I Environmental Site Assessment (Phase I ESA) was conducted in March of 2005 by T&B for the town of East Hampton to identify potential areas of concern (pAOC) on the property. Seven areas were identified and included:

1. The Floor Drain (pAOC1);
2. The 300-gallon AST Location (pAOC 2);
3. The In-Ground Hydraulic Lift (pAOC 3);
4. The Former Coal Pocket Storage Area (pAOC 4);
5. The Interior Floor Stained Areas (pAOC 5);
6. Exterior Areas of Stressed Vegetation and Soil Staining (pAOC 6); and
7. The Temporary Storage Area (pAOC 7).

Two wells were also identified on the site; an inactive drilled well that formerly supplied the site with water and a dug well that according to the T&B Phase II Report (2005a) may have previously supplied two residences with water. The well is currently inactive.

### 1.3.2 Phase II ESA, 2005

A Phase II Environmental Site Assessment (Phase II ESA) was conducted in October of 2005 by T&B for the Town of East Hampton to identify contaminants of concern (COCs) associated with the pAOCs. Soil sampling was conducted in each pAOC and groundwater sampling was conducted from the two identified wells on site and two monitoring wells installed for the Phase II. Five of the seven pAOCs identified in the Phase I ESA were confirmed to have released COCs into the environment:

- The Floor Drain (pAOC1);
- The Former Coal Pocket Storage Area (pAOC 4);
- The Interior Floor Stained Areas (pAOC 5);
- Exterior Areas of Stressed Vegetation and Soil Staining (pAOC 6); and
- The Temporary Storage Area (pAOC 7).

COCs in soil identified in the Phase II ESA investigation were metals (arsenic, antimony, cadmium, chromium, mercury, nickel, copper, lead and zinc), polycyclic aromatic hydrocarbons (PAHs), extractable total petroleum hydrocarbons (ETPH), polychlorinated biphenyls (PCBs), and volatile organic compounds (VOCs). COCs in groundwater identified in the Phase II ESA investigation were metals, VOCs, semi-volatile organic compounds (SVOCs), and organohalide pesticides (only found in dug well). Hydraulic fluid from the in-ground lift in the northern section of the building was analyzed and found to be free of PCBs. The floor drain sediment showed evidence of petroleum contamination but was not tested for PCBs. Bedrock was encountered approximately eight feet below ground surface (bgs) on the site.

### 1.3.3 Remedial Investigation, 2008

A draft Remedial Investigation Report (RIR) was completed in December of 2008 by T&B for the Town of East Hampton to document further investigation of release areas identified in the Phase II ESA. Four of the five release areas were further investigated in the remedial investigation; pAOC1 (Floor Drain) was not investigated. Results are shown on select site plans and analytical data summary tables from the 2008 T&B report located in Appendix B and are summarized below:

- In pAOC4 (Coal Pocket), an approximately three foot by three foot area at a depth of one to two feet below grade was identified with elevated metals;
- In pAOC5 (Interior Floor), an approximate three foot by three foot area from the concrete slab to two feet below grade in the area of boring B-6 was sampled for TCE. TCE concentrations (27 mg/kg at RI-7, 22 mg/kg at RI-8 and 11 mg/kg at RI-10) exceeded Residential Direct Exposure Criteria (RES DEC) (56 mg/kg) and GA Pollutant Mobility Criteria (PMC) (0.1 mg/kg);
- In pAOC6, site-wide impacts of VOCs, PCBs and ETPH were identified. An approximate three foot by three foot area from the concrete slab to two feet below grade was tested for TCE in the vicinity of B-15. TCE concentrations (2.8 mg/kg at RI-11, 2.4 mg/kg at RI-12) exceeded GA PMC. VOC impacts were also found in the area around B-18 (TCE concentration 77 mg/kg at RI-27) and RI-21 (TCE concentration 100 mg/kg) in exceedance of GA PMC and RES DEC. ETPH contamination was found in the southern exterior portion of the site. RI-24, RI-25, and RI-26 had concentrations of ETPH ranging between 570 mg/kg and 1,400 mg/kg, which exceeded the RES DEC and GA PMC. Site wide PCB impacts were also identified and are discussed in greater detail below;
- In pAOC7 (Temporary Storage), a TCE exceedance (77 mg/Kg) was identified in RI-27 at two to four feet below grade.

The impacts of ETPH and PCBs appear to be comingled. PCB's were detected in surficial soils (0-3") at several areas across the site, however only soil in the southern portion of the site consistently exceeded 1 mg/kg (Appendix B, Figure 4 PCB Concentration Plan). The highest levels of PCB contamination were identified in surficial soils, specifically the 0-3 inch interval at locations in the southern exterior portion of the site: PCB-8, -9, -10, -11, and -12 at which PCB concentrations were 470, 190, 160, 1,100, and 510 mg/kg respectively (Appendix B). Concentrations greater than 50 mg/kg were also found in the 2-4 foot interval at several locations (RI -23,-24, and -26; 230, 380, and 120 mg/kg respectively). T&B recommended further delineation of the site-wide impacts of ETPH and PCBs, and VOC impacts near the overhead doors and identified VOC release areas (B-6, B-15, B-18). These locations are shown on the site plans provided in Appendix B. The southern exterior portion of the property containing



the area with PCB concentrations greater than 50 mg/kg is the focal point of this proposed scope of work.

#### 1.3.4 Pre-Remediation Investigation, 2009

AECOM completed a remedial investigation at the former Summit Thread Powerhouse Site in October 2009. The primary objective of this investigation was to further delineate the areal extent of shallow soils (less than two feet bgs) containing PCB concentrations exceeding 50 mg/kg, as well as to determine the presence or absence of PCBs in downgradient catch basin sediments and concrete surfaces within the building. Soil, catch basin sediment, and concrete samples were collected as part of this investigation. PCB soil impacts exceeding 50 mg/kg were found to be present across much of the southwestern portion of the Site, particularly in the approximate upper two feet of soils in this area. The most significant impacts were typically found within the upper three inches in this area; however, impacts exceeding 50 mg/kg were identified to a depth of two feet bgs. The previous Remedial Investigation performed by T&B in 2008 also revealed impacts as deep as four feet bgs at three locations. Current and historic PCB impacts also exceed both the Res DEC and I/C DEC at various depths in several borings throughout this area. PCB impacts exceeding 50 mg/kg extend beyond the current location of the locked chain link fence in the southern portion of the Site, and down the property line along Railroad Avenue, toward Watrous Street.

Concentrations (exceeding 50 mg/kg) of PCBs were also detected in catch basin sediment samples collected from three downgradient catch basins located in the vicinity of the Site. Impacts to catch basin sediments may be the result of surficial runoff occurring during storm water events into the downgradient catch basins. At this time, it has been assumed that the PCB impacts identified in the catch basins originated from the site and not from another unidentified source.

PCB impacts to concrete were also detected throughout all interior areas of the Site building. Concentrations of PCBs were generally greater than 1 mg/kg, with three locations exceeding 10 mg/kg. The flooring throughout this building is heavily stained, particularly in the northern two sections of the building (former coal pocket and former boiler room). The surficial concrete surface throughout the former coal pocket was found to be degraded in some areas, as it was brittle and flakey.

## **1.4 Remediation Criteria**

Based on the site history, conditions and previous investigation results as described above, the applicable criteria for these remediation activities will be the RSR criteria for the GA PMC, RES DEC, GWPC, and RES VC. The less stringent I/C DEC and I/C VC may be used at the site if residential use of the site is restricted and an Environmental Land Use Restriction (ELUR) is recorded on the land deed.

## **1.5 Overview of Interim Remedial Action Plan**

The results of AECOM's 2009 PRI, in conjunction with previous investigation results, have been used to develop this IRAP. Remedial activities will be conducted in accordance with the CTDEP RSRs and USEPA requirements.

This IRAP includes a description of the remediation approach, health and safety protocols, waste management procedures, sampling and analytical protocols, project scheduling, site security, record-keeping protocols, reporting requirements, and monitoring protocols to be implemented at the site.

The three primary activities to be completed as part of this IRAP include:

1. Soil remediation at a specific area located in the southern portion of the site that contains concentrations of PCBs exceeding 50 milligrams per kilogram (mg/kg);
2. Construction a fence along the southern portion of the property boundary to eliminate public access to the site; and
3. Removal and off-site disposal of sediment from three catch basins located adjacent to the site, along Watrous Street.

The interim soil remedial actions will include:

1. Soil excavation, with temporary soil stockpiling and subsequent off-site disposal;
2. Placement of a geotextile fabric liner at the extents of the excavation; and

3. Backfilling the excavation to grade with crushed stone.

The fencing will extend from the southwest portion of the building and will extend along the southern portion of the site to the southwest corner of the property, then extend northward and be connected to the existing fence located along the western portion of the site. Construction of this fence will complete a barrier to limit access to the site.

## **2.0 REMEDIATION PLANNING**

The following sections describe the remediation planning tasks to be implemented at the site prior to implementing the interim soil remediation activities.

### **2.1 Area of Remedial Activity**

As determined by previous investigations outlined in Section 1, and discussed and agreed upon during the December 2008 on-site meeting between the Town of East Hampton, CTDEP, and EPA, the goal of this interim remedial action will be to focus on soil remediation in the southern portion of the site that exceeds 50 mg/kg (Figure 2). Based on the AECOM 2009 PRI, this area is approximately 4,400 SF. The remedial approach considers the goals of the potential site redevelopment actions. It is assumed that the property will be redeveloped as a light industrial/commercial facility.

In addition to conducting a focused soil remediation in the southern portion of the site, a fence will also be installed along the perimeter of this portion of the site to prevent public access. Details regarding these proposed remediation plans are included in Appendix B.

### **2.2 Health and Safety**

A Health and Safety Plan (HASP) has been prepared in accordance with the requirements of 29 CFR 1910.120 for previous site activities completed at the site.. Prior to initiating field activities, the HASP will be updated to include the activities associated with this IRAP. All work will be conducted in accordance with the HASP. The HASP is intended to cover AECOM employees and site visitors only. Remediation contractors will be required to develop and follow their own HASP during all site activities. All soil remediation work will be conducted by personnel that have 40 hour OSHA training.

The objective of the HASP will be as follows:

- To protect the health and safety of on-site personnel.
- To limit exposure of the public to hazardous substances, pollutants, or contaminants.

The HASP will include the following:

- Brief Site Description
- Site Safety Hazards
- Chemical Compounds of Concern
- Project Personnel
- Site Training/Medical Surveillance Requirements
- Personnel Protective Equipment (PPE) Requirements
- Air Monitoring Requirements
- Decontamination Procedures
- Work Zones
- Remediation Derived Waste Disposal/Handling
- Emergency Response
- Special Operations Safety Requirements
- Emergency Resources
- Generic First Aid

### **2.3 Permits and Approvals**

No permits from federal, state, or local governments are anticipated for this project.

As this project is an Licensed Environmental Professional (LEP)-lead site, with work being conducted in accordance with the Connecticut General Statutes 22a-133x, CTDEP approvals for these activities are not required.

### **2.4 Public Notification**

In accordance with the Connecticut RSRs, the CT VRP, as well as the EPA cleanup fund, public notice for these activities is required. To satisfy the VRP, the public notification process will be conducted in accordance with Connecticut General Statute 22a-134(a)(h)(2)(i). This process includes a requirement for public notice of remediation activities to be placed in appropriate local newspapers a minimum of 45 days prior to the start of the soil remediation activities and notification to the Director of Public Health for the Town. Additionally, either notice of the planned remediation activities must be mailed

to each owner of record of property which abuts the parcel, at the address for such property on the last-completed grand list for the Town or a sign must be placed at the site which is visible from the road which states that an environmental clean-up is in progress at the site. In accordance with the referenced General Statute, if a sign is posted at the site, it will not be less than six feet by four feet, clearly visible from the road and include a name and telephone number of a person who can provide additional information about the project.

To satisfy EPA requirements, a public meeting will be held prior to start of remediation activities.

## **2.5 Waste Management**

Wastes generated from the proposed interim remediation activities will be classified as TSCA regulated waste. Several waste streams will be generated during remedial activities at the site. The following presents a summary of the proposed management process:

1. Soil and asphalt excavated during remedial activities will be temporarily stockpiled on-site, characterized, and subsequently loaded into transport vehicles for shipping to an off-site disposal facility.
2. Sediment removed from the three catch basins located adjacent to the site along Watrous Street will be temporarily stockpiled on the site. They will be allowed to free drain excess water. The excess water will be collected in drums for subsequent transport and disposal at an off-site disposal facility.
3. All decontamination media will be collected, characterized and transported for off-site disposal. Liquid materials will be segregated from solid materials, and all will be temporarily containerized on-site subsequent to disposal at an off-site facility.
4. Other solid materials (such as plastic sheeting, hay bales, personal protective equipment, etc.) used during the remediation activities will be segregated from other waste streams. If solid materials come into contact with contaminated materials, the solid materials will be disposed of along with the contaminated

materials. If the solid materials do not come into contact with contaminated materials, they will be disposed of as municipal waste.

Prior to being transported off-site, all wastes will be properly characterized and profiled for disposal. Waste disposal will be approved as required and the intended facility will confirm their acceptance of the waste prior to transport. The TSCA regulated waste will be disposed of at facility permitted to accept such wastes.

If the soil to be excavated has been completely characterized and approved for disposal may be loaded directly into transport vehicles for shipping to the off-site disposal facility. If the soil to be disposed of off-site needs to remain on-site until characterization and approval / acceptance is complete., it will be staged on-site in a manner and designated area as specified in drawings C-2 and C-3, located in Appendix B.

Liquid wastes that will be generated include decontamination wastes. Liquid wastes will be disposed of at a permitted, off-site facility.

Waste removal from the site will be documented by manifest or bill of lading. It will be the responsibility of the waste disposal subcontractor to prepare the manifests or bills of lading and documentation. A representative of the Town will sign waste profile forms and manifests. The disposal documentation will be included in the RAR.

## **2.6 Sedimentation and Erosion Control**

Prior to the excavation of contaminated soils from the approximate 4,400 SF area located in the southern portion of the site, an erosion and sedimentation control system (hay bales and/or silt fence) will be installed at the locations shown on drawings contained in Appendix B, in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control. Details of sedimentation and erosion controls are also included in Appendix B.

It is anticipated that excavated soils may be temporarily stockpiled on-site pending final disposal. If soils are temporarily stockpiled on-site, they will be stockpiled on, and covered by, plastic sheeting, which will be anchored with sandbags or other materials to contain the soils and minimize potential exposure. Hay bales will be placed around

areas used for stockpiling to prevent the migration of contaminated soil from the stockpile. AECOM will routinely inspect the integrity these soil erosion and sediment controls throughout the duration of soil remediation activities. AECOM will ensure that the remediation contractor regularly maintains the controls.

## **2.7 Dust Control and Air Monitoring**

To minimize the potential for the PCBs at the site to be released in particulate form during site activities, dust control measures will be implemented if dust is observed during remedial activities. Throughout the remediation activities, air monitoring will be performed, by the contractor, in conjunction with project health and safety requirements to monitor the total dust and particulate emissions at the site during remedial activities. It is anticipated this will consist of the use of a portable dust meter. Further details on air monitoring will be included in the remediation contractor-prepared Health and Safety Plan (HASP).

The dust control measures will include the use of water to pre-wet soil to prevent airborne migration. Water will also be sprayed, where necessary, onto active work areas and other areas of the site that may be subject to the release of dust. Water may also be used in high-traffic areas to minimize dust emissions caused by vehicular traffic.

## **2.8 Decontamination**

Decontamination of heavy equipment (i.e., excavator, backhoe, vacuum extraction truck) will be performed as necessary to minimize the potential spreading of contamination. Decontamination will be performed in accordance with TSCA 40 CFR 761.79(c) and will include a rinse of the contaminated surface with a solvent and/or pressure washing with a triple rinse. Any contaminated material which collects on the exterior of the equipment will be removed, collected and containerized for off-site disposal.

All decontamination of equipment will occur within a decontamination pad. The decontamination pad will include a polyethylene sheeting base constructed in such a manner that all liquids will drain toward the center. All collected liquid will be transferred



into closed lid, DOT-approved, 55-gallon drums. Drums will be temporarily stored on-site subsequent to final off-site disposal.

## **2.9 Site Restoration**

Subsequent to obtaining final excavation limits, a geotextile fabric will be placed in the excavation. The 4,400 SF area will subsequently be backfilled to grade with crushed gravel. No compaction of the material will be conducted.

## **2.10 Site Security**

A metal gated chain-link fence will be placed around the perimeter of the property and will provide security to the site during the remediation. The fence will be installed so that there will not be access to the open areas of the southern portion of the site. The fence will be six feet high and include a swing gate on the southern side for access into the site from Railroad Avenue. The fencing installation will include a combination of driven posts and post that will be cemented into place. Any soil removed for fence installation in the vicinity of the proposed soil excavation area will be temporarily stockpiled on site for subsequent off-site disposal. Temporary safety fencing will be installed around excavations, as necessary. Refer to Appendix B for details.

## **2.11 Demobilization**

Environmental contractor equipment, excess materials and wastes shall be demobilized following completion of interim remediation activities at the site.

### **3.0 SOIL REMEDIATION**

Soil remediation includes excavation, stockpiling, waste characterization and transportation and off-site disposal of PCB-impacted soil containing concentrations of PCBs greater than 50 mg/kg. These concentrations of PCB exceed RES DEC, I/C DEC and TSCA clean up levels. The specific remediation area is shown on Figure 2 and Drawing C-2. It is an approximate 4,400 SF area that will be excavated to one foot below grade. This will result in an approximate 163 cubic yard (CY) volume of soil being excavated and requiring off-site disposal.

Prior to initiation of soil excavation, existing pavement located within the proposed excavation area will be removed and temporarily stockpiled on site. As the asphalt is in contact with the PCB-contaminated soil, it will be disposed as TSCA regulated waste. Additionally, the fencing located within the proposed soil remediation area will be removed prior to soil excavation activities. Care will be used during the fence removal, with an expectation that the swing gate can be re-used as part of the fencing to be installed along the property line following the completion of these soil remediation activities. A final evaluation and determination regarding re-use of the swing gate will be made upon removal.

Following the soil excavation, soil samples will be collected at the extents of the excavation for laboratory analysis to evaluate the soil quality regarding PCB concentrations in soil (details provided in the subsequent section). Subsequent to the soil sampling, a geotextile fabric will be placed to mark the extents of excavation. Crushed stone will be placed on the fabric and raised to surface grade.

#### **4.0 SEDIMENT REMOVAL FROM ADJACENT CATCH BASINS AND DISPOSAL**

Sediment existing in three catch basins located adjacent to the southwestern corner of the site, along Watrous Street, will be removed, temporarily stockpiled on-site, allowed to drain and subsequently disposed of at an off-site disposal facility licensed to accept this material. After the sediment is allowed to free drain water contained within, it is anticipated that it can be disposed of at the same facility as the soil. The locations of the three catch basins are shown on Figure 2 and Drawing C-2. Details regarding the catch basin cleaning are provided below.

A vacuum extraction truck (vac truck) will be used to remove the sediment from each of the three catch basins. The vac truck will be clean upon arrival for the project. Following removal of the sediments from each of the three catch basins, the vac truck will drive onto the site and the sediments will be removed from the truck and placed onto a polyethylene-lined pad (similar to the decontamination pad) that will be constructed in a manner to allow free water to drain from the sediments and be contained on the pad. Subsequently, the drained water will be pumped into drums for transport to an off-site disposal facility. The vac truck will be decontaminated on the decontamination pad prior to leaving the site.

Based on catch basin sampling conducted in the Fall of 2009, each of the three catch basins contained approximately nine inches of sediment. The removal action will be considered complete when sediment is removed to the extent practical. This will be followed by a visual inspection of each catch basin to confirm a minimal amount of sediment remains. No sampling will be conducted at the completion of the sediment removal.

The Town Department of Public Works will be informed of the planned activity prior to implementation.

## **5.0 SAMPLING AND ANALYSIS PLAN**

Sampling will include a soil quality evaluation at the extents of the excavation. The sampling will include analysis for PCBs using EPA Method 8082, following a soxhlet extraction. The sampling and analysis plan will be submitted to the EPA in a Quality Assurance Project Plan (QAPP) for EPA review and approval prior to implementation of remediation activities.

### **5.1 Soil Quality Evaluation Sampling**

Samples will be obtained from the bottom of excavation limits (1 foot below grade) and the sidewalls (0-3 inches) on a 20 foot interval using hand-held equipment. The typical equipment requirements and collection procedures used to sample soil are described below.

#### Equipment

- Stainless Steel (SS) Trowels, Spoons, or Scoops
- SS Spade or Hand Auger
- SS Bowls
- Sample Containers (provided by the laboratory)

#### Sample Collection Procedures

Soil samples will be collected according to the following procedure. Changes to these procedures must be justified and recorded in the field logbook.

- 1) Decontaminate sampling equipment.
- 2) Record the weather conditions and other notable site conditions.
- 3) Sketch and record the sampling locations on the site map and in the field notebook.
- 4) Photograph the sampling location and conditions.
- 5) Collect the sample from the sampling location at the proposed excavation limits at the prescribed depth intervals using the SS equipment noted above and place into an SS bowl. After the soil is collected for PCB analysis is

collected, homogenize the sample. Fill the appropriate sample container for the analyte as required.

- 6) Immediately label and refrigerate/ice the sample.
- 7) Stake the sample location and label and record in the logbook as indicated below.
- 8) Submit the sample to the laboratory under chain of custody protocol.

#### Documentation

The following information is typical of that documented and reported in the field logbook when collecting confirmatory samples:

- Description of the sample that is being submitted to the laboratory including the physical characteristics of the sample (e.g., color, odor, and texture), and unusual characteristics.
- Type of sample (grab).
- Sample designation and location.

Samples will be evaluated to the RSR criteria for PCBs.

## **5.2 Waste Characterization Sampling**

Waste characterization sampling will be performed to supplement existing information and data for the purposes of satisfying the requirements of the disposal facility. Waste characterization is anticipated to be completed following excavation of soil and stockpiling of soils. It may also be obtained from a pre-remediation in-situ sampling program if an excavation and direct load approach is selected.

Waste characterization will be conducted as necessary to supplement the existing data to meet the specific disposal facility requirements. Sampling protocols will be similar to those described above. Waste characterization samples will be submitted under chain of custody for laboratory analysis.

### **5.3 Laboratory Analysis**

Laboratory analysis will be performed by Phoenix Environmental Laboratories (Phoenix), of Manchester, CT. Detection limits will be selected to be below the applicable RSR criteria. The SOP laboratory protocols specific to Phoenix will be applied. Details regarding the laboratory analytical methods is provided the Quality Assurance Project Plan (QAPP) that accompanies this project.

Soil samples collected at the extents of the excavation for the purpose of conducting a soil quality evaluation will be analyzed for PCBs. The following analyses will be conducted on samples collected from the 4,400 SF excavation area:

- PCBs by EPA Methods 8082; and
- PCBs SPLP by EPA Method 1312 (up to 10% of mass analysis samples).

As indicated above, waste characterization samples will be dependent upon the disposal facility's criteria.

### **5.4 Quality Assurance/Quality Control**

The analytical laboratory will be required to perform all of the internal quality control procedures that are specified in the analytical methods. These include, but are not limited to:

- Blanks – The laboratory will analyze method blanks prepared and analyzed with each set of samples. These are a check of the accuracy of the system and indicate if there are positive biases.
- Calibration Checks – These are standards, generally from a different source than the calibration standards that are analyzed along with the samples. The purpose of the calibration checks is to determine if the analytical equipment is functioning accurately.

Field QA/QC samples will be submitted along with the laboratory samples. A description of each of the sample QC types is described below:

- Field duplicates – Field duplicates provide an indication of the overall precision of the field sampling and analytical method. Approximately one field duplicate will be collected for every 20 samples analyzed.

Upon receipt of the laboratory data, AECOM will perform a review of the data to evaluate its usability. This will include checking of such items as:

- Holding times;
- Field and laboratory blanks;
- Field and laboratory duplicates;
- Surrogate recoveries, if applicable;
- Calibration checks;
- Spike recoveries, if applicable, and
- Analytical method detection limits (MDLs).

Items such as GC/MS tuning, initial calibrations, calculations, and raw data will be checked by the laboratory.

The SOP laboratory protocols specific to Phoenix will be applied

A USEPA-approved Quality Assurance Project Plan will be prepared because USEPA funding is being used for the remediation.

## **6.0 DOCUMENTATION AND REPORTING**

The Town will oversee remediation activities and AECOM will collect the soil samples at the extents of the excavation. AECOM will prepare and maintain a record of activities performed while AECOM is on-site. The Town will be responsible for documenting that the project is completed in accordance with the specifications of this IRAP, and generally accepted industry/engineering standards.

### **6.1 Field Documentation**

The following list identifies the specific documentation and reporting requirements that will be required for this project.

- Maintaining an accounting of materials entering and leaving the site, including waste soils and other materials;
- Photographic documentation of completed excavations, previously unknown areas of contamination, completed remediation areas, and other pertinent observations;
- Documenting segregation, storage, and accounting of wastes that may be stockpiled at the site;
- Documenting and reporting of any spills, leaks, or other discharges occurring at the site;
- Documenting and reporting of any disruption/damage to utility structures;
- Documenting that erosion control and site security measures are adequately maintained throughout the project;
- Maintaining transportation/disposal documentation; and
- Documenting decontamination prior to demobilization.

### **6.2 Post-Remediation Reporting**

Following completion of these remediation activities, AECOM will prepare an Interim Remedial Action Report. AECOM will rely on the Town to provide the information itemized in the previous Section (Section 5.1). The IRAR will be submitted to CTDEP.



The report will describe the completed work at the site, and will contain the following specific items:

- Project narrative;
- Confirmatory sample analytical data in tabular form;
- Complete laboratory reports;
- Waste disposal documentation (manifests, bills-of-lading, certificates of disposal, etc.);
- Waste disposal summary indicating the weights, volumes, and disposition of excavated materials;
- Photographs of remediation activities; and
- Recommendations for other future actions, if required.

## **7.0 SCHEDULE**

Appendix C contains the proposed project schedule. As shown on this schedule, project planning and selection of a contractor is planned to be completed in August 2010. Site remediation activities are planned to occur in September 2010.

## 8.0 REFERENCES

AECOM USA, Inc. 2009. *Quality Assurance Project Plan for Pre-Remediation Sampling Program Former Summit Thread Powerhouse, 13 Watrous Street, East Hampton, Connecticut*. Prepared for US Environmental Protection Agency and the Town of East Hampton, CT. August 2009.

Tighe & Bond (T&B 2005) Environmental Site Overview Report, Village Center, East Hampton, CT. Prepared for the Town of East Hampton. 2005.

Tighe & Bond (T&B 2005a) Phase I Environmental Site Assessment for 13 Watrous St East Hampton, CT. Prepared for the Town of East Hampton. 2005.

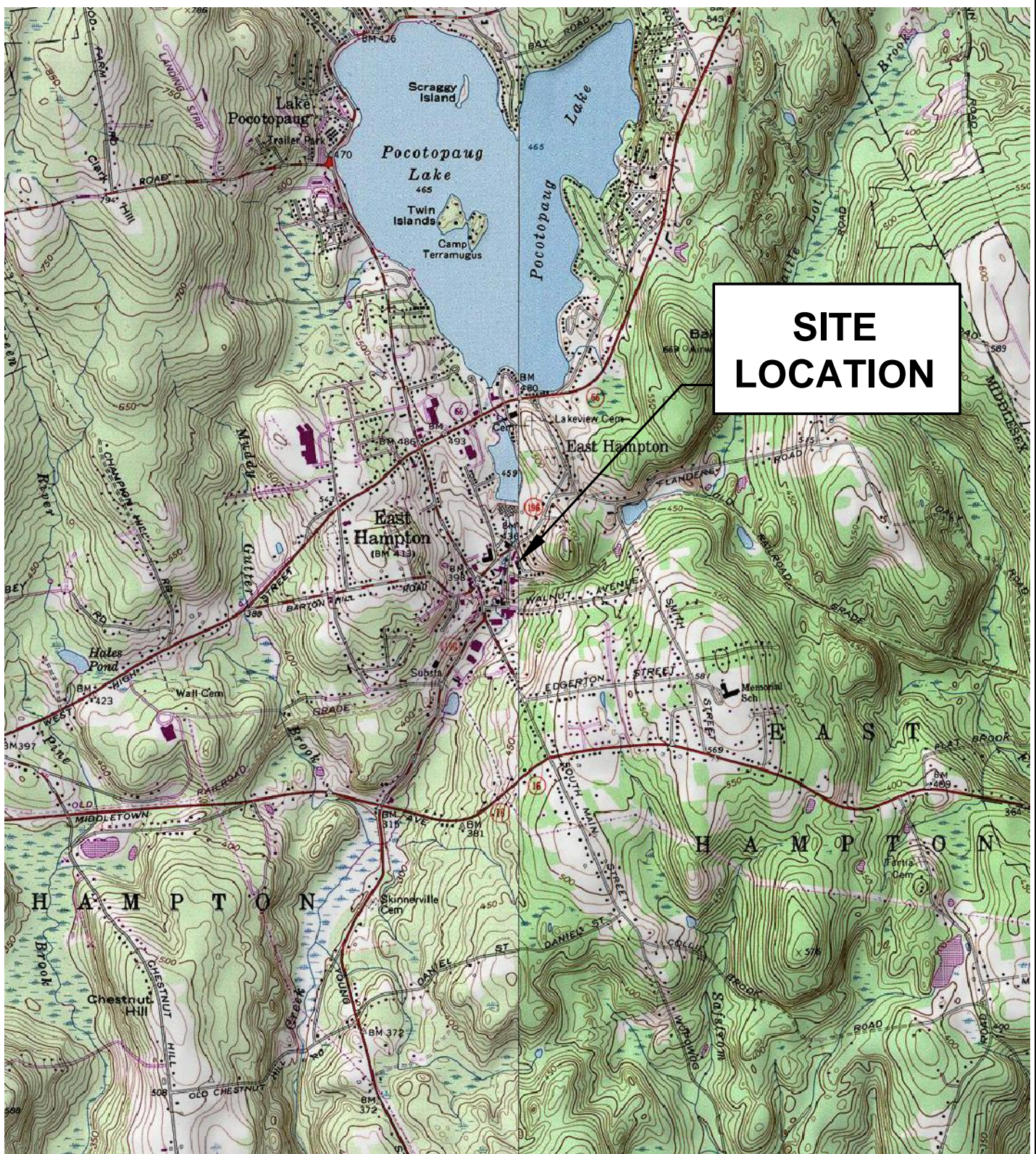
Tighe & Bond (T&B 2005b) Phase II Environmental Site Assessment for 13 Watrous St East Hampton, CT. Prepared for the Town of East Hampton. 2005.

Tighe & Bond (T&B 2008) DRAFT Remedial Investigation Report: Former Summit Thread Powerhouse 13 Watrous St East Hampton, CT. Prepared for the Town of East Hampton. 2008

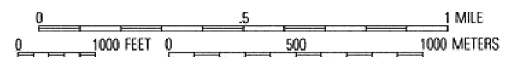
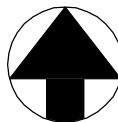
Metcalf & Eddy, Inc. (M&E). 2004. *Generic Quality Assurance Project Plan, Non-Superfund Targeted Brownfields Assessments, Various New England Locations, Revision 01, Volumes I and II. RFA 04266*. December 2004.

## FIGURES





SOURCE:  
U.S.G.S. TOPOGRAPHIC MAPS  
MIDDLE HADDAM, CT QUADRANGLE,  
MAP VERSION: 1984, CURRENT AS OF 1997



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**FIGURE 1  
SITE LOCATION MAP**

INTERIM REMEDIAL ACTION PLAN  
TOWN OF EAST HAMPTON CONNECTICUT  
13 WATROUS STREET EAST HAMPTON, CONNECTICUT

SCALE:  
AS NOTED

DATE:  
MAY 2010

PROJECT NUMBER:  
60155031



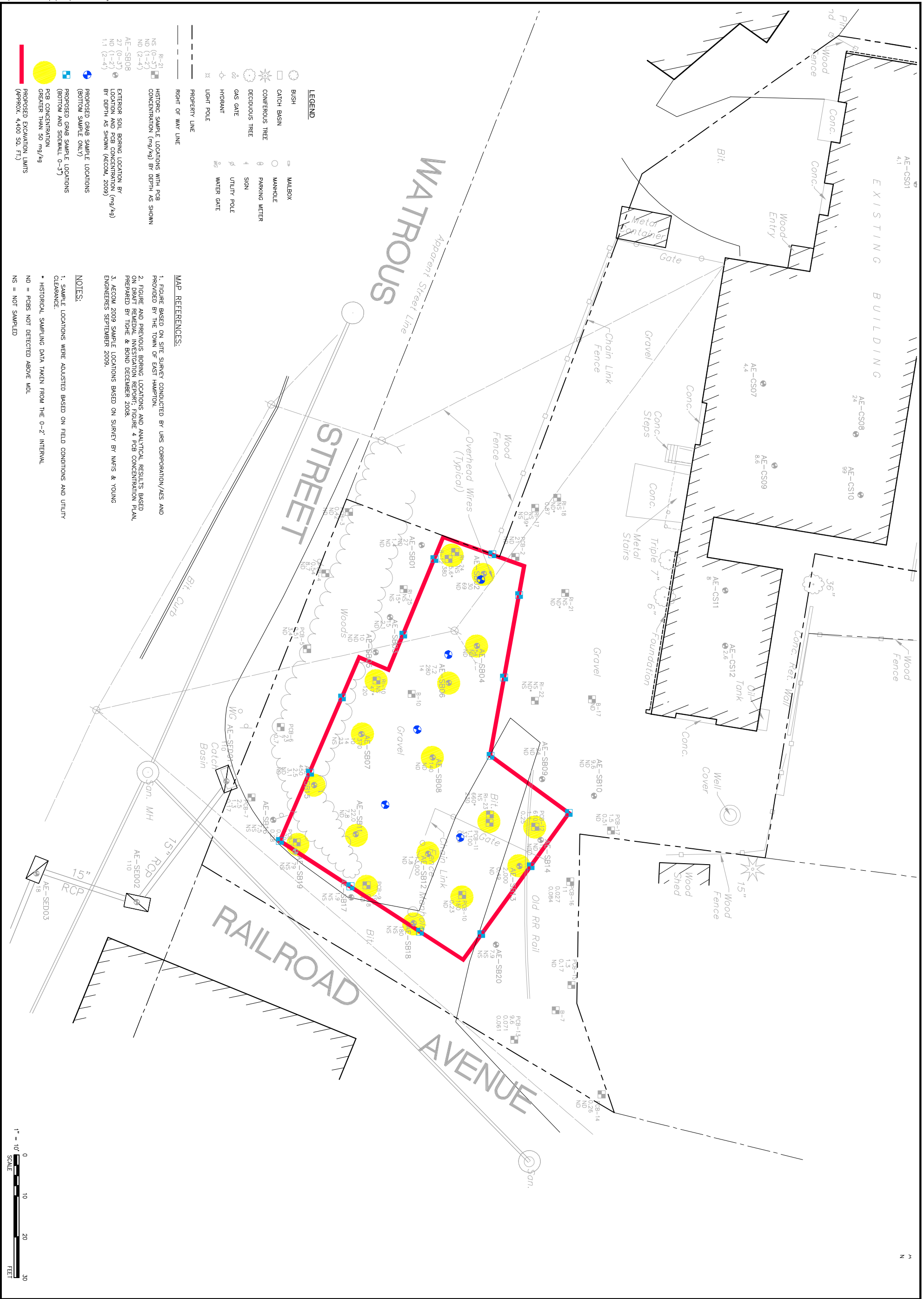


FIGURE NUMBER

2

SHEET NUMBER

SITE PLAN WITH SAMPLING LOCATIONS

INTERIM REMEDIAL ACTION PLAN

TOWN OF EAST HAMPTON CONNECTICUT

13 WATROUS STREET EAST HAMPTON, CONNECTICUT

SCALE: 1" = 10'

DATE: MAY 2010

PROJECT NUMBER: 60155031

AECOM

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DRAWN BY:	MT				
CHECKED BY:	JB				
APPROVED BY:	JB				

## **APPENDIX A**

### **Statement of Limitations**

## STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as follows:

1. The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.
2. AECOM USA, Inc. derived the data in this report primarily from visual inspections, examinations of records provided by the Client, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
3. In preparing this report, AECOM has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, AECOM has not attempted to verify the accuracy or completeness of any such information.
4. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.
5. Because of the limitations stated above, the findings, observations, and conclusions expressed by AECOM in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings, observations, and conclusions are based solely upon site conditions in existence at the time of investigation.
6. This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.



## **APPENDIX B**

### **Remediation Drawings**

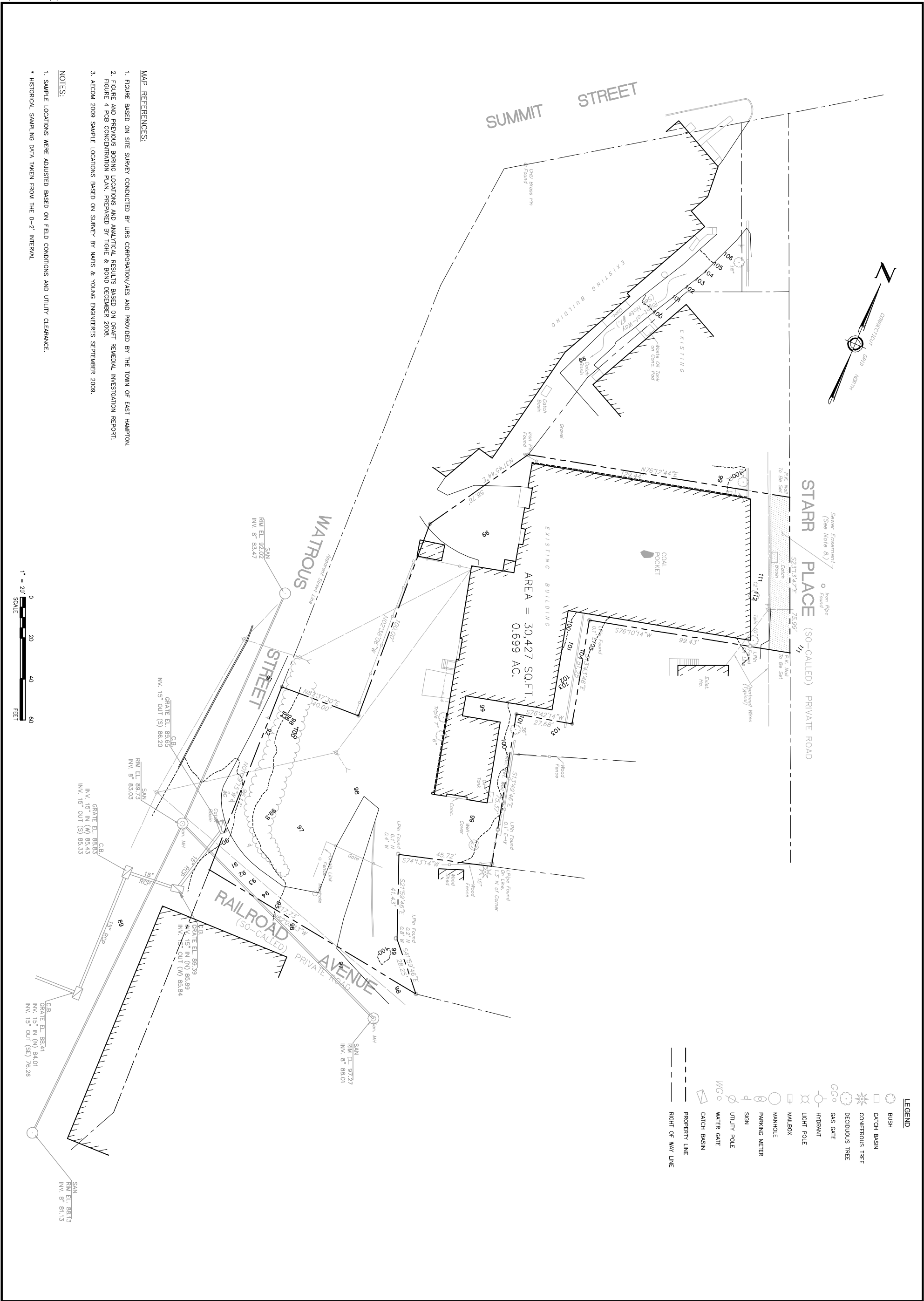


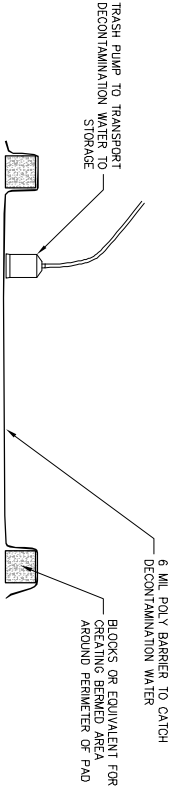
FIGURE NUMBER		SITE PLAN - EXISTING CONDITIONS		INTERIM REMEDIAL ACTION PLAN		TOWN OF EAST HAMPTON CONNECTICUT		13 WATROUS STREET EAST HAMPTON, CONNECTICUT	
SCALE:		DATE:		PROJECT NUMBER:					
1" = 20'		4/28/10							

DESIGNED BY:		NO.:		REVISIONS		DATE:		BY:	
DS									
DRAWN BY:									
MT									
CHECKED BY:									
JB									
APPROVED BY:									
JB									

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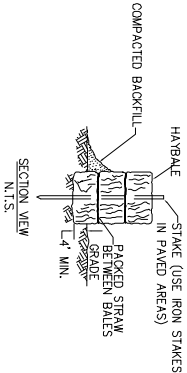
C-1		SHEET NUMBER	
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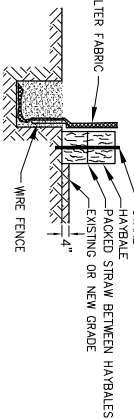
HEAVY EQUIPMENT DECONTAMINATION AREA

NTS



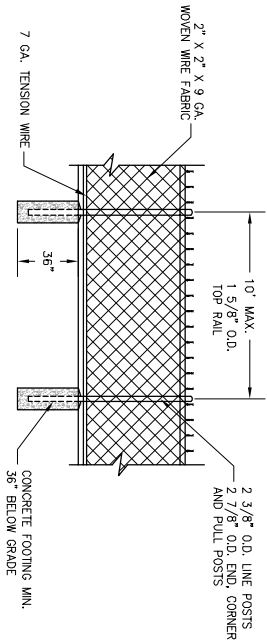
HAY BALE BARRIER

NTS



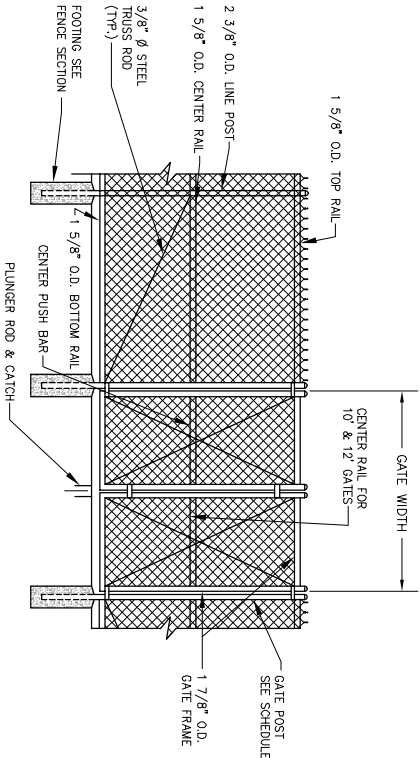
SILT FENCE - DETAIL

NTS



6' HIGH CHAIN LINK FENCE

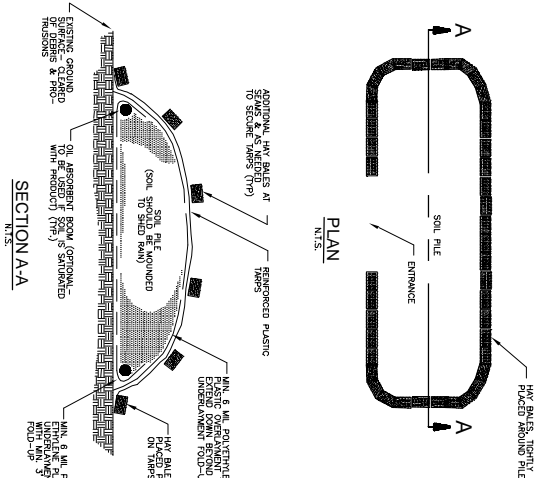
NTS



GATE POST SCHEDULE	
GATE WIDTH	POST O.D.
≤ 6'	2 7/8"
6'-13'	4"
13'-18'	6 5/8"

10' & 12' HEIGHT DOUBLE LEAF GATE

NOT TO SCALE



STAGED SOIL/SOIL STOCKPILE DETAIL

NTS

- NOTES:
1. AVOID LOW-LYING AREAS FOR STAGING.
  2. TAPPS MAY BE RE-USED BY CONTRACTOR ON OTHER SITES IF USED OVER POLY.
  3. SAND BAGS, OR EQUIV., MAY BE USED IN PLACE OF HAY BALES ON TOP OF PILE.
  4. IF EXISTING GROUND SURFACE IS VERY ROUGH OR UNEVEN, A 4'-6" LAYER OF CLEAN SAND MAY BE PLACED TO PROVIDE A FLAT STAGING AREA.
  5. PERIMETER HAY BALES SERVE BOTH TO SECURE TARP AND TO PREVENT SEDIMENT RUNOFF IN THE EVENT OF A BREACH OF THE PLASTIC.
  6. FLOOD EXCESS TARP MATERIAL UNDER TARP AND EXCESS PLASTIC SHEETING MATERIAL UNDER PLASTIC SHEETING TO AVOID COLLECTING RAINWATER IN POOLS.

GENERAL NOTES

1. EXISTING CONDITIONS, AS PRESENTED, REPRESENT THOSE CURRENT AS OF THE DATE OF THE FIELD SURVEY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF SITE CONDITIONS PRIOR TO START OF WORK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "CALL-BEFORE-YOU-DIG" AT 1-800-922-4455 TO ARRANGE FOR MARKING OUT THE LOCATION OF EXISTING UNDERGROUND UTILITIES AT LEAST 72 HOURS IN ADVANCE OF EXCAVATION.
3. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR START ANY KIND OF EXCAVATION WORK PRIOR TO OBTAINING ALL THE NECESSARY INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES AT THE SITE.
4. ALL EXCAVATION SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT UNDERGROUND UTILITIES OR STRUCTURES ARE NOT DAMAGED. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY FOR ANY DAMAGE INCURRED DURING EXCAVATION OPERATIONS. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY EXISTING PIPE OR UTILITY DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
5. ALL STREET CURBS, PAVEMENTS, SIDEWALKS AND GRASSED AREAS ADJACENT TO THE PROJECT LIMITS DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LOCAL, STATE AND FEDERAL PERMITS REQUIRED THAT ARE NOT PREVIOUSLY OBTAINED AND MADE PART OF THE CONTRACT DOCUMENTS.
7. COMPLIANCE WITH ALL PROJECT PERMIT CONDITIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. ALL FUEL, OIL, PAINT OR OTHER HAZARDOUS MATERIALS SHALL BE STORED IN A SECONDARY CONTAINMENT AREA AND SECURED IN A LOCKED AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
9. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED, CHARACTERIZED AND TRANSPORTED AND DISPOSED OFF SITE IN ACCORDANCE WITH ALL STATE AND FEDERAL REGULATIONS.
10. A SUPPLY OF ABSORBENT SPILL RESPONSE MATERIAL SUCH AS BOOMS OR BLANKETS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES TO CLEAN UP POTENTIAL SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE AND OIL.
11. SPILLS OF HAZARDOUS MATERIALS SHALL BE REPORTED IMMEDIATELY TO THE FOLLOWING: CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, OIL AND CHEMICAL SPILLS UNIT AT 860-566-3338.
12. ALL ON-SITE CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND TECHNICAL SPECIFICATIONS.
13. A WATER SUPPLY IS NOT AVAILABLE AT THE SITE.
14. CONTRACTOR TO SUBMIT PROJECT WORK PLAN WITH SEQUENCE AND DETAILS OF PROPOSED WORK ACTIVITIES INCLUDING PROJECT WORK ZONES.
15. CONTRACTOR TO SECURE AND MAINTAIN OPEN REMEDIAL EXCAVATIONS PRIOR TO BACKFILLING EXCAVATION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRANSPORT AND DISPOSAL OF ALL WASTES GENERATED DURING THE PROJECT.
17. CONSTRUCTION WATER THROUGHOUT DURATION OF PROJECT ACTIVITIES.
18. CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY WORK WITH THE RESPECTIVE UTILITY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION AND COSTS ASSOCIATED WITH CUSTOMER OWNED SERVICES AND FOR ALL UTILITY WORK MADE FOR THE CONTRACTOR'S CONVENIENCE, INCLUDING TEMPORARY UTILITY RELOCATION(S) AND RECONNECTION(S).

DETAILS

INTERIM REMEDIAL ACTION PLAN  
TOWN OF EAST HAMPTON CONNECTICUT  
13 WATROUS STREET EAST HAMPTON, CONNECTICUT

SCALE:	DATE:	PROJECT NUMBER:
1" = 20'	4/28/10	



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	NO.	DESCRIPTION	DATE	BY:
DS				
DRAWN BY:				
CHECKED BY:				
APPROVED BY:				
JB				

C-3

SHEET NUMBER

## **APPENDIX C**

### **Project Schedule**

INTERIM REMEDIAL ACTION PLAN  
Planning Level Schedule

13 Watrous Street  
East Hampton, Connecticut  
June 16, 2010

Project tracking by Month	Jun-10				Jul-10					Aug-10				Sep-10			
Week Ending	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24
Task																	
<b>Regulatory Program/Interim Remediation Planning</b>																	
Interim Remedial Action Plan Development (see Note 1)																	
Assessment of Brownfield Cleanup Alternatives (ABCA)																	
Community Relations Plan																	
Public Notice/Review/Comment																	
QAPP Development (draft submitted to EPA)																	
QAPP Approval																	
Plans and Specifications (see Note 2)																	
Town preparation of bid package (see Note 2)																	
Bid Selection Process (see Note 2)																	
<b>Permits</b>																	
None planned																	
<b>Scopes of Work/Contract Amendment</b>																	
(for AECOM field work)																	
<b>Interim Remedial Actions</b>																	
Mobilization																	
Soil Excavation and disposal																	
Site Regrading																	
Fence Installation																	
<b>Close Out Procedures</b>																	
Interim RAR																	

Notes:

1. Interim Remedial Action Plan (RAP) will be approved by an LEP. As this project is in the Voluntary Remediation Program, CTDEP approval will not be obtained for the interim RAP. However, EPA approval will be necessary. The 30 day review period for EPA is incorporated into public notice/review/comment time period.
2. Town will solicit bids and award a contractor to perform remediation activities.