

SITE: ScovillBREAK: 5.4OTHER: 593606

**DECLARATION FOR THE  
EXPLANATION OF SIGNIFICANT DIFFERENCES  
SCOVILL INDUSTRIAL LANDFILL SUPERFUND SITE  
WATERBURY, CONNECTICUT  
September 2016**

**Site Name and Location**

The Scovill Industrial Landfill Superfund Site is located in Waterbury, Connecticut.

**Lead Agency**

United States Environmental Protection Agency

**Support Agency**

Connecticut Department of Energy & Environmental Protection

**Statement of Purpose**

The attached Explanation of Significant Differences (ESD) sets forth the basis for modifying the remedy for the Scovill Industrial Landfill Superfund Site (the Site). The U.S. Environmental Protection Agency (EPA) developed this Declaration after consulting with the Connecticut Department of Energy & Environmental Protection (CT DEEP) on the ESD. CT DEEP provided comments by electronic mail, dated July 19, 2016; CT DEEP's comments were incorporated into the ESD.

**Statutory Basis for Issuance of the ESD**

Pursuant to Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9617(c), and 40 C.F.R. § 300.435(c)(2)(i), if EPA determines that the remedial action being undertaken at a site differs significantly from the Record of Decision (ROD) for that site, EPA shall publish an ESD and the reasons such changes are being made. According to 40 C.F.R. § 300.435(c)(2)(i), and EPA guidance (Office of Solid Waste and Emergency Response (OSWER) Directive 9200.1-23-P, July 1999), an ESD, rather than a ROD amendment, is appropriate where the adjustments being made to the ROD are significant but do not fundamentally alter the remedy with respect to scope, performance or cost. EPA has determined that the adjustments to the ROD provided in the attached ESD are significant but do not fundamentally alter the overall remedy for the Site with respect to scope, performance, or cost. Therefore, this ESD is properly being issued.

In accordance with Section 117(d) of CERCLA, 42 U.S.C. § 9617(d), and 40 C.F.R.



§§ 300.435(c)(2)(i)(A) and 300.825(a)(2), this ESD will be available for public review at the EPA Records Center in Boston, Massachusetts and the public information repository located at the Silas Bronson Library at 267 Grand Street in Waterbury, Connecticut. The ESD will also be available at CT DEEP's offices in Hartford, Connecticut. EPA will publish a notice of availability and a brief description of this ESD in a major local newspaper of general circulation following the signing of this ESD.

Although not required by the Superfund statute or regulation, EPA provided the public with a 30-day opportunity to submit written comments on the proposed ESD from August 18, 2016 to September 18, 2016. EPA did not receive any verbal comments at the hearing or any written comments during the comment period. This ESD contains no significant differences from the draft ESD issued for public comment.

## **Background**

In September 2013, EPA issued a ROD in which it selected a remedy to address current and future risk to human health at the Site based on direct contact with contaminants in soil and vapor intrusion from subsurface contamination, including beneath the apartment building located on Area E1 (refer to figures attached to ESD). The remedy in the ROD for Areas E1, F and I includes excavation of soil contamination exceeding ROD cleanup levels to a depth of up to four feet below grade, excavation of soil contamination exceeding Connecticut pollutant mobility criteria (PMC) levels to the top of groundwater, and disposal of these materials off-site. The ROD specified that EPA would conduct a Pre-Design Investigation (PDI) in Areas E1 and I to better define the extent of contamination, which was completed between August 2014 and September 2015.

At the time the ROD was issued, the prevalence of poly-aromatic hydrocarbons (PAHs) and arsenic contamination in soil throughout Area I was not known, and was estimated based on then-available data to be approximately 3,720 cubic yards. Based on Area I PDI results, the amount of soil contamination increased to approximately 7,400 cubic yards. The increased amount of contaminated soils requiring removal led EPA to re-evaluate the cost effectiveness of off-site disposal. EPA determined that a consolidation of like-contaminated soils from Area I under the Area J soil cap specified in the ROD is appropriate and will result in about \$939,000 in cost savings. EPA also determined that a similar consolidation of like-contaminated soils from Areas E1 and F under the Area J soil cap is appropriate and will result in additional cost savings of approximately \$31,000. The consolidation of extra material under the cap will not significantly increase soil cap costs. Taken together, cost savings from consolidation amount to about \$970,000.

EPA also determined that consolidation of the soils from Areas E1, F and I to Area J under the soil cap has environmental and community benefits: a significant reduction in heavy-haul

trucking mileage, resulting in a reduction in wear and tear on city and state roadways and a reduction in cleanup-related vehicle emissions.

### **Overview of the ESD**


With this ESD, EPA is changing its approach for disposal of excavated soil contamination that exceeds ROD direct-exposure cleanup standards in Areas E1, F and I. Rather than disposing of these contaminated soils off-site, EPA now will consolidate them with similarly-contaminated soils from Area J under a two-foot thick soil cap in Area J. The contaminated soils to be consolidated under the cap are not characterized as hazardous waste under RCRA. Under the ROD, EPA is already required to consolidate Area J soils that are above ROD cleanup standards under the soil cap.

Only minimal changes to the soil cap in Area J will be necessary. This change will increase the height of the cap from about two feet above-grade, as specified in the ROD, to about ten feet above-grade at its highest point. This change does not require an increase in the footprint of the soil cap. In fact, to minimize the impact on wetlands in Area J, the footprint of the soil cap will be reduced from an estimated 86,200 square feet in the ROD to an estimated 60,000 square feet. Approximately three feet of the increase in the height of the cap from the ROD estimate is from the materials incorporated from Areas E1, F, and I. The remainder of the increase, approximately five feet, is due to the need to minimize the impact on wetlands, as is required by applicable and relevant and appropriate environmental requirements (ARARs).

The mound shaped cap includes a three to five (3-5%) crown that peaks approximately ten feet above existing grade and tapers to existing grade via three to one (33%) slopes at its perimeter. EPA will plant vegetation around the soil cap perimeter, and grass and/or wild flowers on the soil cap itself (see Figure 6a attached to the ESD).

### **Declaration**

For the foregoing reasons and as explained herein, by my signature below, I approve the issuance of an Explanation of Significant Differences for the Scovill Industrial Landfill Superfund Site in Waterbury, Connecticut, and the changes stated therein.

  
Bryan Olson, Director  
Office of Site Remediation and Restoration  
U.S. Environmental Protection Agency – New England

9/21/16  
Date

**EXPLANATION OF SIGNIFICANT DIFFERENCES  
SCOVILL INDUSTRIAL LANDFILL SUPERFUND SITE  
WATERBURY, CONNECTICUT**

**September 2016**

**FINAL**

**Site Name:** Scovill Industrial Landfill Superfund Site

**Site Location:** Waterbury, Connecticut

**Lead Agency:** United States Environmental Protection Agency (EPA)

**Support Agency:** Connecticut Department of Energy & Environmental Protection  
(CT DEEP)

## **I. INTRODUCTION**

This document is an Explanation of Significant Differences (ESD) for the Record of Decision (ROD) for the Scovill Industrial Landfill Superfund Site (the Site), issued in September 2013. EPA is publishing this ESD in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9617(c), and 40 C.F.R. § 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan. EPA has determined that the changes to the remedial action stated herein significantly change but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance or cost. An ESD is therefore appropriate in this case.

### **Summary of Differences**

In the ROD, EPA chose to excavate contaminated soils in Areas E1, F, and I that exceeded ROD cleanup standards (direct-exposure criteria) (see Figure 2) and to dispose of them off-site. ROD cleanup levels are specified in Table L-3 of the ROD and attached to this ESD. This ESD documents a change in approach to instead consolidate contaminated soils exceeding ROD cleanup levels from these Areas with similar contaminated soils from Area J under a two-foot protective soil cap in Area J (see Figure 5 and Figure 6a). The soil cap is already a component of the ROD remedy. Under this ESD, the footprint of the soil cap in Area J will decrease to minimize any impact on wetlands, and the height of the soil cap will increase from about two feet above-grade to about ten feet above-grade (about five feet to minimize impacts to wetlands without consolidation, and about three feet due to consolidation of materials from Areas E1, F and I).

Between August 2014 and September 2015, EPA completed a pre-design sampling investigation (PDI) as specified under the ROD. Based on PDI results, EPA determined during remedial design that soil exceeding ROD cleanup levels in Areas E1, F, and I can be excavated and



consolidated under the soil cap to be constructed in Area J. This change in the remedial action is expected to result in a cost savings of approximately \$970,000. An additional benefit of this change is a significant reduction in heavy-haul trucking mileage, resulting in a reduction in traffic and wear and tear on city and state roadways, and a reduction in cleanup-related vehicle emissions.

In accordance with CERCLA §117(d), 42 U.S.C. § 9617(d), and 40 C.F.R. § 300.435(c)(2)(i)(A) and 300.825(a)(2), this ESD and its supporting documents are available for public review and added to the Administrative Record for the Site. The Administrative Record is available for public review at the EPA Region 1 Records Center in Boston, Massachusetts, and the repository located near the Site, at the addresses listed below:

EPA Region 1 Records Center  
5 Post Office Square, Suite 100  
Boston, Massachusetts 02109-3912  
By appointment only: 617-918-1440

Silas Bronson Library  
267 Grand Street  
Waterbury, Connecticut, 06702

Hours of operation:

*Monday – Thursday: 9 am – 8 pm*

*Friday: 9 am – 5 pm*

*Saturday & Sunday: Closed*

This ESD is also available at CT DEEP's offices in Hartford, Connecticut. EPA will publish a notice of availability and a brief description of this ESD in a major local newspaper of general circulation following the signing of this ESD. A 30-day public comment period on this ESD was also provided.

## **II. SITE HISTORY, CONTAMINATION, AND THE SELECTED REMEDY**

The Site, encompassing about 25 acres, is bounded to the north by residential properties along Newbury Street and Academy Avenue, to the east by a steep hill topped with residential properties abutting Academy Avenue, to the south by Meriden Avenue (State Route 69) with abutting commercial properties, and to the west by a steep hill topped by residential properties along Monroe Avenue (see Figure 1-1 and Figure 1-C). The Scovill Manufacturing Company (the Company) manufactured various metal parts, including brass buttons, belt buckles, clasps, and other products using aluminum, chromium, copper, silver, tin, and zinc. In addition, the Company produced appliances, small motors, watches, injection molded plastics, and photographic equipment, and produced numerous products for the military during World War I, World War II, and the Korean War, including munitions, fuses, and brass artillery casings. The Company used the Site as a landfill from 1919 to the mid-1970s for disposal of ash, cinders,

demolition debris, and other wastes it generated. Over time, as landfilled areas were filled in, Scovill sold off parcels for development to new owners. By the mid-1990s, the Southern portion of the Site, which consists of approximately 18 acres, had been developed for residential and commercial uses.

In 1988, the northern portion of the Site, referred to as Area J (also known as the Calabrese parcel) (totaling 6.8-acres) was in the initial stages of development for an elderly housing complex when a number of capacitors, ash, cinder, crushed drums containing sludge material, metal waste, demolition debris and other waste materials were encountered at depths ranging between 8 and 20 feet below grade. The waste materials contained elevated levels of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals. In 1989, the development project was ordered to stop until the extent and degree of contamination was identified. In 1998, CT DEEP removed about 2,300 tons of PCB-contaminated soils and 18 capacitors, placed a temporary one-foot soil cap over the area and erected protective fencing around four of the almost seven acres of the parcel.

The EPA and its contractors conducted investigations to support potential waste-removal efforts and evaluation of Site conditions. On July 27, 2000, EPA listed the Site on the National Priorities List (NPL). EPA conducted Phase I of the Remedial Investigation (RI) in the fall of 2002.

In 2004, EPA issued an Administrative Order to a Potentially Responsible Party (PRP), Saltire Inc. (the corporate successor to Scovill Manufacturing Company), to complete the remaining RI activities. The PRP's contractor conducted approximately 90 percent of the Phase II RI, but ceased all work after Saltire filed for bankruptcy in July 2004. EPA acquired the existing data for evaluation and conducted the Phase III RI between 2008 and 2011.

In September 2013, EPA issued the ROD, which selected a remedy to address current and future risk to human health at the Site based on direct contact with contaminants in soil, and vapor intrusion from subsurface contamination, including beneath the apartment building located on Area E1. Between August 2014 and September 2015, EPA completed a PDI, as specified under the ROD. The PDI involved sampling a number of parcels to further define the extent of contamination.

The remedial components, as specified in the ROD, for the different Areas of the Site, currently include, among other things, the following:

- Area I – Conduct a PDI to better define the extent of contamination in this Area. Based on the results, excavate soil contamination exceeding ROD cleanup levels to a depth of up to four feet below grade, and excavate soil contamination exceeding Connecticut Remediation Standard Regulations Pollutant Mobility Criteria (PMC) levels to the top of groundwater. Dispose of all excavated soil off-site. The

excavated areas will be backfilled with clean soil and the surface will be restored to existing conditions (pavement).

- Areas D1, E1, and F – Conduct a PDI to better define the extent of contamination in Area E1. Conduct targeted excavation of contamination exceeding ROD cleanup levels to a depth of up to four feet below grade, and targeted excavation of soil contamination exceeding Connecticut PMC levels to the top of groundwater. Dispose of all excavated soil off-site. The excavated Areas will be backfilled with clean soil and the surface will be restored to existing conditions (vegetation and pavement).
- Area J – Conduct a PDI to better define the extent of contamination in this Area. Based on the results, excavate soil contamination exceeding ROD cleanup levels outside of the planned soil cap area to a depth of up to four feet below grade, and excavate soil contamination exceeding Connecticut PMC levels to the top of groundwater. Excavated soil exceeding ROD cleanup levels will be consolidated under a two-foot soil cap system in Area J. Excavated soil exceeding Connecticut PMCs will be disposed of off-site. Excavated Areas outside the cap system will be backfilled and restored (vegetation).
- In Area E1 – Conduct a PDI to assess the potential for chemicals to volatilize from below the slab of the apartment building into the living space and, as determined necessary based on a vapor pathway evaluation, design, construct, operate, and maintain a sub-slab vapor mitigation system. Implement institutional controls (ICs) to prohibit the use of first floor residential units without a vapor mitigation system, if EPA decides the systems are required based on PDI results.
- All Areas – The application of ICs to prevent, without regulatory approval: the excavation and removal of soil below four foot depths; excavation of on-site soils for use or disposal beyond a property's boundaries; and conversion of non-residential properties to residential usage. The Area J IC additionally requires the operation of a vapor management system to prevent potential contaminants from entering any planned structure through vapor intrusion, and limits activities that could harm the soil cap. Additionally, all Areas will require periodic institutional control assessments and Five-Year Reviews.

### **III. BASIS FOR THIS ESD**

As indicated above, the ROD called for a PDI at Area I to better define the extent of soil contamination exceeding ROD cleanup levels and/or Connecticut Pollutant Mobility Criteria (PMC) levels requiring excavation and off-site disposal. The ROD cleanup levels are based on direct exposure contact to soil to prevent human risk, whereas the PMC are designed to protect

groundwater quality. At the time the ROD was issued, the prevalence of PAH and arsenic contamination in soil throughout Area I was not known, and was estimated based on then-available data to be approximately 3,720 cubic yards. Based on Area I PDI results, the amount of soil contamination increased to approximately 7,400 cubic. The PDI results indicate that these materials are not characterized as hazardous waste under the Resource Conservation and Recovery Act (RCRA) and therefore do not require being disposed at a RCRA Subtitle C facility. The increased amount of contaminated soils requiring removal led EPA to re-evaluate the cost effectiveness of off-site disposal. EPA has determined that a consolidation of like-contaminated soils from Area I under the Area J soil cap is appropriate and will result in about \$939,000 in cost savings. See the capital cost summary tables below; 30% Remedial Design assumes off-site disposal; 60% Remedial design assumes consolidation of contaminated soils under cap in Area J.

EPA has also determined that a similar consolidation of like-contaminated soils from Areas E1, and F under the Area J soil cap is appropriate and will result in additional cost savings of approximately \$31,000. See the capital cost summary tables below. The consolidation of extra material under the cap will not significantly increase soil cap costs. Taken together, cost savings from consolidation amount to about \$970,000.

### **30% Remedial Design Estimated Capital Costs Assuming Off-Site Disposal**

<b>Risk Areas</b>	<b>Capital Costs</b>	<b>Capital Cost Contingencies &amp; Indirect Capital Costs</b>	<b>Total</b>
D1, E1, and F	\$64,000	\$36,000	\$100,000
I	\$1,700,000	\$ 955,000	\$2,655,000

### **60% Remedial Design Estimated Capital Costs Assuming On-Site Consolidation**

<b>Risk Areas</b>	<b>Capital Costs</b>	<b>Capital Cost Contingencies &amp; Indirect Capital Costs</b>	<b>Total</b>
D1, E1, and F	\$44,000	\$25,000	\$69,000
I	\$1,100,000	\$ 616,000	\$1,716,000

Additional bases for consolidation of the soils from Areas E1, F and I to Area J under the soil cap are the environmental and community benefits: a significant reduction in heavy-haul trucking mileage, resulting in a reduction in wear and tear on city and state roadways and a reduction in cleanup-related vehicle emissions.

#### **IV. DESCRIPTION OF SIGNIFICANT DIFFERENCES**

The ROD specified that EPA would conduct a PDI in Areas E1 and I to better define the extent of contamination. The remedy for Areas E1, F and I as specified in the ROD is excavation of soil contamination exceeding ROD cleanup levels to a depth of up to four feet below grade, and excavation of soil contamination exceeding Connecticut PMC levels to the top of groundwater. All excavated soil would be disposed of off-site.

With this ESD, EPA is changing its approach for disposal of excavated soil contamination that exceeds ROD direct-exposure cleanup standards (see attached Table L-3 from ROD) in Areas E1, F and I. Rather than disposing of these contaminated soils off-site, EPA now will consolidate them with similarly contaminated soils from Area J under a two-foot thick soil cap in Area J. The contaminated soils to be consolidated under the cap are not characterized as hazardous waste under RCRA. Current data indicate that D1 soils exceed PMC standards but do not exceed ROD cleanup levels. These soils will thus be disposed off-site. Under the ROD, EPA is already required to consolidate Area J soils that are above ROD cleanup standards under the soil cap.

Only minimal changes to the soil cap in Area J will be necessary with this ESD. This change will increase the height of the cap from about two feet above-grade, as specified in the ROD, to about ten feet above-grade at its highest point. This change does not require an increase in the footprint of the soil cap. In fact, to minimize the impact on wetlands in Area J, the footprint of the soil cap will be reduced from an estimated 86,200 square feet in the ROD to an estimated 60,000 square feet. Approximately three feet of the increase in the height of the cap from the ROD estimate is from the materials incorporated from Areas E1, F, and I. The remainder of the increase, approximately five feet, is due to the need to minimize the impact on wetlands, as is required by applicable and relevant and appropriate environmental requirements (ARARs). EPA has determined an unavoidable impact of 6,000 square feet of wetlands is required due to cap construction and other excavation work at the Calabrese property (see Figure 6a). However, all impacted wetland areas will be mitigated.

The mound shaped cap includes a three to five (3-5%) crown that peaks approximately ten feet (10') above existing grade and tapers to existing grade via three to one (33%) slopes at its perimeter. EPA will plant vegetation around the soil cap perimeter, and grass and/or wild flowers on the soil cap itself (see Figure 6a).

This adjustment of the remedial action is not expected to increase soil cap construction costs or change operation and maintenance costs significantly beyond what was contemplated at the time of the ROD. Cost savings from consolidation of soils exceeding direct-exposure cleanup standards from Areas E1, F, and I instead of disposing of these soils off-site, amount to an estimated \$970,000.

No changes to the excavation and off-site disposal of soil contaminated in excess of the Connecticut PMC are presented. This soil volume consisting approximately of 2,234 cubic yards will be disposed-of off-site. This ESD applies only to soil concentrations above ROD direct-exposure cleanup levels.

### Non-Significant Changes

EPA also wishes to note the following non-significant changes:

EPA is making a minor change to the construction of the soil cap as specified in the ROD, which calls for a geotextile layer, a barrier layer (cobbles, one foot), soil cover (one foot), and surface vegetation. Instead the soil cap will consist of a base layer (gravel fill, six inches), a triaxial geogrid material supplemented with a geotextile warning layer, a barrier layer (coarser gravel fill, one foot), topsoil cover (six inches), and surface vegetation. These changes will improve the stability of the cap given Site conditions and provide an ample warning layer to any persons who inadvertently dig in the soil cap (see Figure 5). In order to minimize impacts to wetlands in Area J, the size of the soil cap footprint, estimated to be about 86,200 square feet in the ROD, will be reduced to about 60,000 square feet.

EPA is also clarifying a statement on page 57 of the ROD. The ROD cleanup standard for polychlorinated biphenyls (PCBs), based on the Connecticut Remediation Standard Regulations, is 10 parts per million (ppm). The two-foot soil cap will comply with standards for addressing bulk PCB remediation wastes with concentrations less than or equal to 10 ppm for high occupancy areas, rather than 25 ppm as stated in the ROD.

EPA has determined through data collected from Area I during the RI and PDI that soils within Area I meet Connecticut PMC based on a ninety-five percent upper confidence level of the arithmetic mean of all sample results of laboratory analyses of soil from Area I. See Connecticut Remediation Standard Regulations, Standards for Soil Remediation 22a-133k-2 (e)(1)(A). Therefore EPA will leave soils below four feet in place, rather than completing targeted excavations of soils exceeding PMCs below four feet. Area I soils excavated from zero to four feet below the ground surface that exceed ROD direct-exposure criteria, will be disposed of under the cap on Area J. Soils from any part of the Scovill Site exceeding PMC values will be disposed of off-site.

The published version of the 2013 ROD inadvertently did not include certain ARAR table pages (Tables J3-J9). These missing pages will be inserted into a corrected, republished version of the ROD.

### Changes in Expected Outcomes

The change in the remedy will reduce the cost estimate for the remedy by about \$970,000. See the capital cost summary tables above. The change in the remedy, however, is not expected to increase the remediation time frame once remediation begins.

The change in the remedy will not affect the protectiveness of the remedy, the ROD-specified institutional controls, applicable or relevant and appropriate regulations, remedy operations and maintenance, or Five-Year Review requirements. The remedy will still address current and future risk by placing the contaminated materials under a protective cap, using fencing to restrict access, and institutional controls to prevent incompatible uses and harm to the protective cap.

## **V. SUPPORT AGENCY COMMENTS**

CT DEEP participated with EPA in developing the changes to the selected remedy described herein and concurs with these changes as provided by electronic mail dated August 17, 2016.

## **VI. STATUTORY DETERMINATIONS**

EPA believes that the remedy as adjusted herein remains protective of human health and the environment and satisfies the requirements in Section 121 of CERCLA. The changes made in this ESD have not changed the remedial action objectives for the Site. Rather, the modifications to the remedy described herein will allow the remedy to continue to perform in the most timely and cost-effective manner practicable while meeting all of the statutory requirements of CERCLA.

## **VII. PUBLIC PARTICIPATION COMPLIANCE**

In accordance with Section 117(d) with CERCLA and 40 C.F.R. § 300.825(a), this ESD will become part of the Site's Administrative Record which is available for public review at the locations identified in the introduction to this document.

As required by 40 C.F.R. § 300.435(c)(2)(i)(B), EPA will publish a notice of availability and a brief description of this ESD in a major local newspaper of general circulation following the signing of this ESD.

Although not required by the Superfund statute or regulation, EPA: (1) held a public meeting on August 18, 2016 to describe the outlined changes to the selected remedy and its plan to issue an ESD to address those changes; (2) held a hearing on August 18, 2016 to allow the public to offer verbal comments on the proposed ESD; and (3) provided the public with a 30-day opportunity to submit written comments on the proposed ESD from August 18, 2016 to September 18, 2016.

In order to provide the public notice, EPA mailed post cards about the ESD, public meeting and hearing, and opportunity to comment to about 1,030 people in the community on July 27, 2016. On July 28, July 29 and August 1, 2016, EPA also mailed the post cards with a fact sheet to about 120 people (including owners and residents) located in and around the Site. The fact sheets explained the PDI findings along with the remedial design including the proposed ESD modification to the remedy.

EPA did not receive any verbal comments at the hearing, or any written comments during the comment period. Therefore a responsiveness summary is not being provided. This ESD contains no significant differences from the draft ESD issued for public comment.



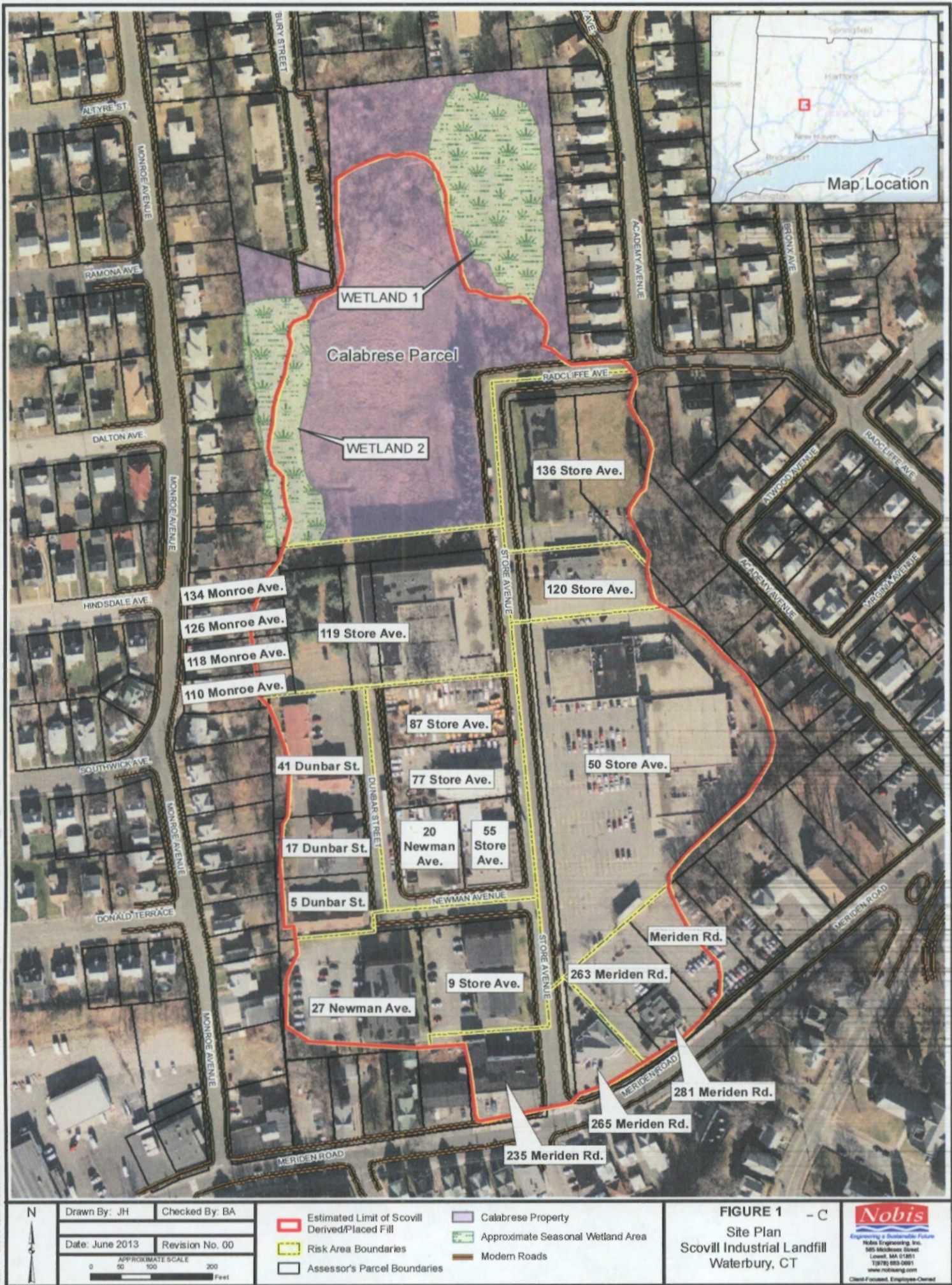
## **FIGURES**



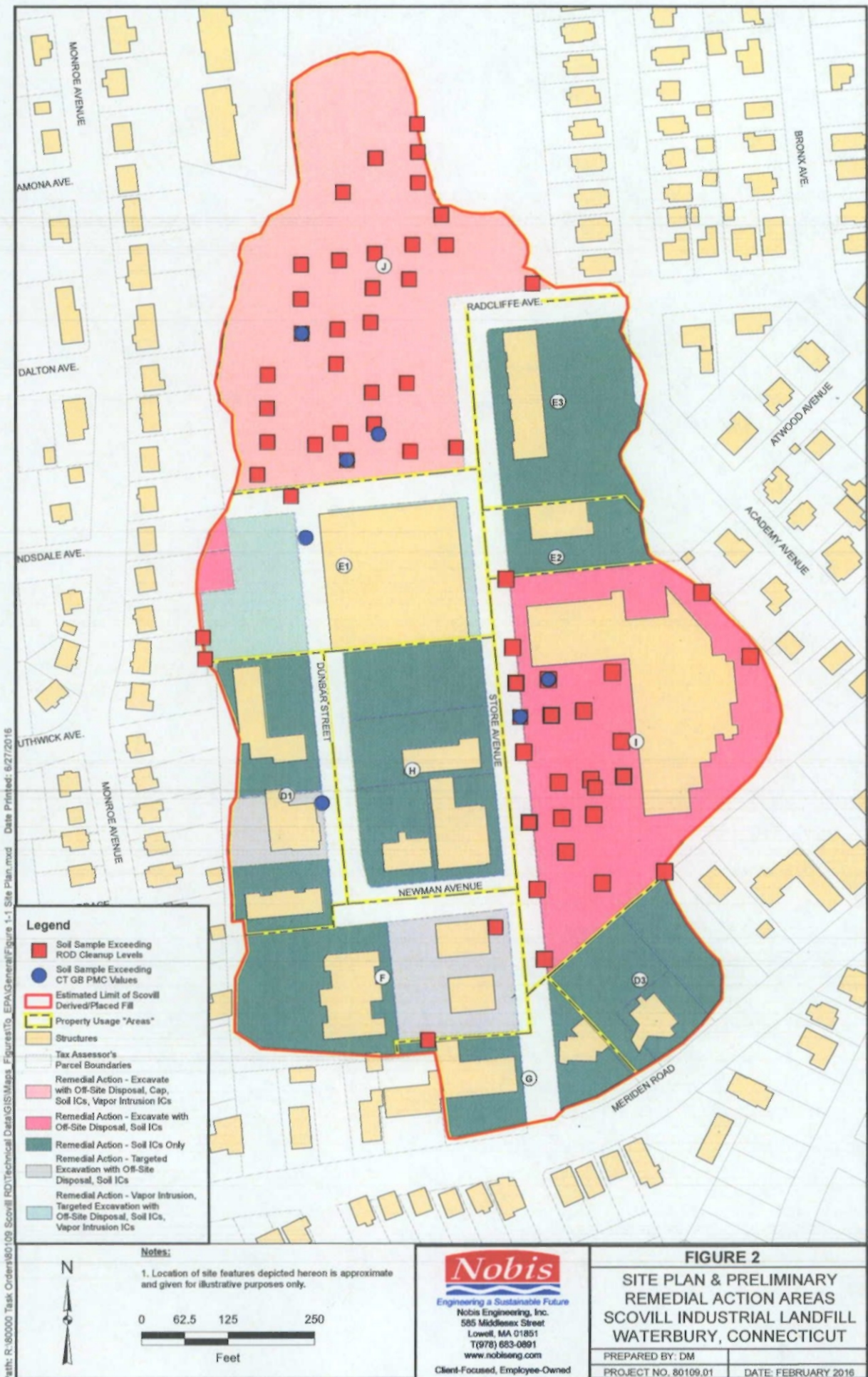




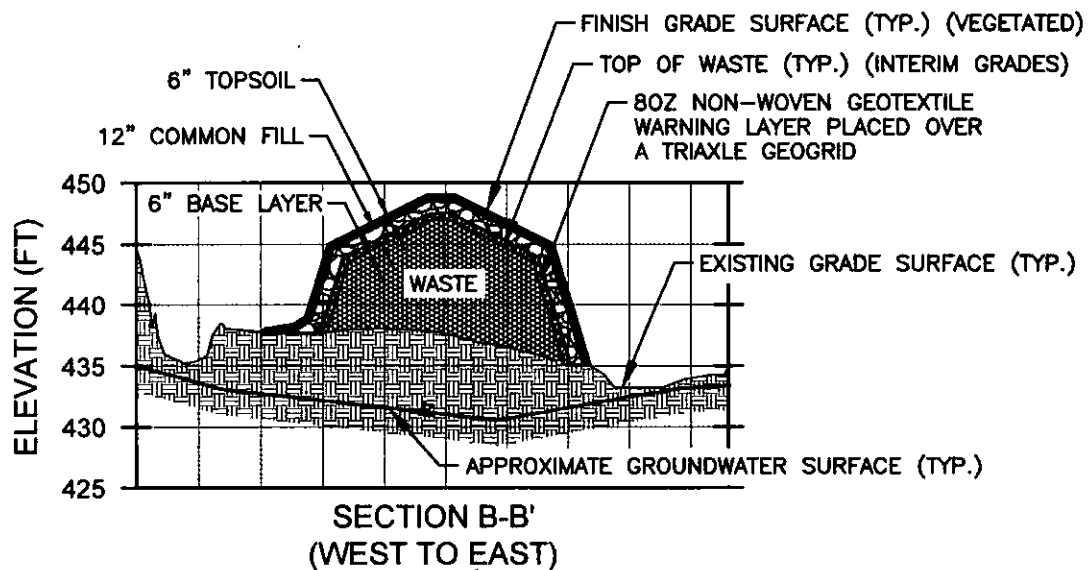
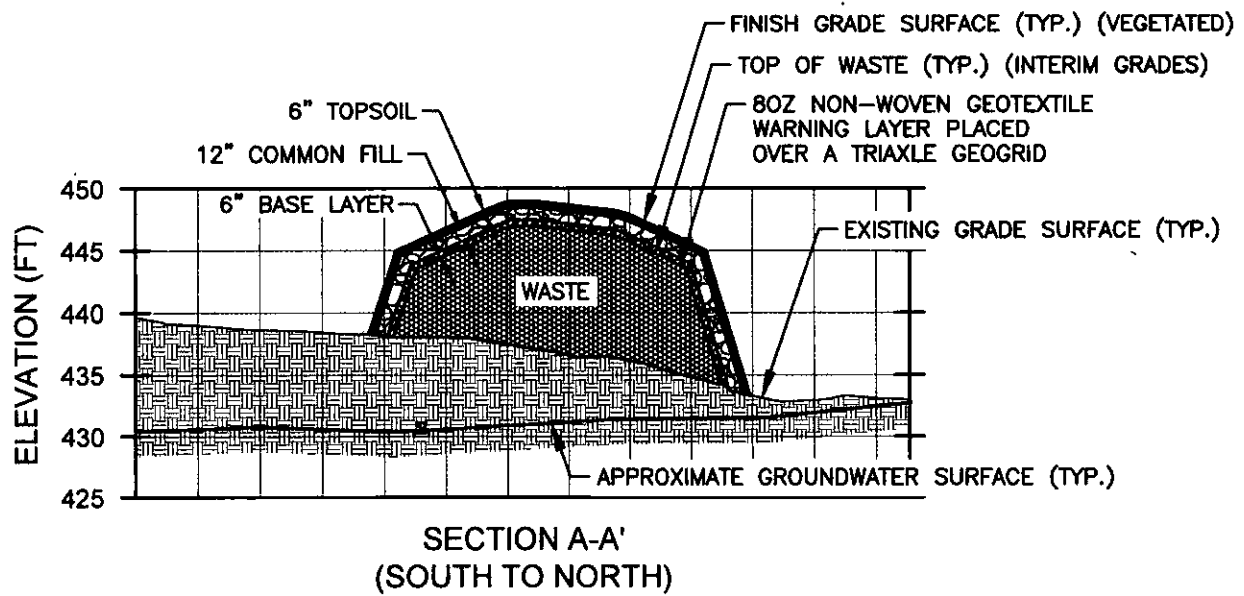
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Engineering a Sustainable Future

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Client - Focused, Employee - Owned

FIGURE 5

AREA J CROSS SECTIONS  
SCOVILL INDUSTRIAL LANDFILL SUPERFUND SITE  
STORE AVENUE  
WATERBURY, CONNECTICUT

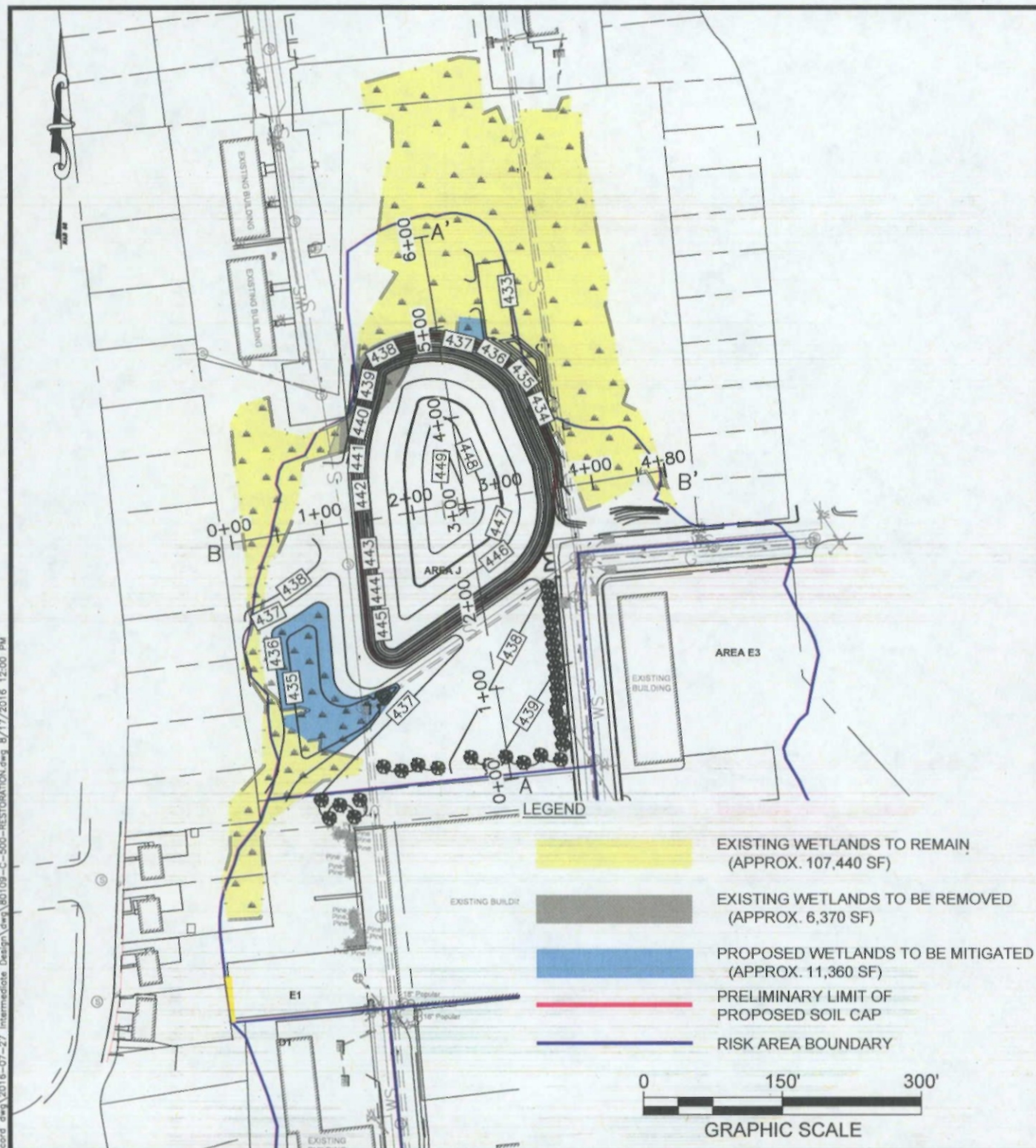
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CHECKED BY: DM

PROJECT NO. 80109

DATE: AUGUST 2016





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FIGURE 6A

SITE RESTORATION  
SCOVILL INDUSTRIAL LANDFILL SUPERFUND SITE  
STORE AVENUE  
WATERBURY, CONNECTICUT

DRAWN BY: SM

CHECKED BY: DM

PROJECT NO. 80109

DATE: AUGUST 2016

## **TABLES**



**Table L-3**  
**Soil Clean-Up Levels and Soil Gas Screening Levels**  
**Scovill Landfill Superfund Site**  
**Waterbury, Connecticut**

Soil Contaminant of Concern	Residential Soil Clean-Up Levels				Comm./Ind. Soil Clean-Up Levels			
	Surface Soil (mg/Kg)	Basis	Sub-surface Soil	Basis	Surface Soil (mg/Kg)	Basis	Sub-surface Soil (mg/Kg)	Basis
Benzo(a)anthracene	3.4	BTV	1	RSR DEC	7.8	RSR DEC	7.8	RSR DEC
Benzo(a)pyrene	3.7	BTV	1	RSR DEC	3.7	BTV	1	RSR DEC
Benzo(b)fluoranthene	5.1	BTV	1.1	BTV	7.8	RSR DEC	7.8	RSR DEC
Benzo(k)fluoranthene	8.4	RSR	8.4	RSR DEC	78	RSR DEC	78	RSR DEC
Dibenz(a,h)anthracene	1	2008 Draft	1	2008 Draft	1	RSR DEC	1	2008 Draft
Indeno(1,2,3-cd)pyrene	1.9	BTV	1	2008 Draft	7.8	RSR DEC	7.8	2008 Draft
Dioxin TEQ	5.E-05	risk-based	5.E-05	risk-based	6.00E-04	risk-based	6.00E-04	risk-based
PCBs	1	EPA/RSR	1	EPA/RSR DEC	10	EPA/RSR DEC	10	EPA/RSR DEC
Antimony	27	RSR	27	RSR DEC	8,200	RSR DEC	8,200	RSR DEC
Arsenic	13.4	BTV	10.4	BTV	13.4	BTV	10.4	BTV
Chromium - Trivalent	3,900	RSR	3,900	RSR DEC	51,000	RSR DEC	51,000	RSR DEC
Chromium - Hexavalent	100	RSR	100	RSR DEC	100	RSR DEC	100	RSR DEC
Nickel	1,400	RSR	1,400	RSR DEC	7,500	RSR DEC	7,500	RSR DEC
Vanadium	470	RSR	470	RSR DEC	14,000	RSR DEC	14,000	RSR DEC

Soil Gas Contaminant of Concern	Soil Gas Screening Levels (ug/m <sup>3</sup> )	Basis
Chloroform	22	RSR VC
Trichloroethene	38	RSR VC
Vinyl Chloride	3	RSR VC

**Abbr.:**

BTV - Background Threshold Values

DEC - RSR Direct Exposure Criteria

EPA - *A Guide on Remedial Actions at Superfund Sites With PCB Contamination*, EPA Publication No. 9355.4-01FS, Fact Sheet, Aug. 1990.

RSR - CT Remediation Standard Regulations (RCSA 22a-133-1 through -3), Amended June 27, 2013

PCBs - polychlorinated biphenyls

VC - RSR Volatilization Criteria for Soil Vapor

Dioxin TEQ - 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) Toxicity



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