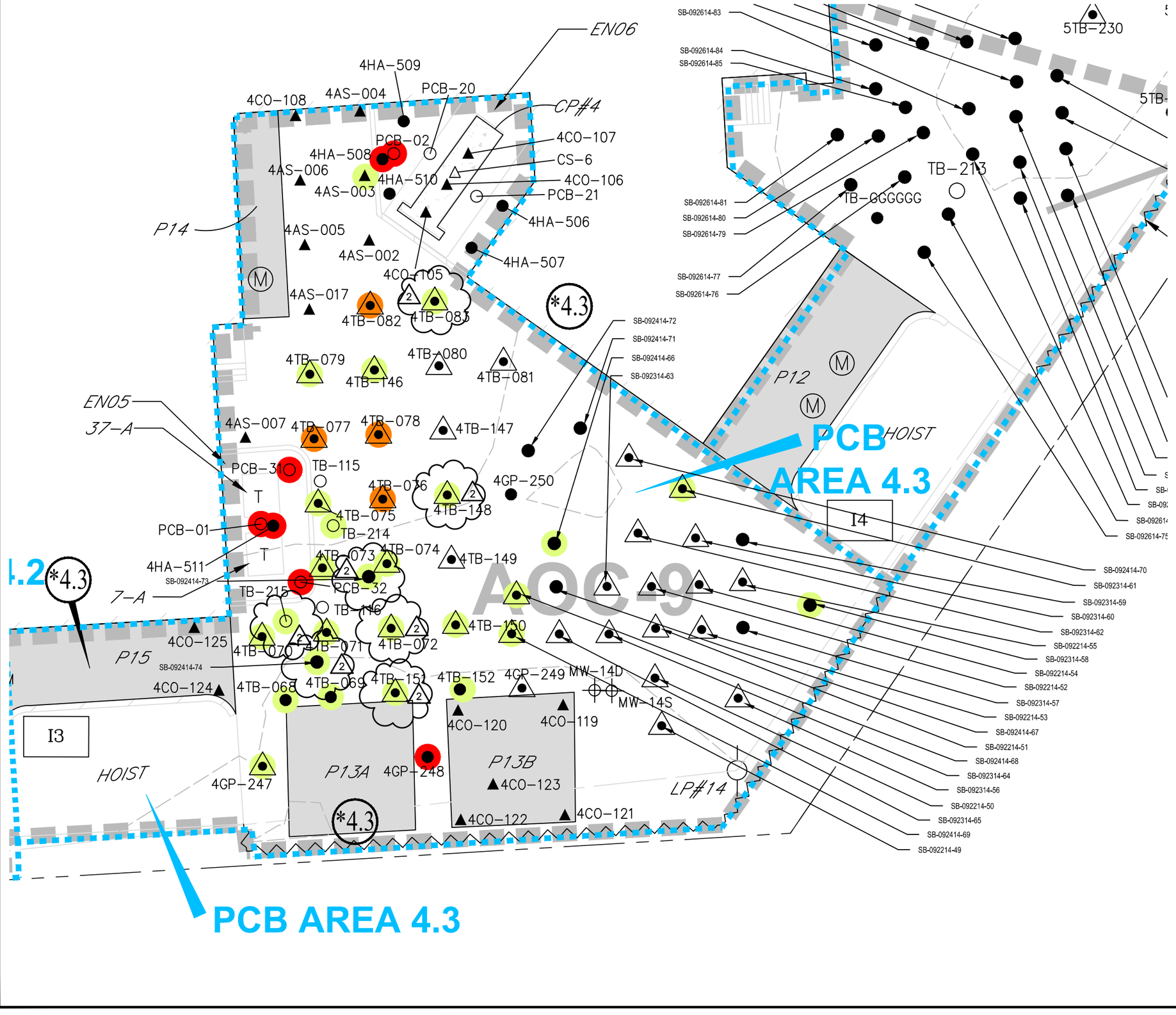

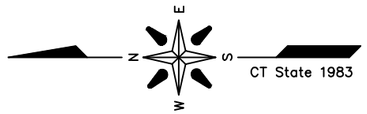

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15’ 30’

GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
2	RG	2/27/17	ADDED SAMPLE LOCATIONS & PCB HIGHLIGHTING	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.3)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-13**
DATE:	10/07/2016		

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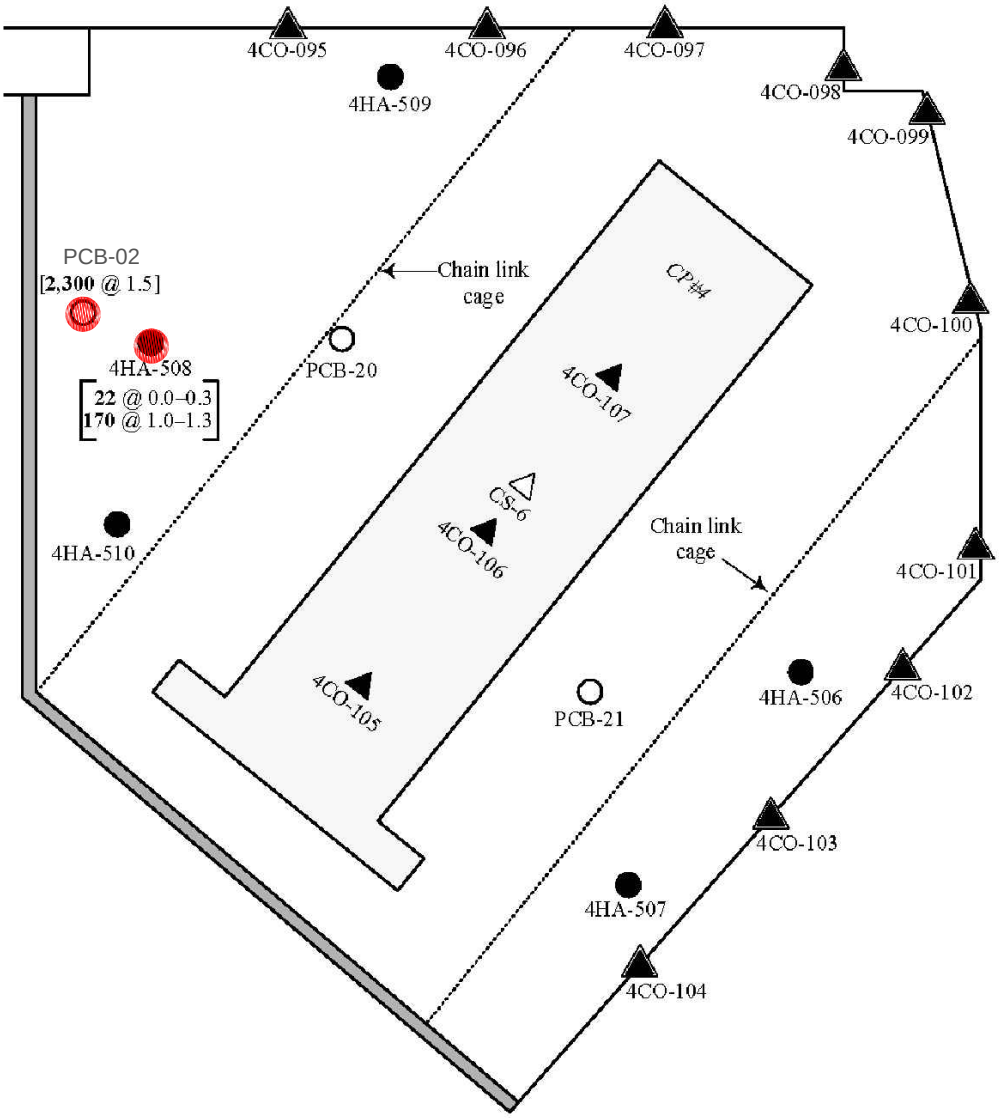
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREFS: --- ATTACHED IMAGES: Figure 4-13B Rev 2;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Figure 4-13A Rev 4.dwg --- PLOT DATE: June 14, 2017 - 3:34PM --- LAYOUT: Figure 4-13A



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

4CO-095	Concrete Sample Point -AEI
4CO-095	Concrete Sample Point on Wall -AEI
CS-6	Concrete Sample Point—GEI
3HX-004	Hexane Wipe Sample Point -AEI
4HA-507	Soil Sample Point -AEI
PCB-1	Soil Sample Point—GEI
[22]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.3a: PCB Area 4.3: Concrete, Hexane, and Soil Samples at Enclosures EN05 and EN06.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
2	RG	2/27/17	REVISED PCB-02 LABEL	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 4.3: Historic Sample Locations at EN06 / Capacitor Bank 4

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-13A**
DATE:	10/07/2016		

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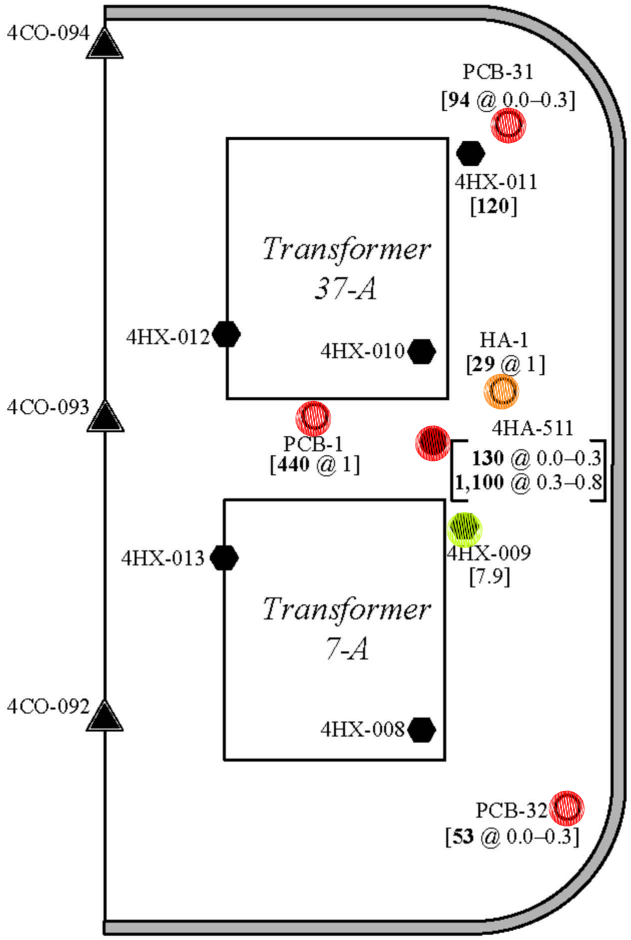
FILE NO.: Figure 4-13A Rev 4.dwg

EN05



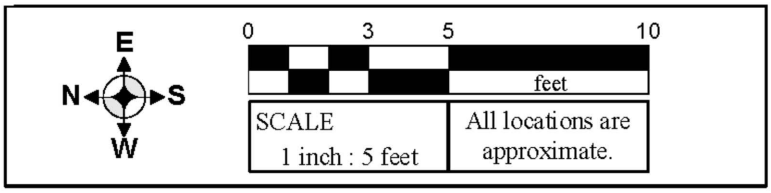
LEGEND

4CO-095	Concrete Sample Point -AEI
4CO-095	Concrete Sample Point on Wall -AEI
CS-6	Concrete Sample Point—GEI
3HX-004	Hexane Wipe Sample Point -AEI
4HA-507	Soil Sample Point -AEI
PCB-1	Soil Sample Point—GEI
[22]	PCB Criterion Exceedance in Milligrams Per Kilogram

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

SOURCE:
Figure A4.3a: PCB Area 4.3: Concrete, Hexane, and Soil Samples at Enclosures EN05 and EN06.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.



NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 4.3: Historic Concrete, Hexane Wipe, and Soil Sample Locations at Enclosure EN05

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-13B**
DATE:	10/07/2016		

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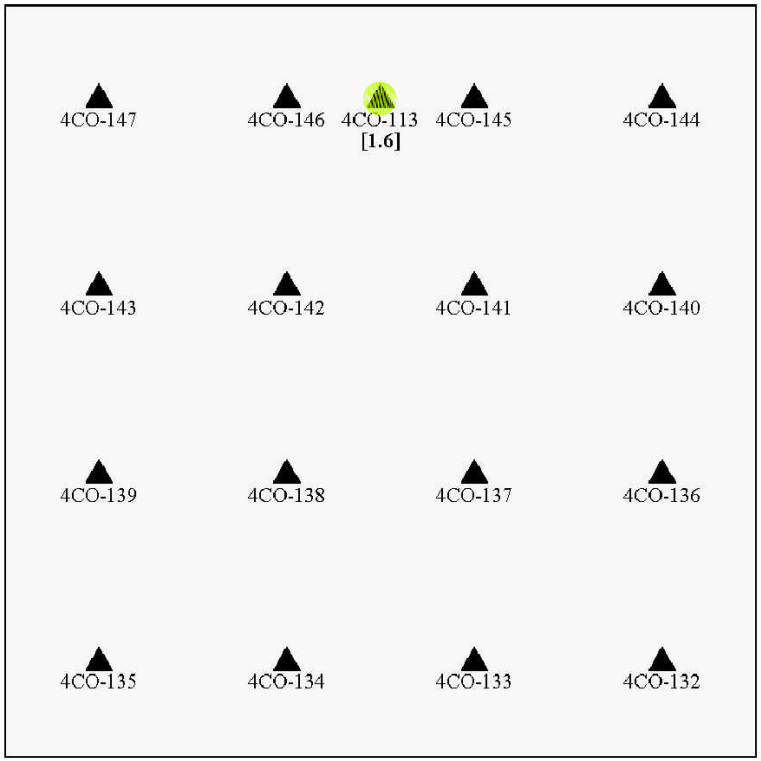
FILE NO.: Figure 4-13B Rev 4.dwg

Concrete Pad P13A



NOTE:
1. Pad P13A was buried beneath ca. 2–4" gravel, and was excavated at sample points.

SOURCE:
Figure A4.3b: PCB Area 4.3: Concrete Sample Points at Concrete Pad P13A.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

4CO-135 — Concrete Sample Point -AEI

[1.6] — PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 4.3: Historic Concrete Sample Locations at Concrete Pad P13A

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-13C**
DATE:	10/07/2016		

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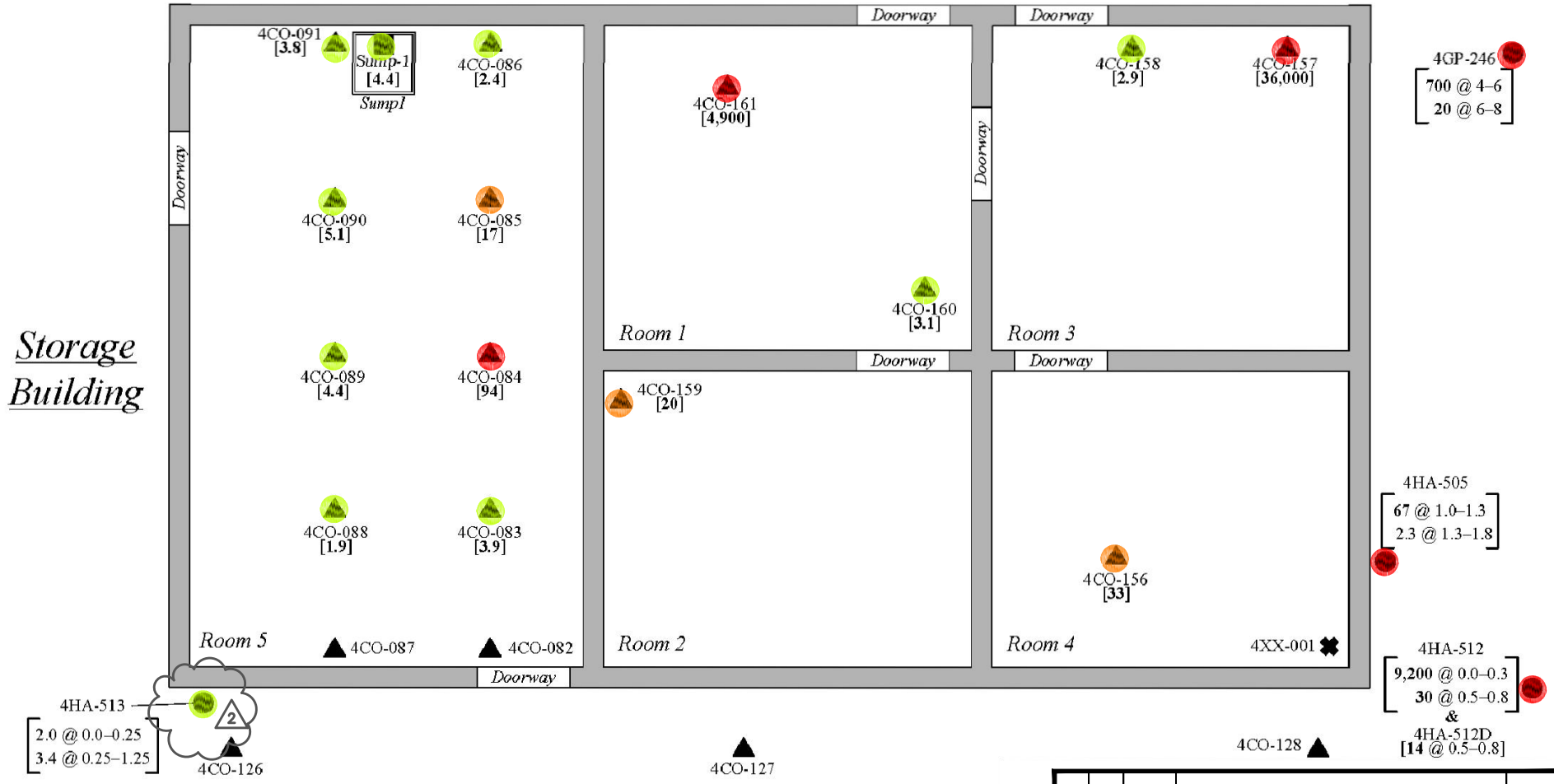
FILE NO.: Figure 4-13C Rev 4.dwg



LEGEND

4CO-087	Concrete Sample Point –AEI
4XX-001	Miscellaneous Sample Point (canister of orange powder) –AEI
Sump-1	Sediment Sample Point –AEI
4HA-513	Soil Sample Point –AEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.2: PCB Area 4.2: Concrete, Miscellaneous, Sediment and Soil Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.2: Historic Concrete, Miscellaneous, Sediment and Soil Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-14**
DATE:	10/07/2016		

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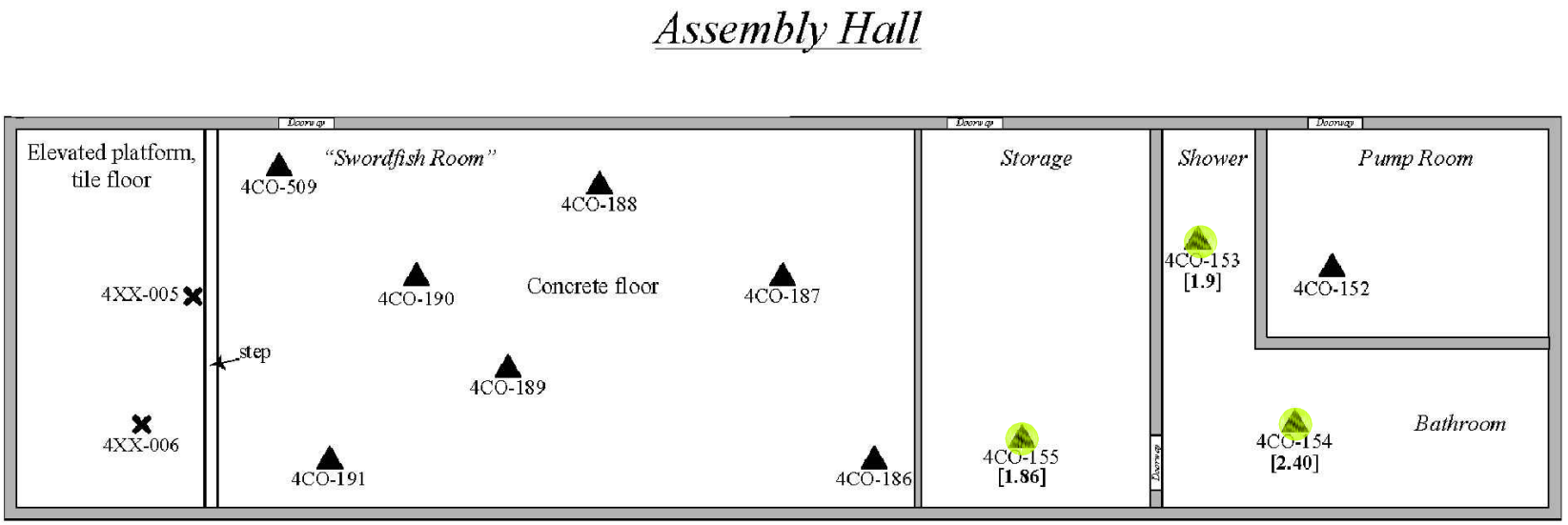
FILE NO.: Figure 4-14 & 5-12 Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

4CO-154	Concrete Sample Point – AEI
4XX-006	Miscellaneous Sample Point (Floor Tiles) – AEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.4: PCB Area 4.4: Concrete and Miscellaneous Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

E N S W

0 6 10 20 feet

SCALE 1 inch : 10 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.4: Historic Concrete and Miscellaneous Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-15**
DATE:	10/07/2016		

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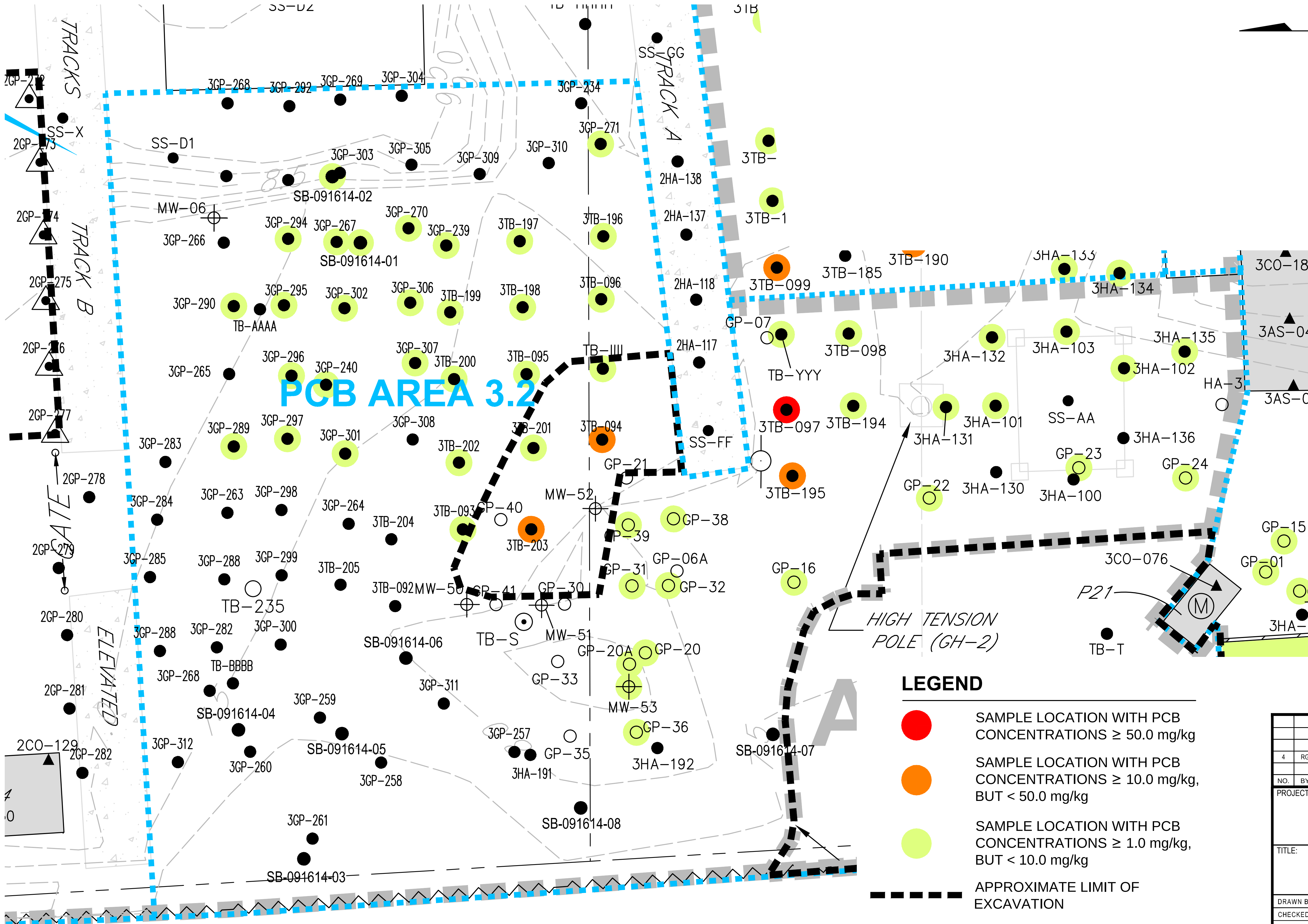
FILE NO.: Figure 4-15 & 5-13 Rev 4.dwg



LEGEND

- (red) SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- (orange) SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- (yellow-green) SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- (dashed line) APPROXIMATE LIMIT OF EXCAVATION

0 15' 30'
GRAPHIC SCALE

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12
(PCB AREA 3.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 4-16**
APPROVED BY:	MM		
DATE:	10/07/2016		

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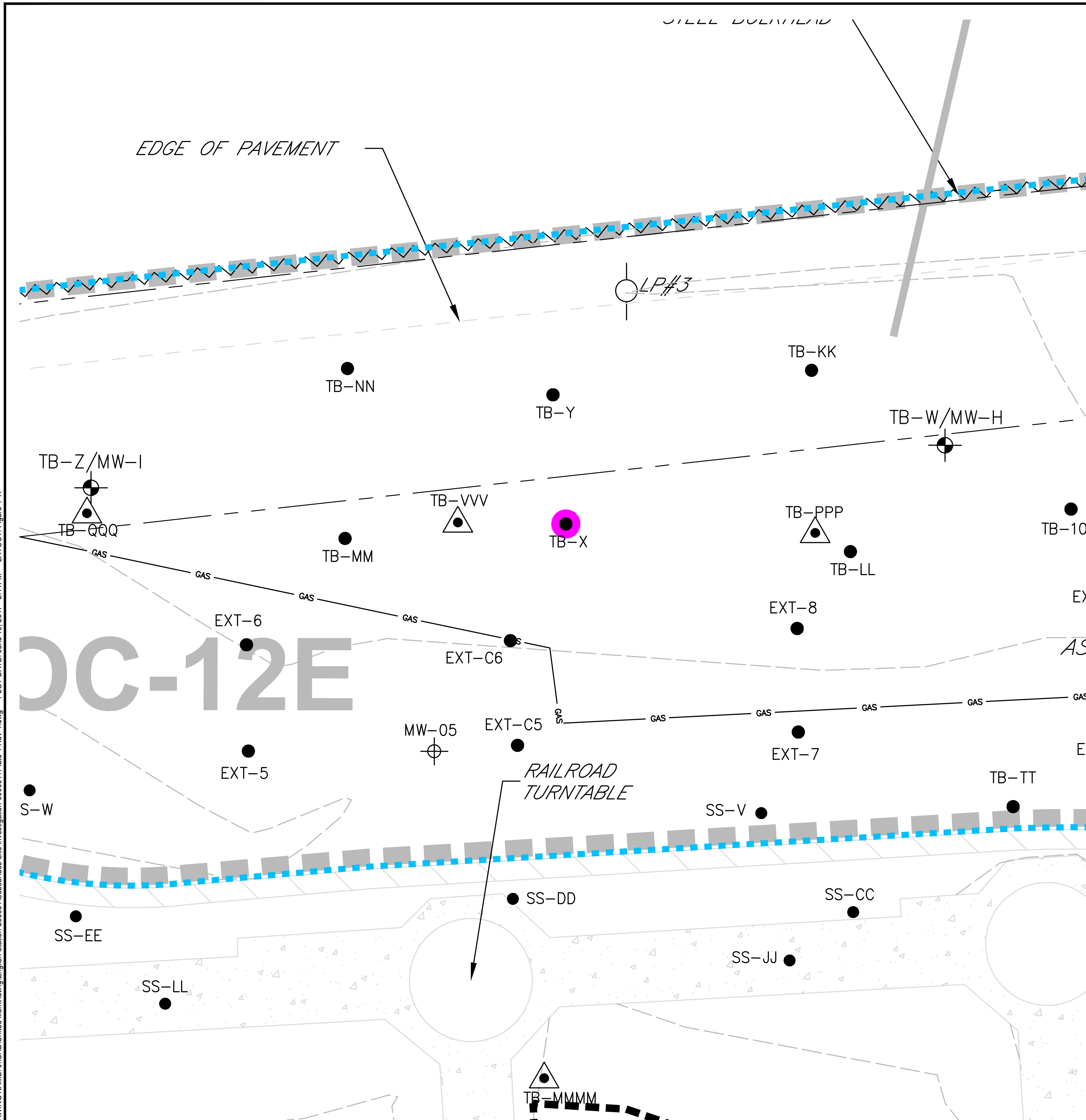
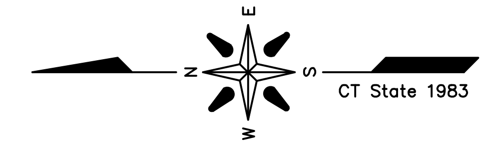
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:40PM --- LAYOUT: Figure 4-16

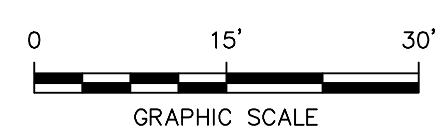




LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NOTE:
SEE FIGURES 4.2A & 4.2B FOR NOTES, LEGEND AND LOCATION.



NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12E
(PCB AREA 6.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM	**FIGURE 4-17**	
DATE:	10/07/2016		

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Phone: 860.298.9692
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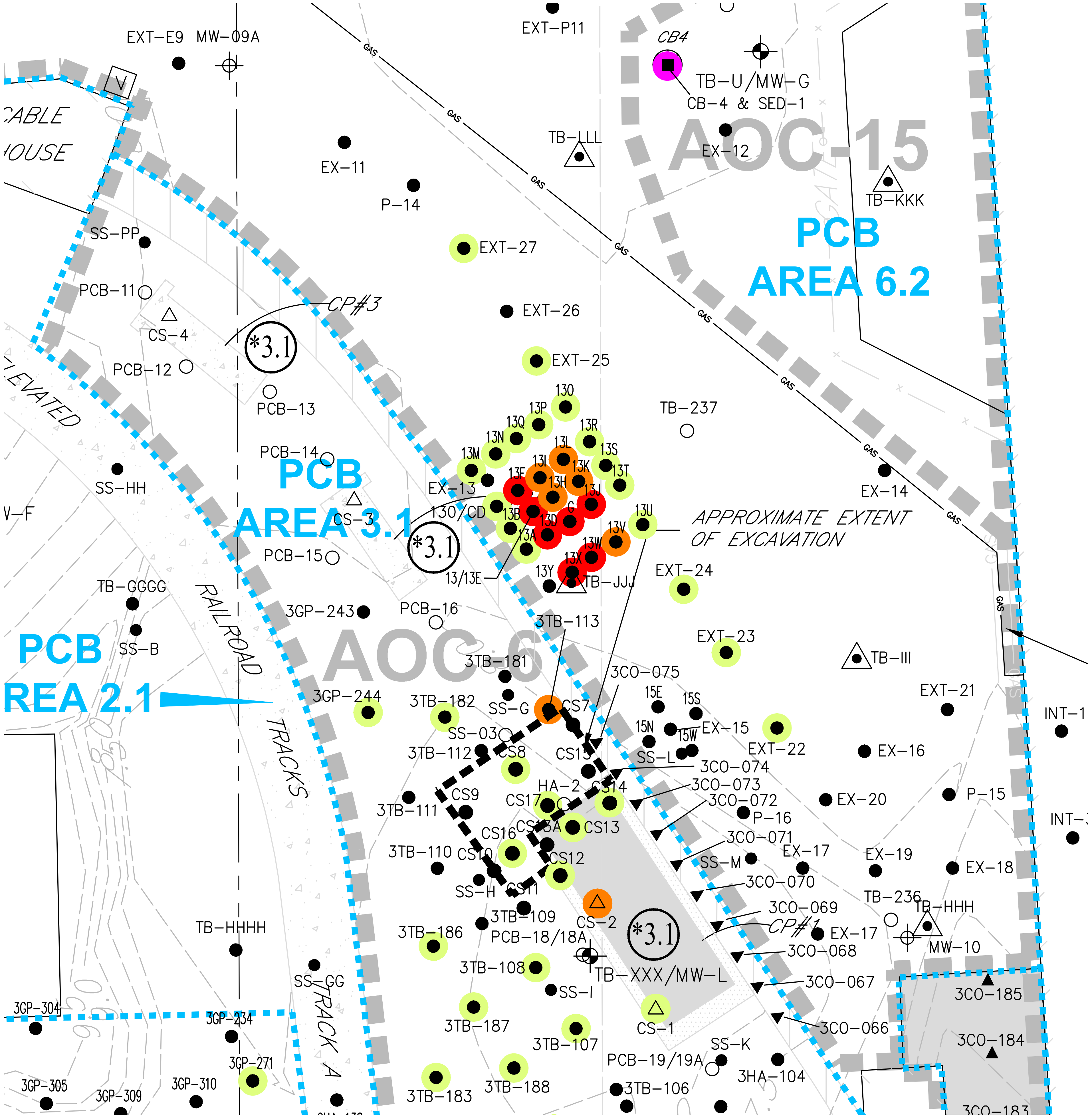
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:41PM --- LAYOUT: Figure 4-17



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4.2A & 4.2B FOR NOTES, LEGEND AND LOCATION.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12E
(PCB AREA 6.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		FIGURE 4-18
APPROVED BY:	MM		
DATE:	10/07/2016		

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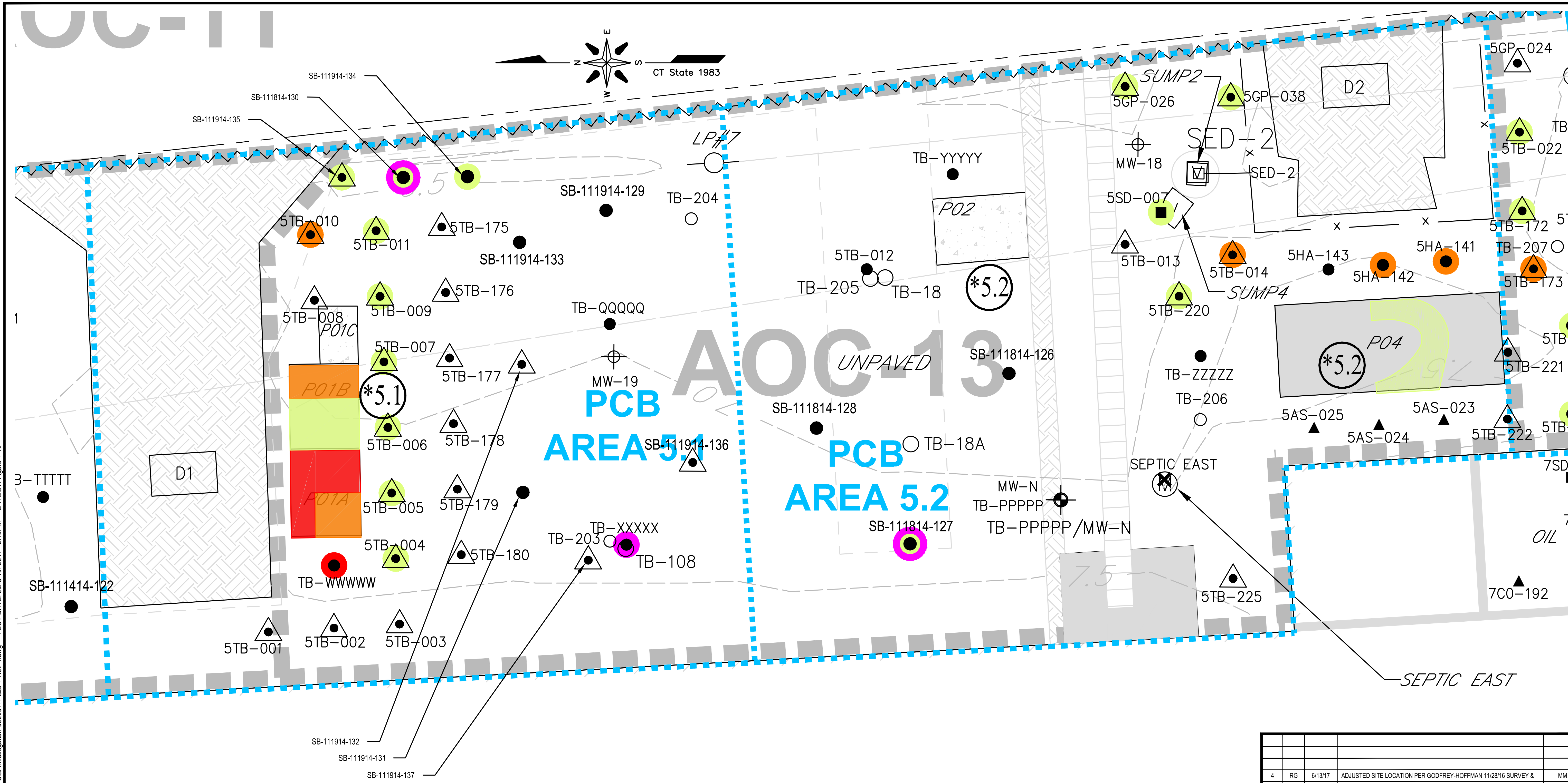
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT: UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE: AOC-13
(PCB AREAS 5.1 & 5.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		FIGURE 4-19
APPROVED BY:	MM		
DATE:	10/07/2016		

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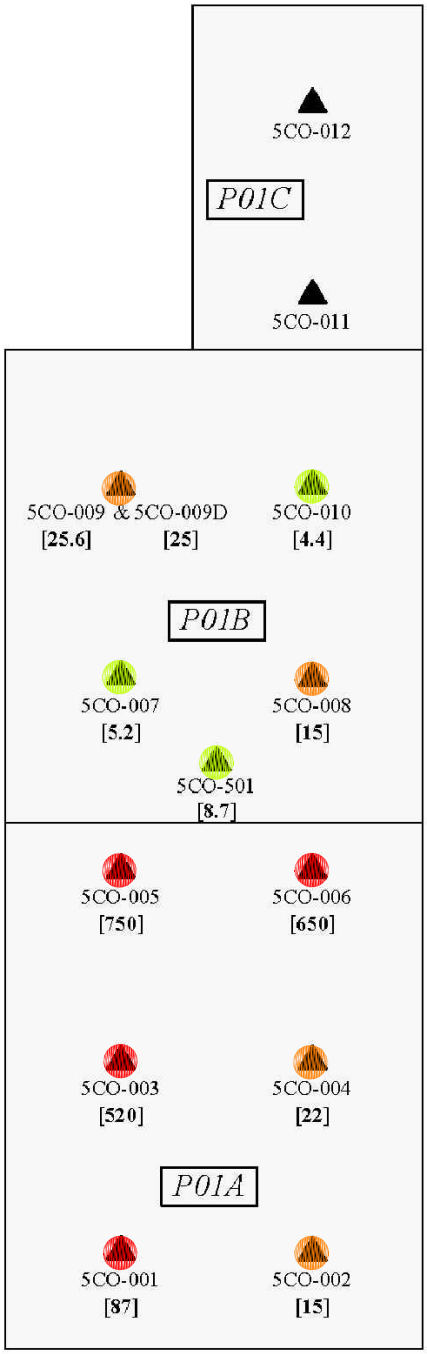
FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\Plate-1 Rev-4.dwg — PLOT DATE: June 19, 2017 - 2:45PM — LAYOUT: Figure 4-19

Concrete Pad P01

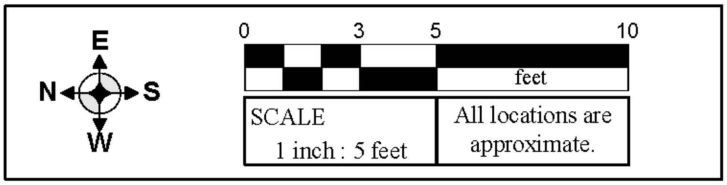


LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:
1. Concrete pad P01C is elevated. Pads P01A and P01B are at grade..

SOURCE:
Figure A5.1: PCB Area 5.1: Concrete Sample Points
at Concrete Pad P01.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.



LEGEND

5CO-011 — Concrete Sample Point -AEI

[87] — PCB Criterion Exceedance in Milligrams Per Kilogram

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.1: Historic Concrete Sample Locations at Concrete Pad P01

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-19A**
DATE:	10/07/2016		

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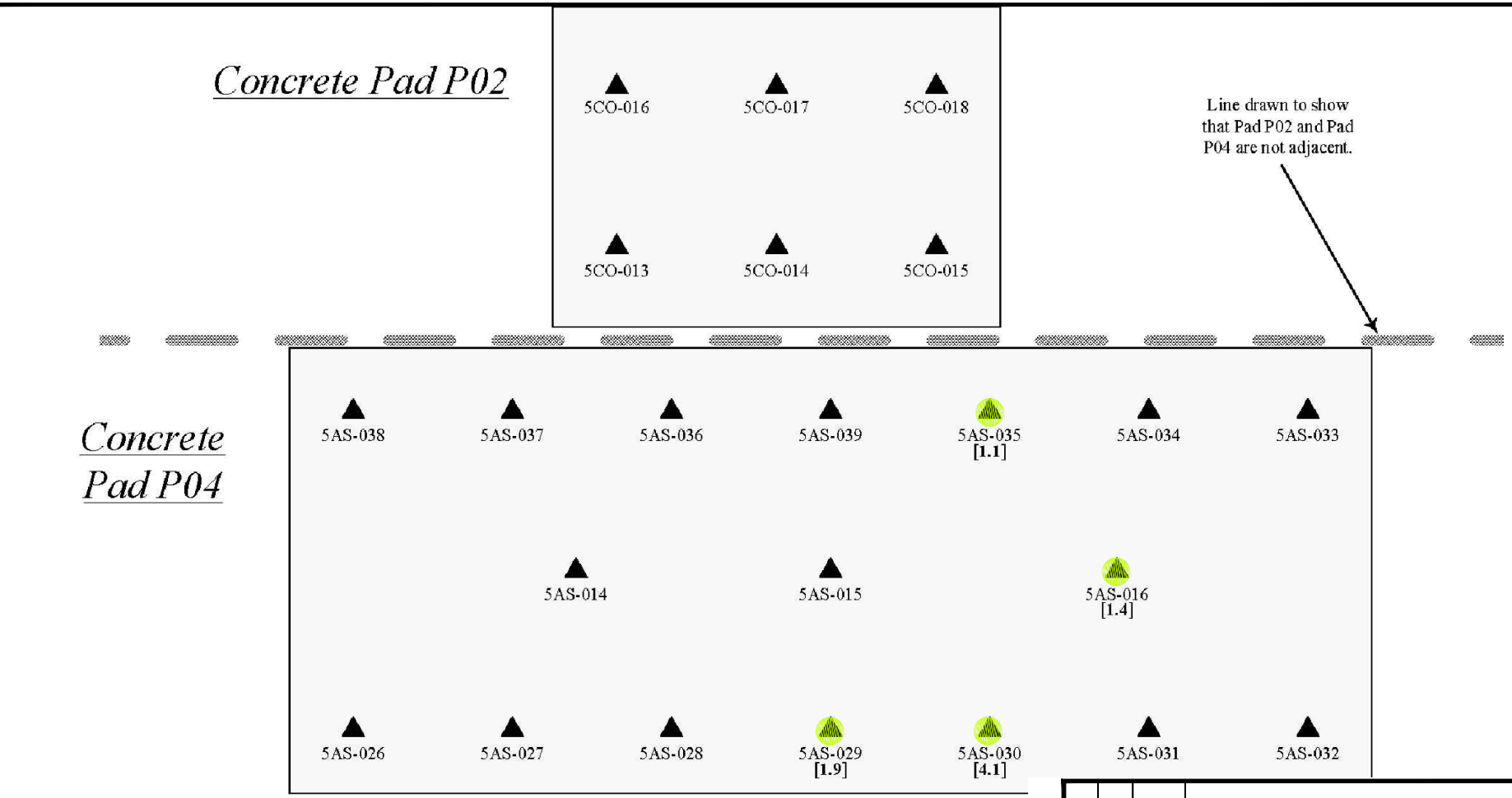
FILE NO.: Figure 4-19A Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:

1. Concrete pad P02 is elevated.

SOURCE:

Figure A5.2: PCB Area 5.2: Asphalt and Concrete Sample Points at Concrete Pads P02 and P04.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

5AS-026
[1.9]

Asphalt or Concrete Sample Point -AEI
PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.2: Historic Asphalt and Concrete Sample Locations at Concrete Pads P02 and P04

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-19B**
DATE:	10/07/2016		

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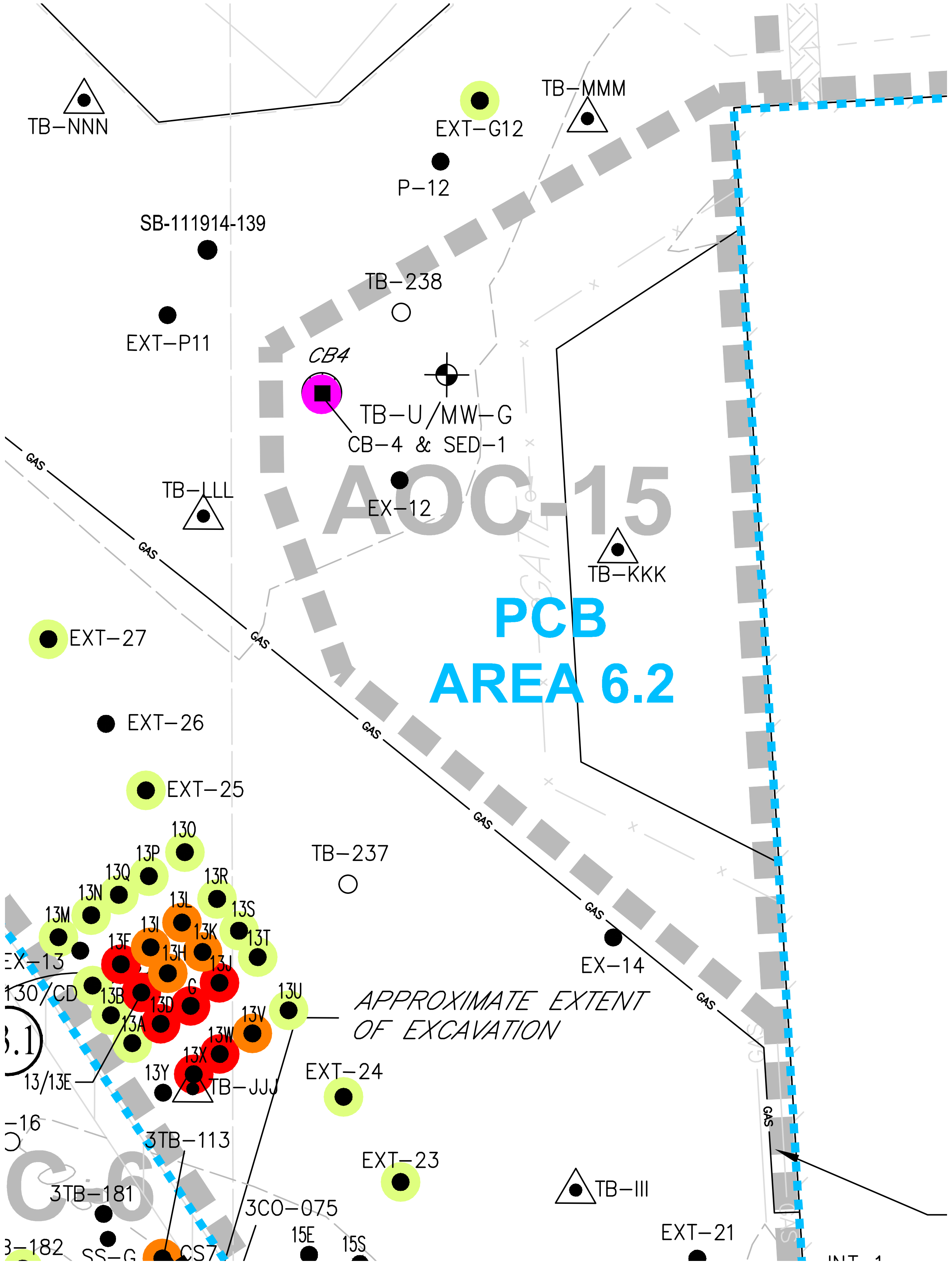
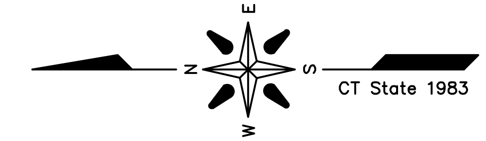
FILE NO.: Figure 4-19B Rev 4.dwg





LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT: **UNITED ILLUMINATING**
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE: **AOC-15**
(PCB AREA 6.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY: KDH	PROJ NO.: 263951-000001-000000
CHECKED BY: RG	**FIGURE 4-20**
APPROVED BY: MM	
DATE: 10/07/2016	

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Phone: 860.298.9692
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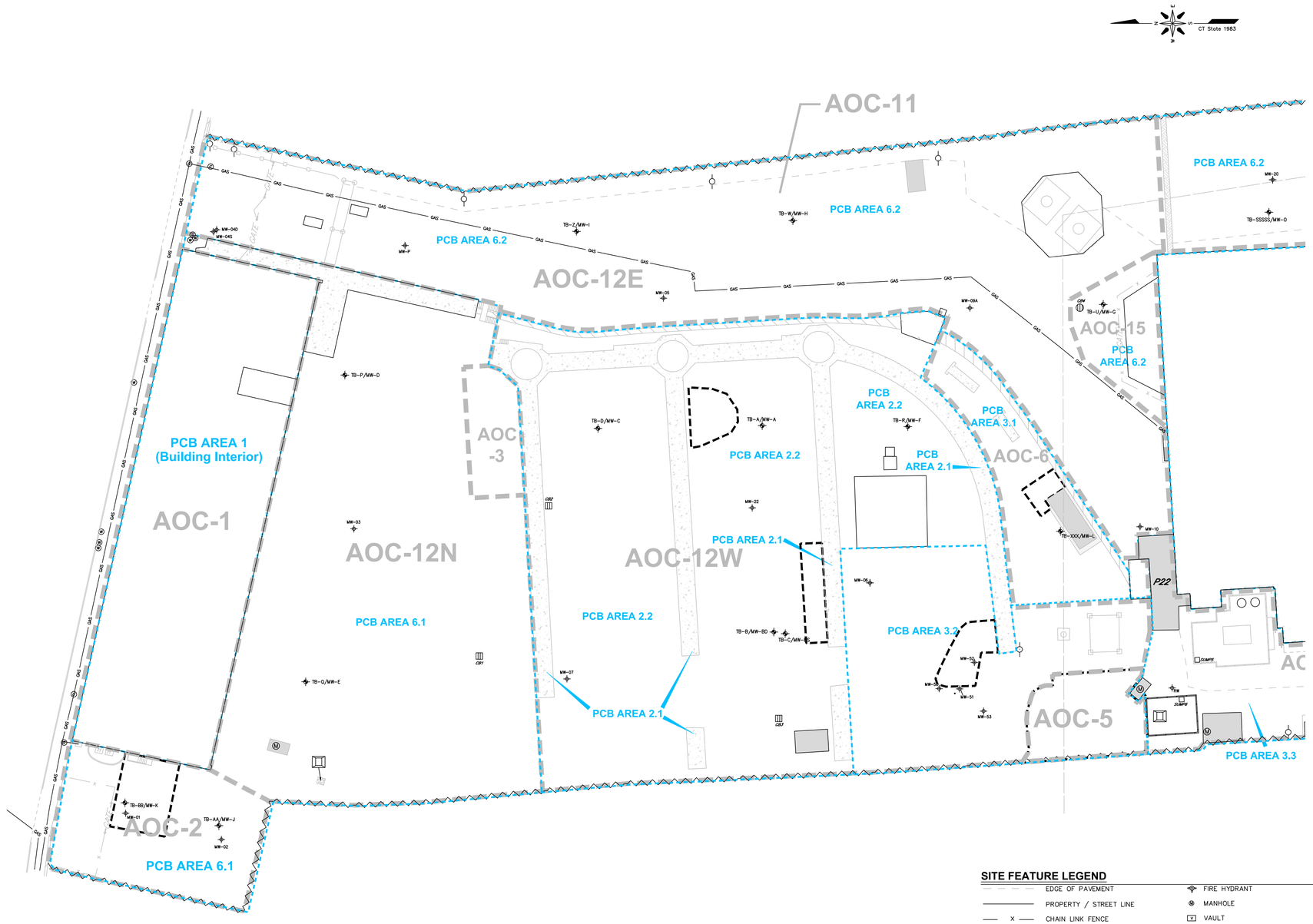
FILE NO.: Plate-1 Rev-4.dwg



General Notes for Figures 4.2A and 4.2B

[1] Several base maps were used for site features and Sample Point locations. These contain some discrepancies that have not been resolved. Locations are approximate.

[2] Not all structural details have been shown within buildings and enclosures.

[3] Most Sample Point locations were field-located and have not been surveyed. Not all Sample Points are mapped.

[4] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to June 21, 2002; scale 1 inch = 40 feet.

[5] These Figures are not intended for construction purposes.

PCB Investigation Areas

PCB Area 1: Station B Interior
- Area 1.1 Mezzanine and First Floor, except Annex III
- Area 1.2 Former Annex III
- Area 1.3 Basement

PCB Area 2: Former Coal Yard
- Area 2.1 Elevated Railroad Tracks and Foundations
- Area 2.2 Remainder of Former Coal Yard

PCB Area 3: Electrical Infrastructure and Excavation
- Area 3.1 Former Capacitor Area
- Area 3.2 United Illuminating Remediation Area
- Area 3.3 Transformer and Capacitor Area

PCB Area 4: Southwest Corner
- Area 4.1 Former Transformer Area
- Area 4.2 Storage and Shop Building Interior
- Area 4.3 Transformer and Former Capacitor Area
- Area 4.4 Assembly Hall Interior

PCB Area 5: Southeast Corner
- Area 5.1 Former Dumpster Area
- Area 5.2 Former Wastewater Treatment Area
- Area 5.3 Oil Pump House Area
- Area 5.4 Former Waste Oil Tank Area
- Area 5.5 Tower GH-4 Area
- Area 5.6 Former Storage Building Area
- Area 5.7 Fuel Oil Tank Area

PCB Area 6: Balance of Site, Except English Station
- Area 6.1 Former Station B Area
- Area 6.2 Mill River East Branch Area

PCB Area 7: English Station Interior

SITE FEATURE LEGEND

- EDGE OF PAVEMENT
- PROPERTY / STREET LINE
- CHAIN LINK FENCE
- GUARDRAIL
- NEW BULKHEAD
- GAS LINE
- OVERHEAD WIRE
- CONCRETE WALL
- APPROXIMATE EXTENT OF PREVIOUS EXCAVATION
- PCB AREA BOUNDARY
- AOC BOUNDARY
- PIPE TRENCH
- EXISTING BUILDING
- CONCRETE PAD
- CONCRETE PAD (ELEVATED)
- ASPHALT APRON
- RECENT FILL
- WATER GATE
- GAS GATE
- ROUND CATCH BASIN
- RECTANGULAR CATCH BASIN
- UTILITY POLE
- FIRE HYDRANT
- MANHOLE
- VAULT
- HATCHWAY
- INTAKE CHANNEL
- DISCHARGE CHANNEL
- TRANSFORMER
- CIRCUIT BREAKER
- CATHODIC BULKHEAD PROTECTION DEVICE
- SOIL SAMPLE FROM GROUND WATER MONITORING WELL
- SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

SOURCE:
MAP TITLED "FIGURE 3N, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-NORTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.

NO.	BY	DATE	REVISION	APP'D
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
1	RG	1/9/17	FIGURE ADDED TO SCOPE OF STUDY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
HISTORIC MONITORING WELL LOCATIONS - PARCEL A

DRAWN BY:	KDH	PROJ. NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	ST		**FIGURE 4-21A**
DATE:	10/07/2016		

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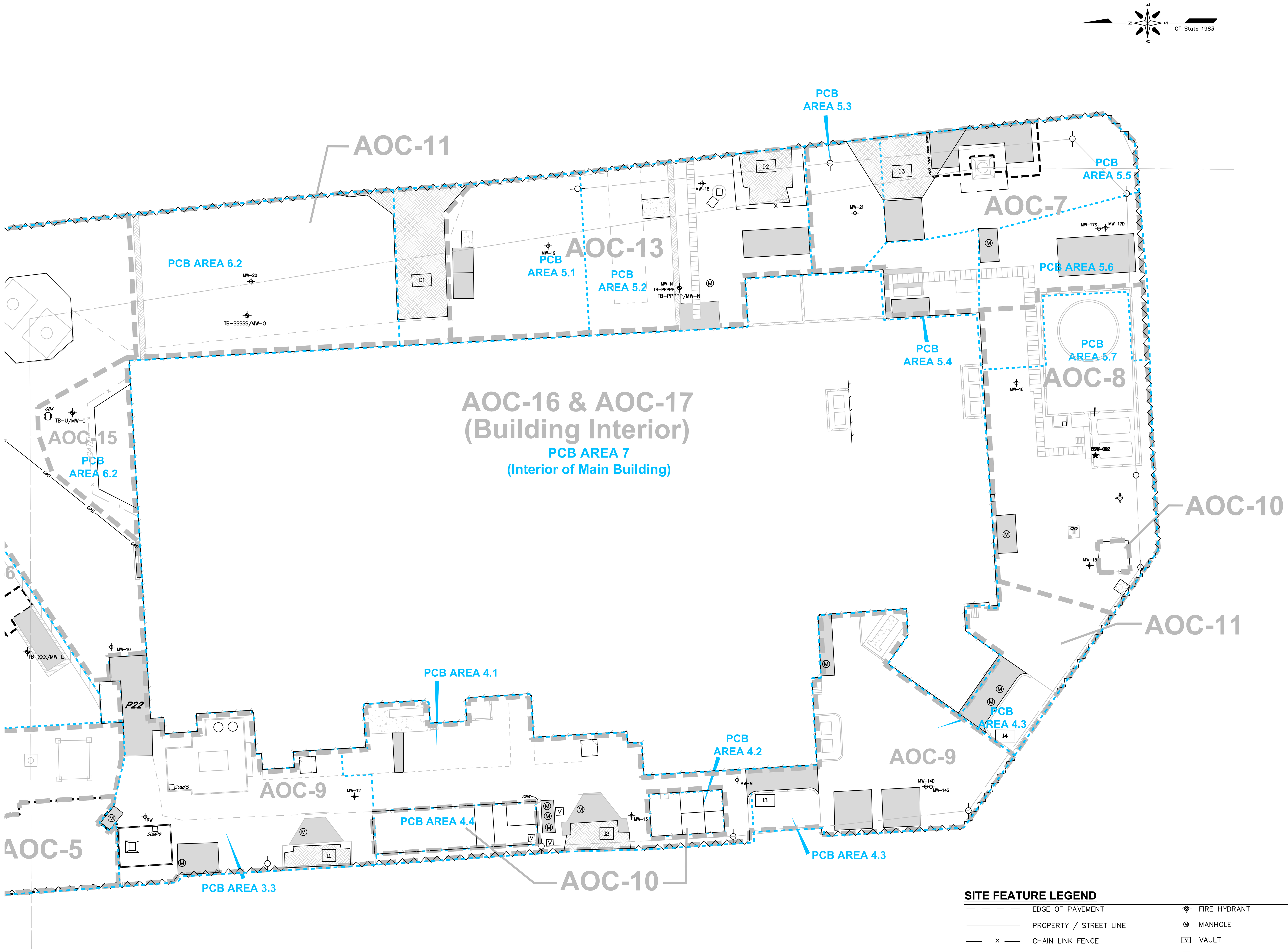
FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg — PLOT DATE: June 13, 2017 - 3:52PM — LAYOUT: Figure 4-21A
XREF: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\Xrefs\Base Map.dwg



General Notes for Figures 4.21A and 4.21B

[1] Several base maps were used for site features and Sample Point locations. These contain some discrepancies that have not been resolved. Locations are approximate.

[2] Not all structural details have been shown within buildings and enclosures.

[3] Most Sample Point locations were field-located and have not been surveyed. Not all Sample Points are mapped.

[4] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to June 21, 2002; scale 1 inch = 40 feet.

[5] These Figures are not intended for construction purposes.

PCB Investigation Areas

PCB Area 1: Station B Interior
- Area 1.1 Mezzanine and First Floor, except Annex III
- Area 1.2 Former Annex III
- Area 1.3 Basement

PCB Area 2: Former Coal Yard
- Area 2.1 Elevated Railroad Tracks and Foundations
- Area 2.2 Remainder of Former Coal Yard

PCB Area 3: Electrical Infrastructure and Excavation
- Area 3.1 Former Capacitor Area
- Area 3.2 United Illuminating Remediation Area
- Area 3.3 Transformer and Capacitor Area

PCB Area 4: Southwest Corner
- Area 4.1 Former Transformer Area
- Area 4.2 Storage and Shop Building Interior
- Area 4.3 Transformer and Former Capacitor Area
- Area 4.4 Assembly Hall Interior

PCB Area 5: Southeast Corner
- Area 5.1 Former Dumpster Area
- Area 5.2 Former Wastewater Treatment Area
- Area 5.3 Oil Pump House Area
- Area 5.4 Former Waste Oil Tank Area
- Area 5.5 Tower GH-4 Area
- Area 5.6 Former Storage Building Area
- Area 5.7 Fuel Oil Tank Area

PCB Area 6: Balance of Site, Except English Station
- Area 6.1 Former Station B Area
- Area 6.2 Mill River East Branch Area

PCB Area 7: English Station Interior

SITE FEATURE LEGEND

EDGE OF PAVEMENT
PROPERTY / STREET LINE
CHAIN LINK FENCE
GUARDRAIL
NEW BULKHEAD
GAS LINE
OVERHEAD WIRE
CONCRETE WALL
APPROXIMATE EXTENT OF PREVIOUS EXCAVATION
PCB AREA BOUNDARY
AOC BOUNDARY
PIPE TRENCH
EXISTING BUILDING
CONCRETE PAD
CONCRETE PAD (ELEVATED)
ASPHALT APRON
RECENT FILL
WATER GATE
GAS GATE
ROUND CATCH BASIN
RECTANGULAR CATCH BASIN
UTILITY POLE
FIRE HYDRANT
MANHOLE
VAULT
HATCHWAY
INTAKE CHANNEL
DISCHARGE CHANNEL
TRANSFORMER
CIRCUIT BREAKER
CATHODIC BULKHEAD PROTECTION DEVICE
MW-H / TB-W SOIL SAMPLE FROM GROUND WATER MONITORING WELL
MW-01 SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

SOURCE:
MAP TITLED "FIGURE 3S, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-SOUTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.

NO.	BY	DATE	REVISION	APP'D.
4	RG	3/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
1	RG	1/9/17	FIGURE ADDED TO SCOPE OF STUDY	MM

PROJECT: UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE: HISTORIC MONITORING WELL LOCATIONS - PARCEL B

DRAWN BY:	KDH	PROJ. NO.:	263951-000001-000000
CHECKED BY:	RG	FIGURE 4-21B	
APPROVED BY:	ST		
DATE:	10/07/2016		

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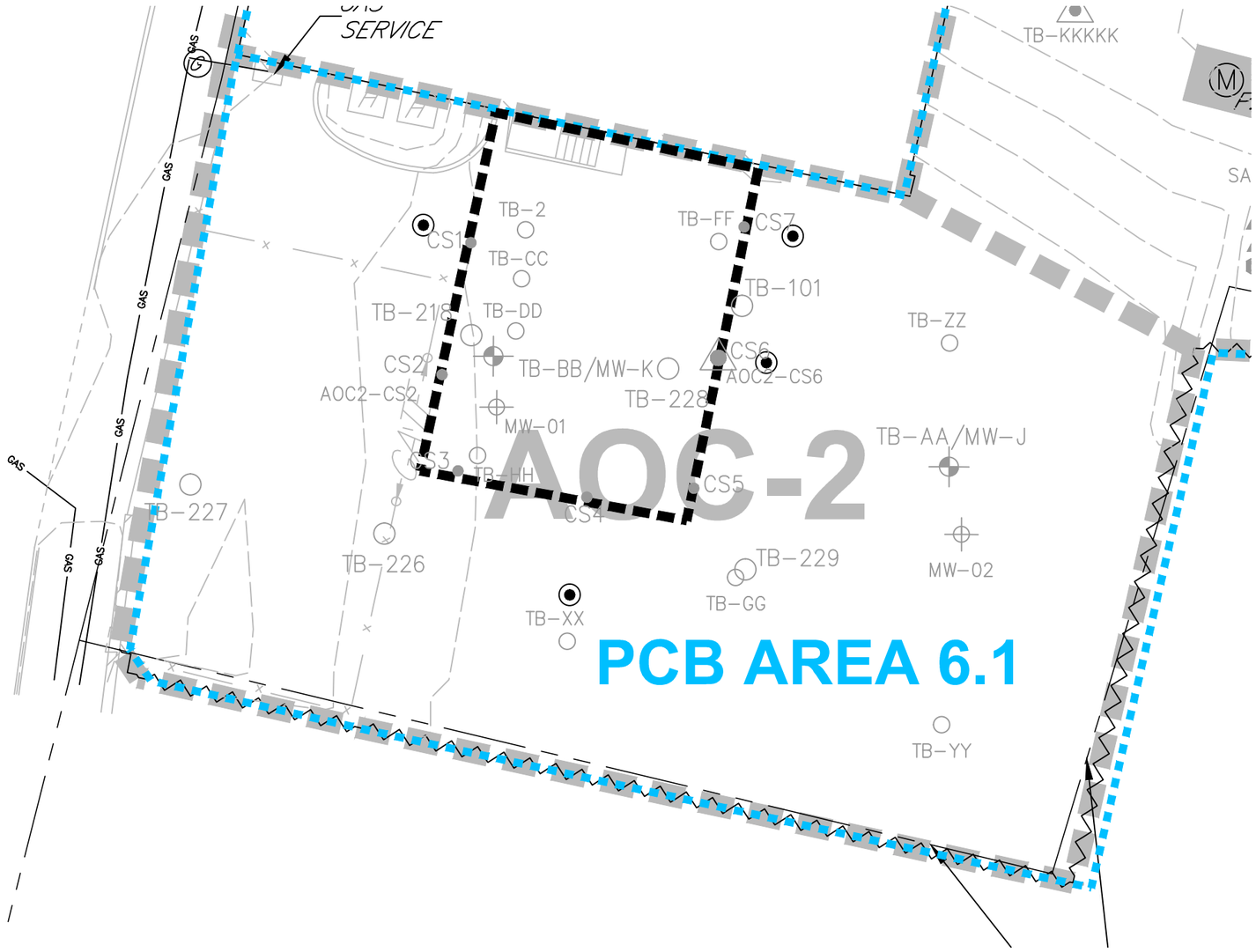
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

CT State 1983

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-2
(PCB AREA 6.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-1**
APPROVED BY:	MM		
DATE:	01/04/2017		

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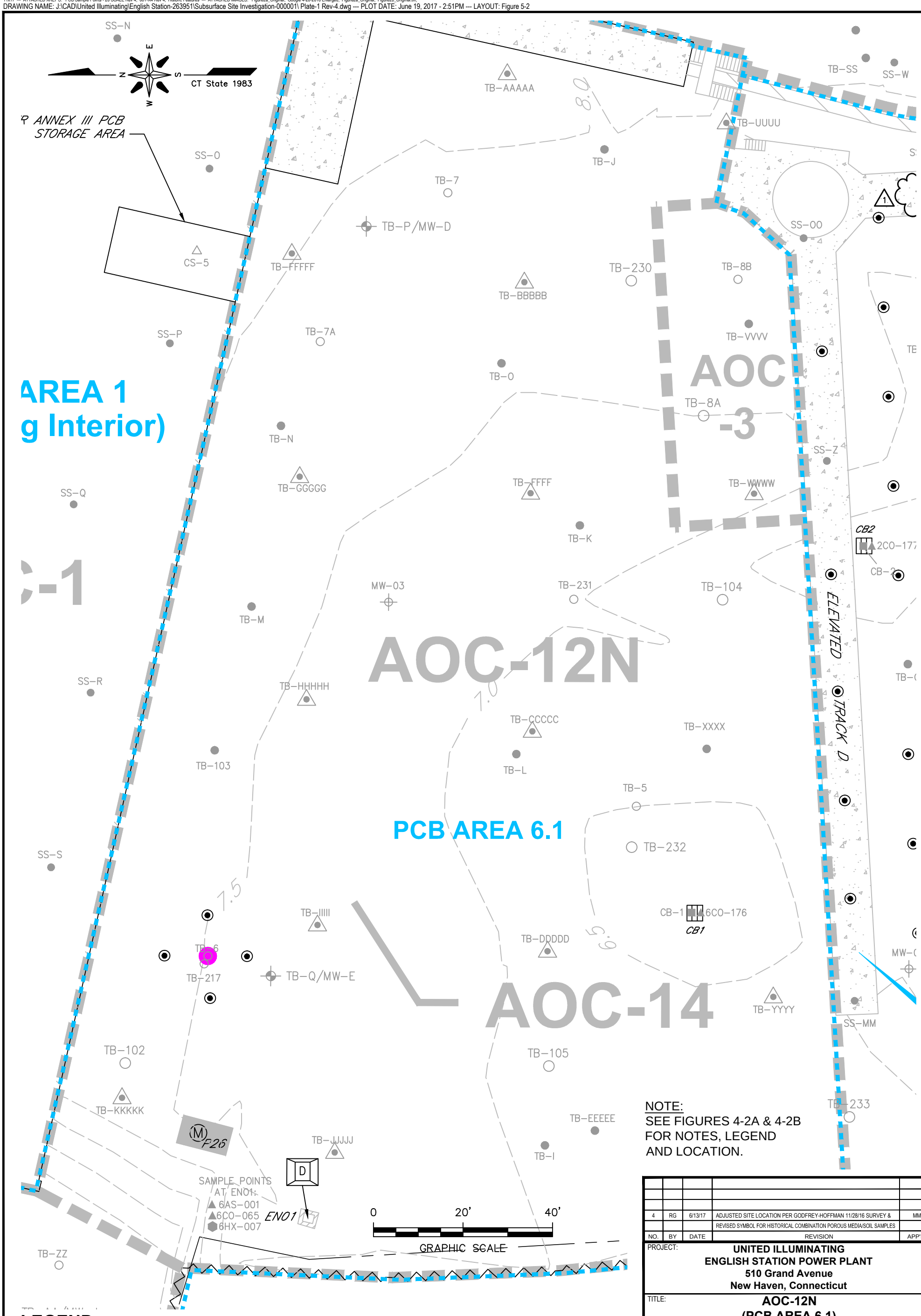
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:51PM --- LAYOUT: Figure 5-2



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE /ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ◉ PROPOSED BORING/SOIL SAMPLE LOCATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12N
(PCB AREA 6.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-2**
DATE:	10/07/2016		

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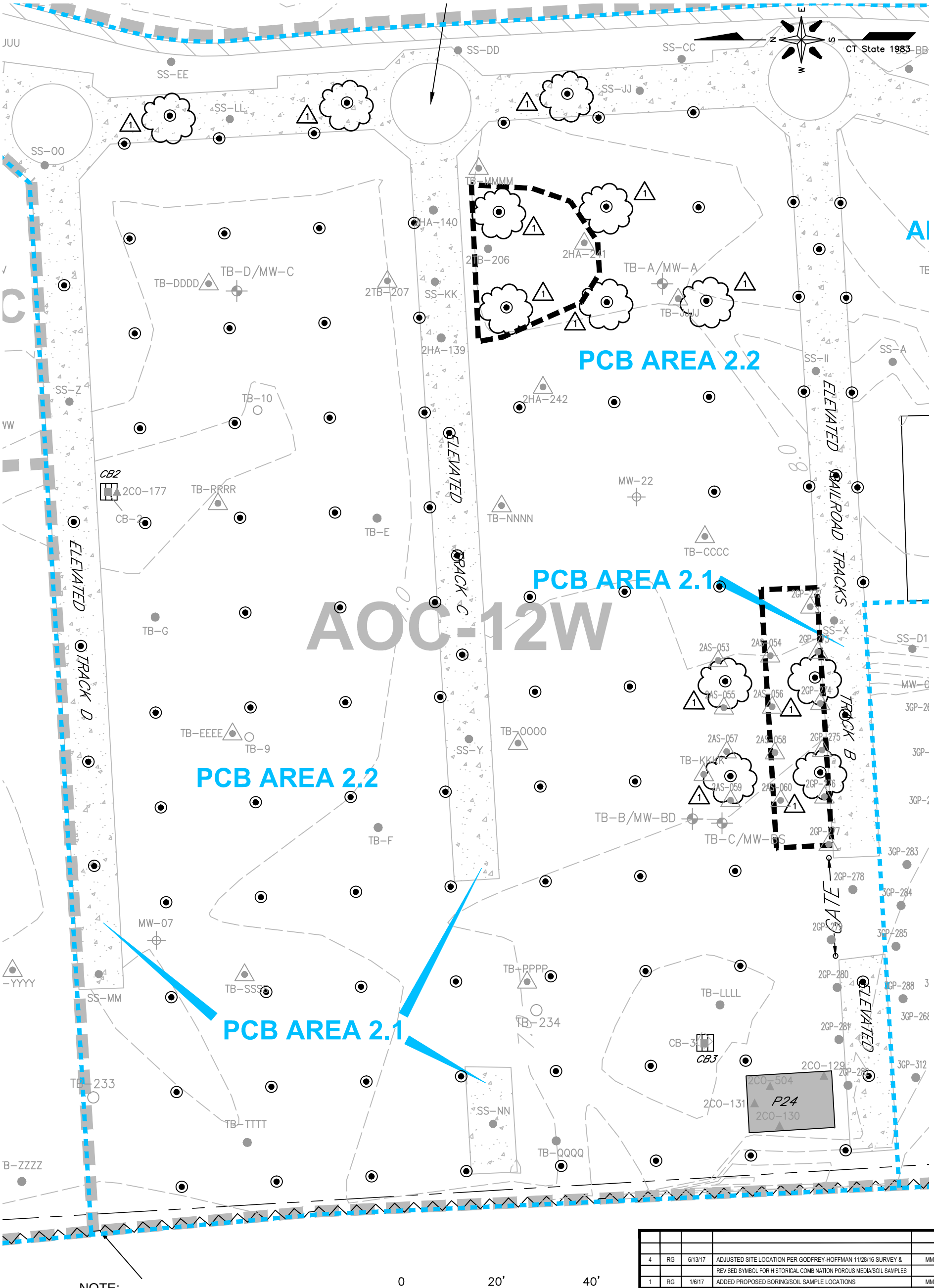
FILE NO.: Plate-1 Rev-4.dwg



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- APPROXIMATE LIMIT OF EXCAVATION
- PROPOSED CONCRETE /ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
1	RG	1/6/17	ADDED PROPOSED BORING/SOIL SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12W
(PCB AREAS 2.1 & 2.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-3**
DATE:	10/07/2016		

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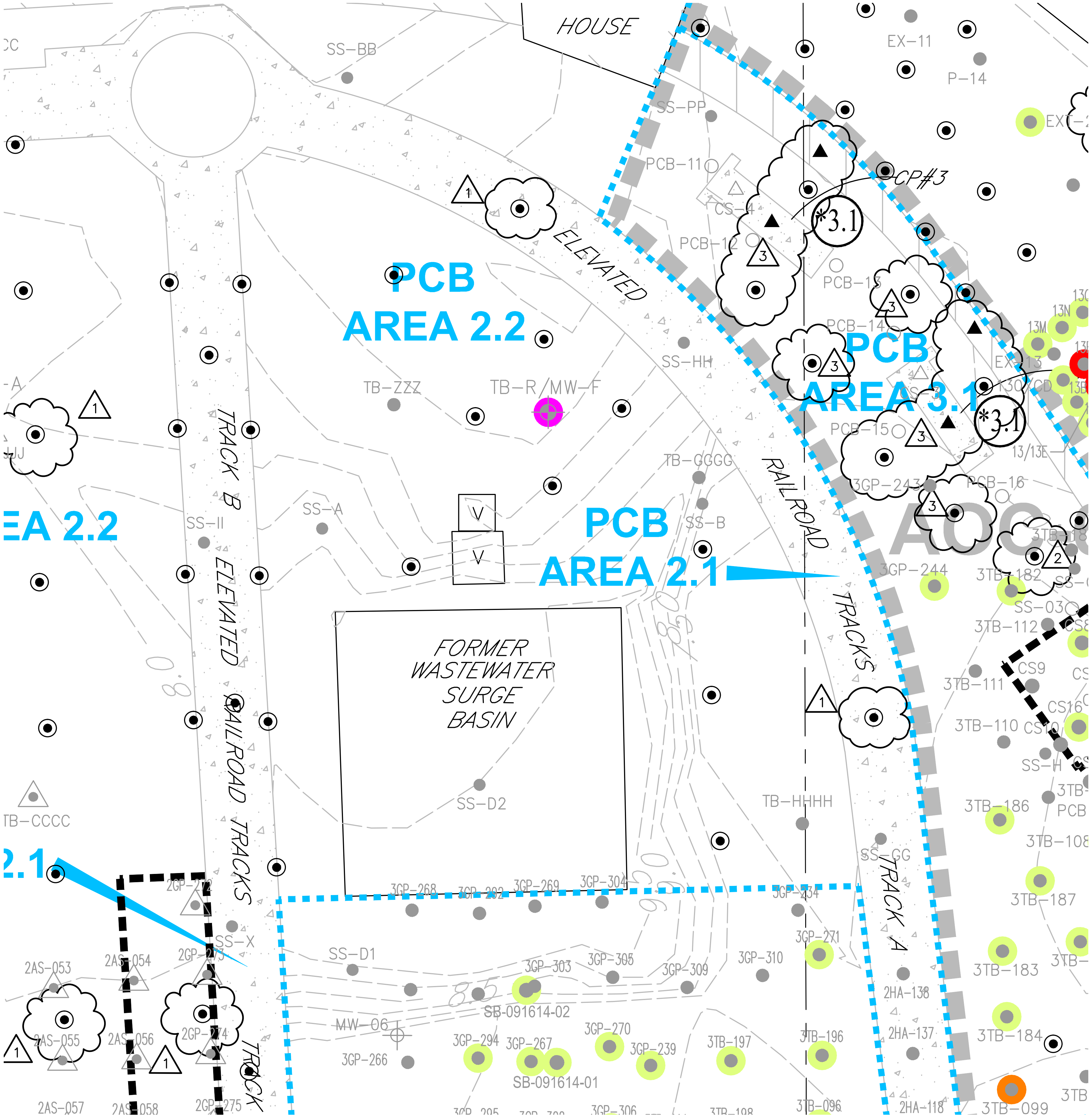
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED BORING & CONC/ASPHALT SAMPLE LOCATIONS	MM
1	RG	1/6/17	ADDED PROPOSED BORING/SOIL SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12W (PCB AREAS 2.1 & 2.2) PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-4**
APPROVED BY:	MM		
DATE:	10/07/2016		

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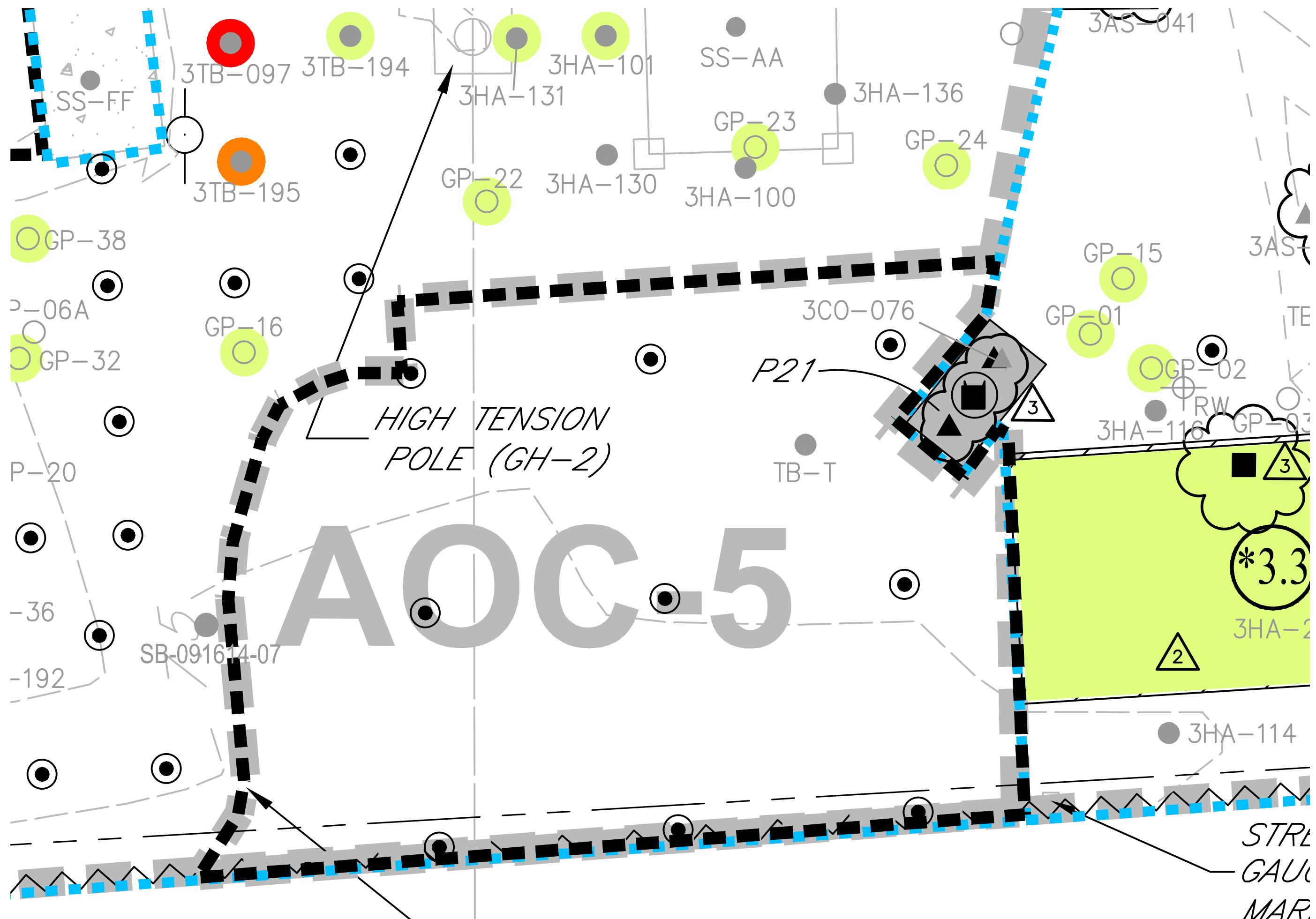
FILE NO.: Plate-1 Rev-4.dwg

CT State 1983



APPROXIMATE EXTENT OF EXCAVATION
(NOTE THAT NUMEROUS SOIL SAMPLES WERE COLLECTED PRIOR TO AND DURING THE EXCAVATION IN AOC 5. THE SAMPLE LOCATIONS ARE NOT SHOWN HEREIN AS THE SOILS WERE EXCAVATED.)

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
3	RG	5/22/17	ADDED PROPOSED BORING & CONC/ASPHALT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED BUILDING I.D. AND NOTE	MM

PROJECT: **UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut**

TITLE: **AOC-5 PROPOSED SAMPLE LOCATIONS**

DRAWN BY: KDH
CHECKED BY: RG
APPROVED BY: MM
DATE: 10/07/2016
PROJ NO.: 263951-000001-000000

FIGURE 5-5

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FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\Plate-1 Rev-4.dwg — PLOT DATE: June 19, 2017 - 8:47AM — LAYOUT: Figure 5-5

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:57PM --- LAYOUT: Figure 5-6

CT State 1983

AOC-15

PCB AREA 6.2

PCB AREA 3.1

PCB AREA 2.1

AOC-6

CABLE HOUSE

ELEVATED RAILROAD TRACKS

TRACK A

GAS

CP#3

CP#1

*3.1

APPROXIMATE EXTENT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- APPROXIMATE LIMIT OF EXCAVATION
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED BORING & CONC/ASPHALT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED BORING LOCATIONS	MM
1	RG	1/6/17	ADDED PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-6
(PCB AREA 3.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-6**
DATE:	10/07/2016		

TRC
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Phone: 860.298.9692
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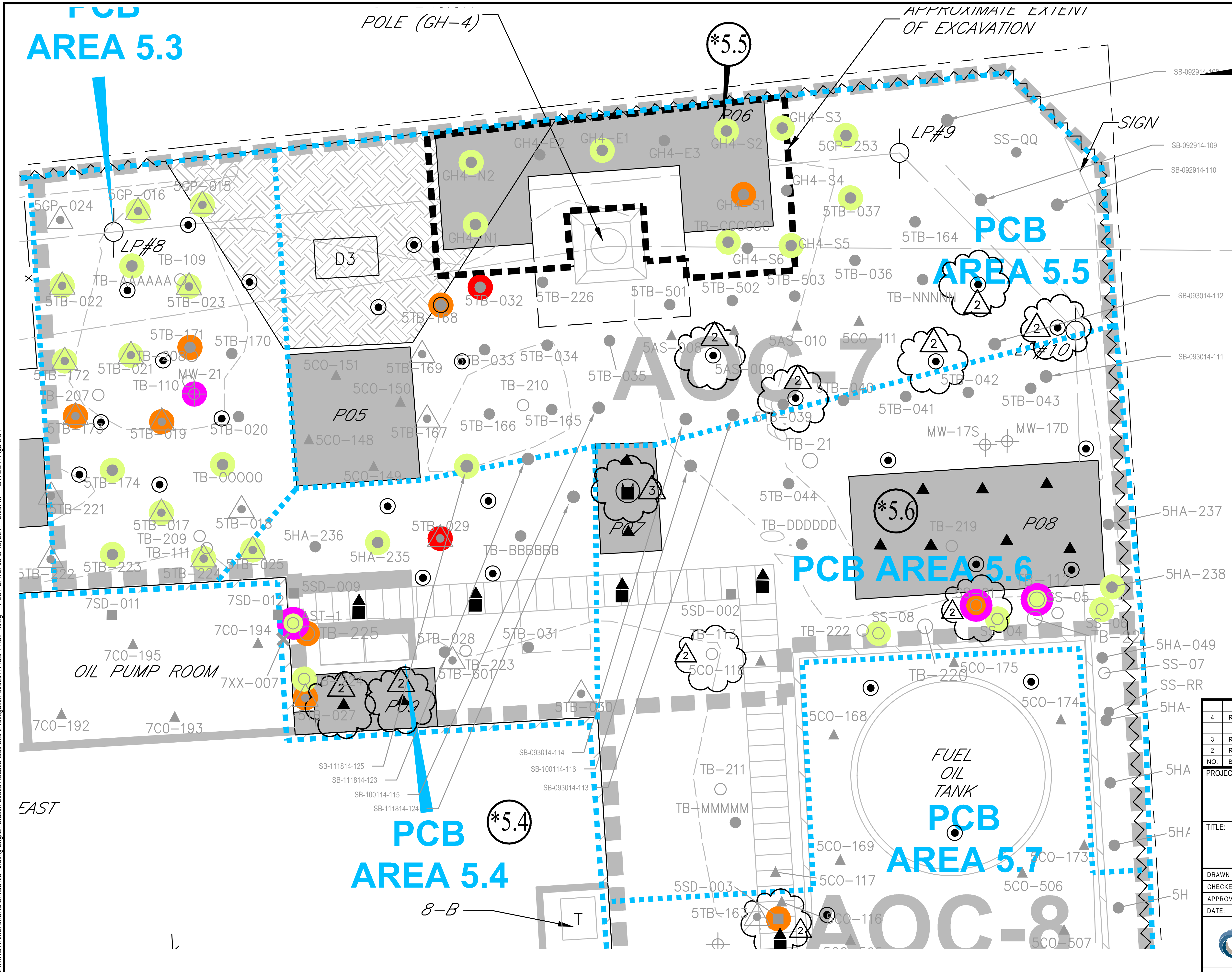
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE	MM
2	RG	2/27/17	ADDED PROP. BORINGS, CONC. SAMPLES AND TPH/ETPH HIGHLIGHTING	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-7
(PCB AREAS 5.3, 5.4, 5.5, & 5.6)
PROPOSED SAMPLE LOCATIONS

DRAWN BY: KDH	PROJ NO.: 263951-000001-000000
CHECKED BY: RG	**FIGURE 5-7**
APPROVED BY: MM	
DATE: 10/07/2016	

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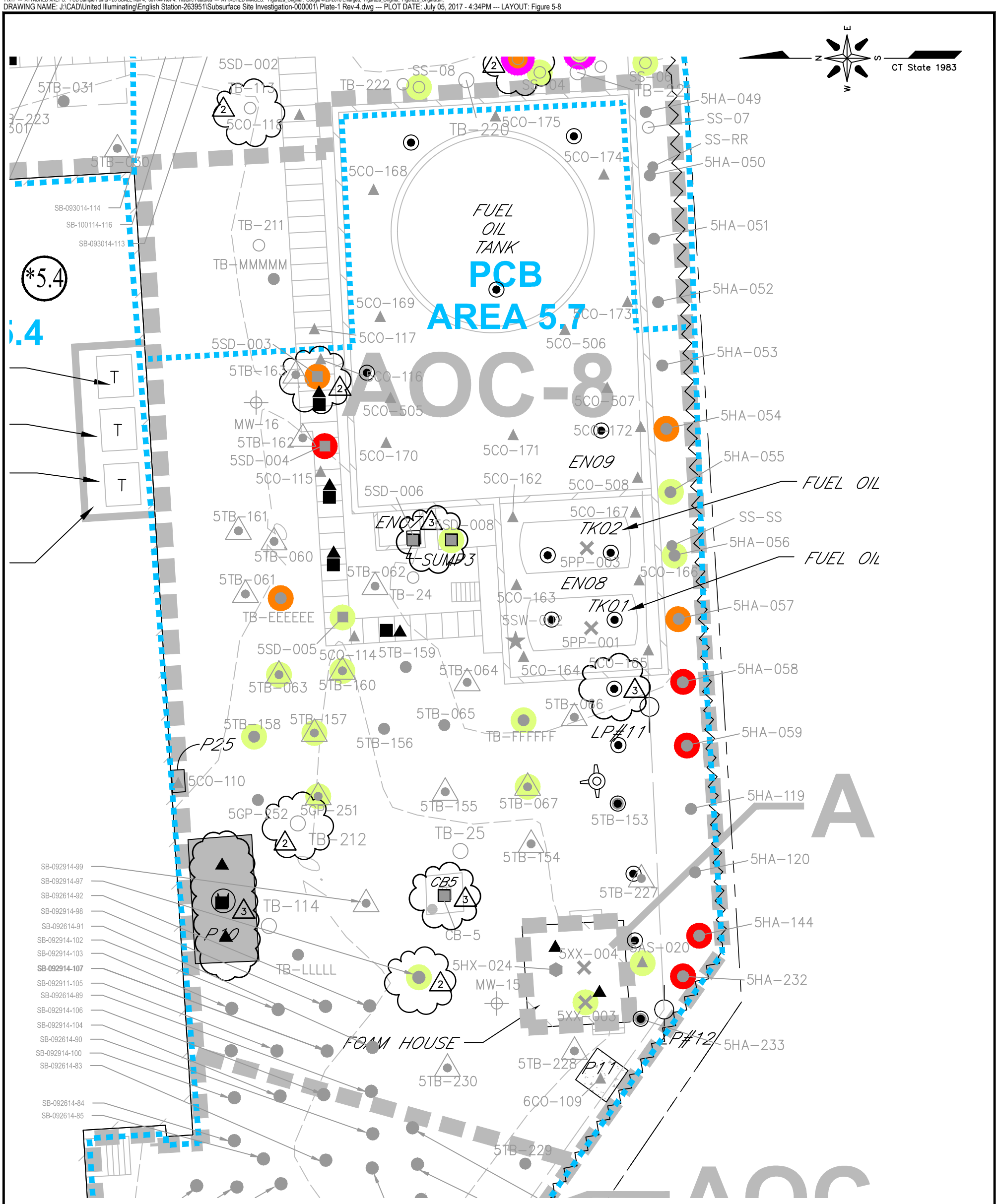
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:59PM --- LAYOUT: Figure 5-7

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: July 05, 2017 - 4:34PM --- LAYOUT: Figure 5-8



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROP. CONC/ASPHALT, BORING & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT & MOVED PCB HIGHLIGHT TO SSD-003 AND	MM
			ADDED SAMPLE TB-212 & RENAMED SAMPLE TB-213 TO TB-113	

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-8
(PCB AREA 5.7)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-8**
DATE:	10/07/2016		

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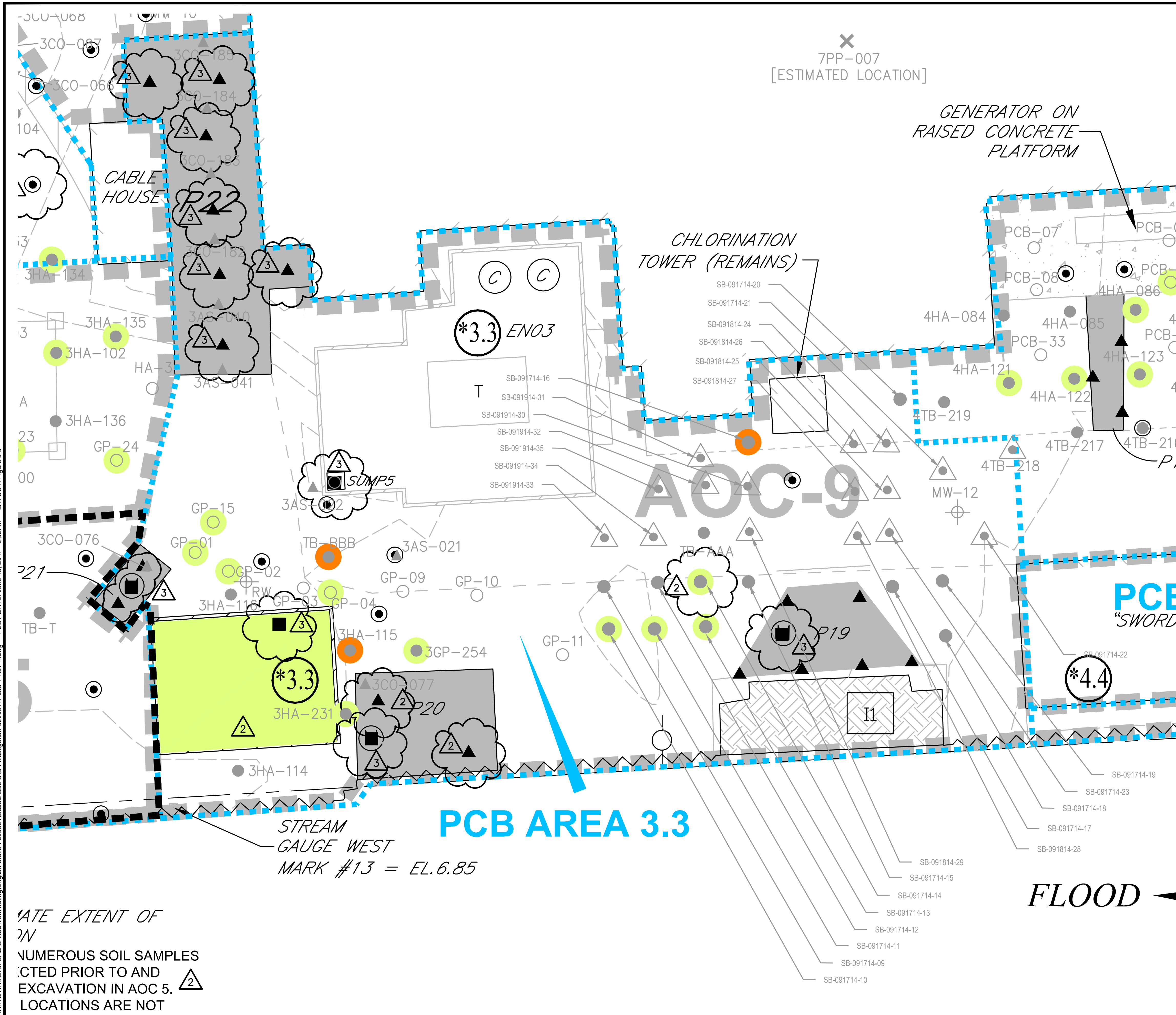
FILE NO.: Plate-1 Rev-4.dwg



CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED CONC/ASPHALT & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROP. CONC. SAMPLES, BORINGS & PCB HIGHLIGHT	MM

PROJECT: **UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut**

TITLE: **AOC-9 (PCB AREA 3.3) PROPOSED SAMPLE LOCATIONS**

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG	FIGURE 5-9	
APPROVED BY:	MM		
DATE:	10/07/2016		

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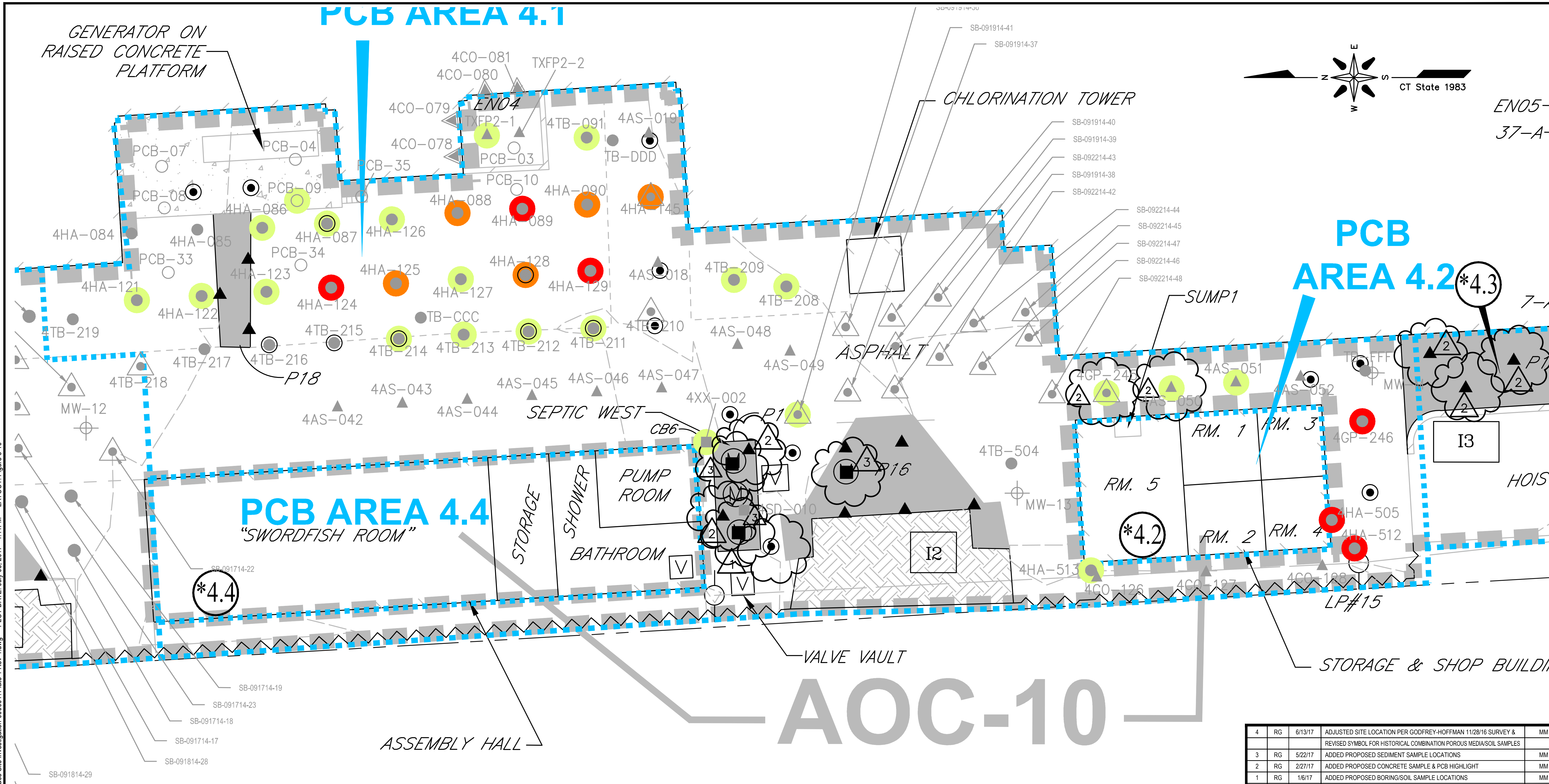
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

● (red)	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg	▲	PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
● (orange)	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg	■	PROPOSED SEDIMENT SAMPLE LOCATION
● (yellow-green)	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg	⊙	PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED CONCRETE SAMPLE & PCB HIGHLIGHT	MM
1	RG	1/6/17	ADDED PROPOSED BORING/SOIL SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM	**FIGURE 5-10**	
DATE:	10/07/2016		

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FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\Plate-1 Rev-4.dwg --- PLOT DATE: July 05, 2017 - 4:41PM --- LAYOUT: Figure 5-10

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROP. BORING, CONC/ASPHALT & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT & PROP. CONCRETE SAMPLE & BORING LOCATION	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.3)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		FIGURE 5-11
APPROVED BY:	MM		
DATE:	10/07/2016		

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FILE NO.: Plate-1 Rev-4.dwg

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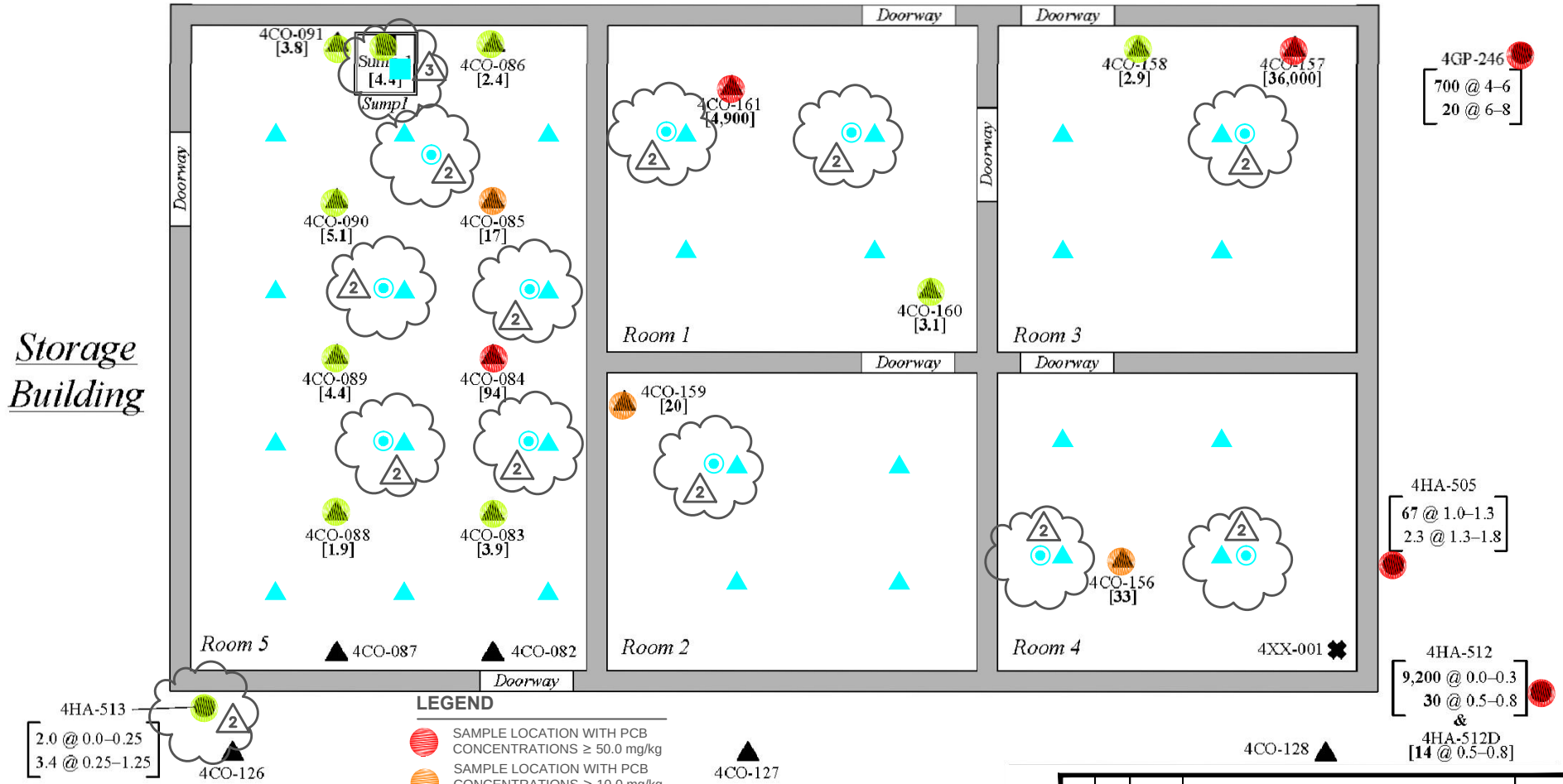

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

SOURCE:
Figure A4.2: PCB Area 4.2: Concrete, Miscellaneous, Sediment and Soil Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

4CO-087	Concrete Sample Point –AEI
4XX-001	Miscellaneous Sample Point (canister of orange powder) –AEI
Sump-1	Sediment Sample Point –AEI
4HA-513	Soil Sample Point –AEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATION	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT & PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.2: Proposed Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 5-12**
DATE:	10/07/2016		

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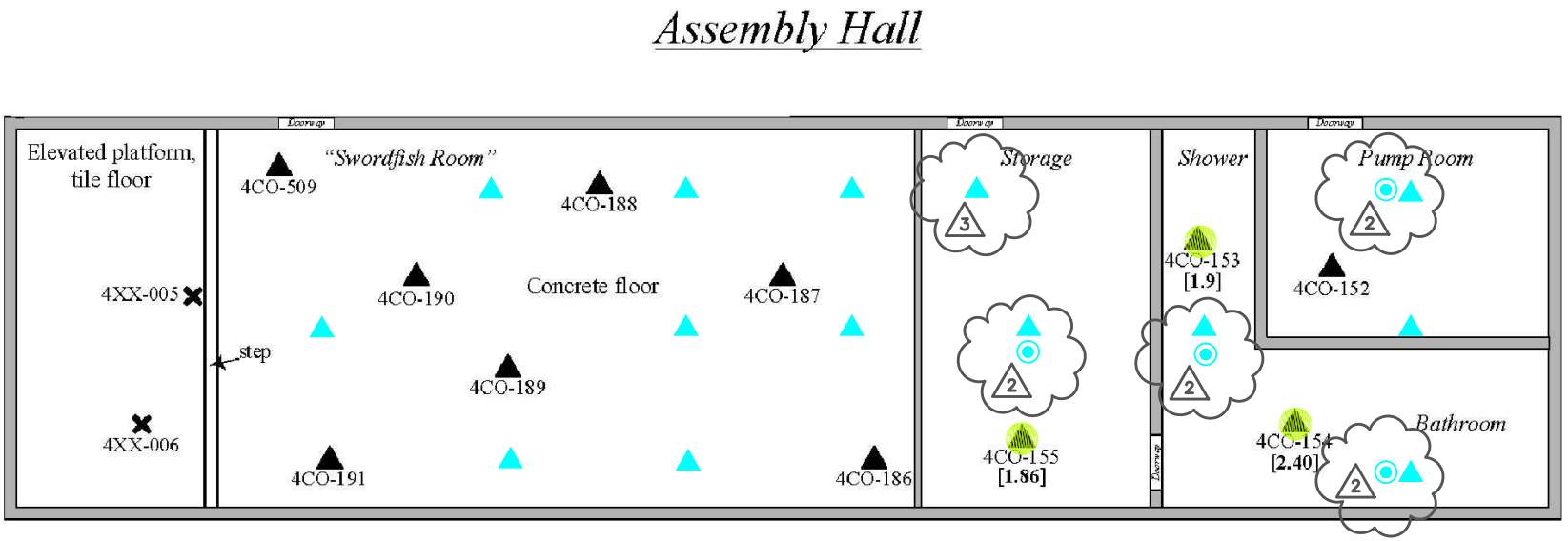
FILE NO.: Figure 4-14 & 5-12 Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

LEGEND

4CO-154 — Concrete Sample Point – AEI

4XX-006 — Miscellaneous Sample Point (Floor Tiles) – AEI

[1.9] — PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.4: PCB Area 4.4: Concrete and Miscellaneous Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

N E S W

0 6 10 20 feet

SCALE 1 inch : 10 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
3	RG	5/22/17	ADDED PROPOSED CONC/ASPHALT SAMPLE LOCATION	MM
2	RG	2/27/17	ADDED PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.4: Proposed Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 5-13**
DATE:	10/07/2016		

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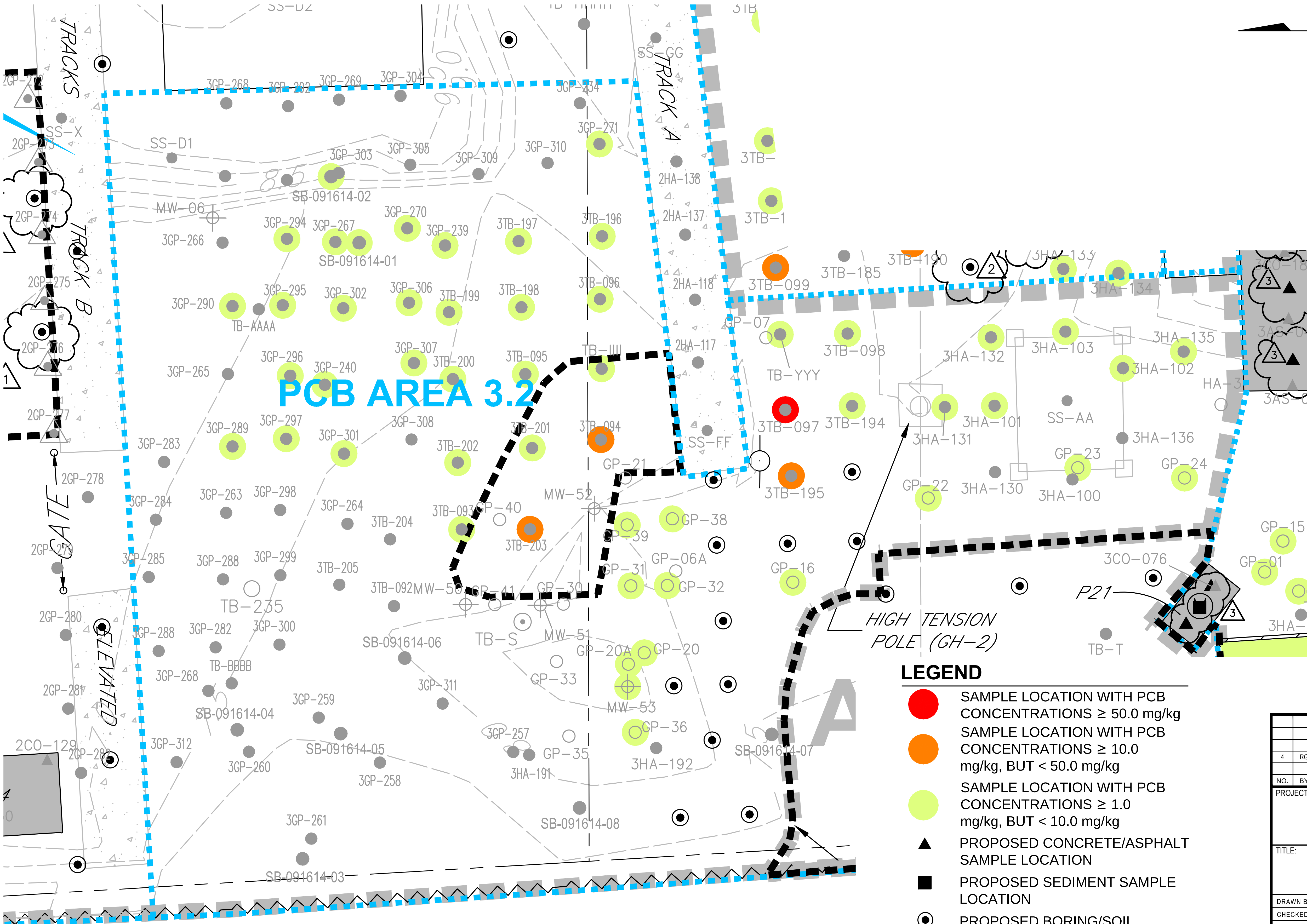
FILE NO.: Figure 4-15 & 5-13 Rev 4.dwg



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT: UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut

TITLE: AOC-12 (PCB AREA 3.2) PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		FIGURE 5-14
APPROVED BY:	MM		
DATE:	10/07/2016		

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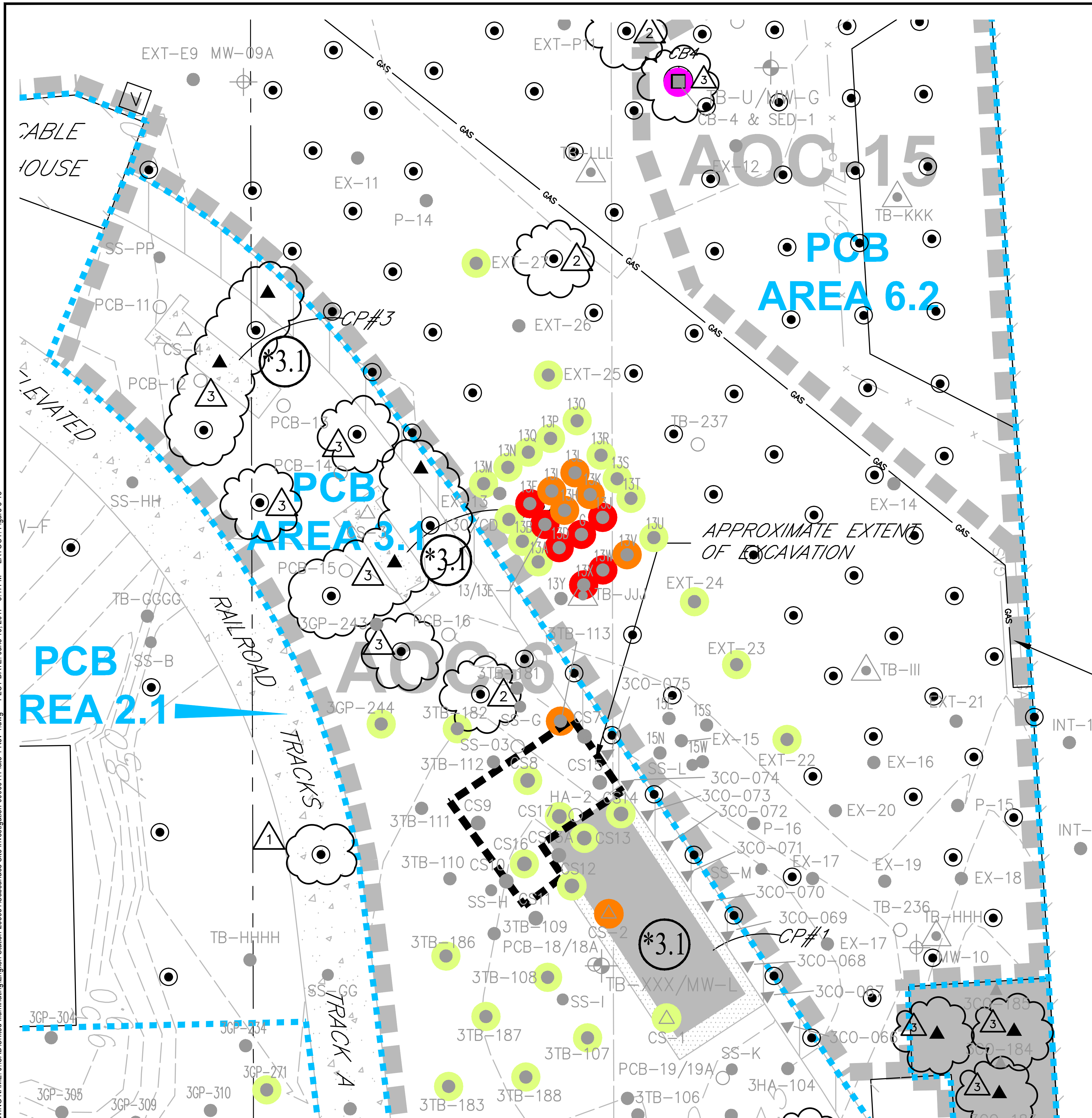
FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\Plate-1 Rev-4.dwg -- PLOT DATE: June 19, 2017 - 3:46PM -- LAYOUT: Figure 5-14



CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ⊙ PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROP. BORING, CONC/ASPHALT & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED BORING LOCATIONS	MM

PROJECT: UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE: AOC-12E
(PCB AREA 6.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		FIGURE 5-15
APPROVED BY:	MM		
DATE:	10/07/2016		

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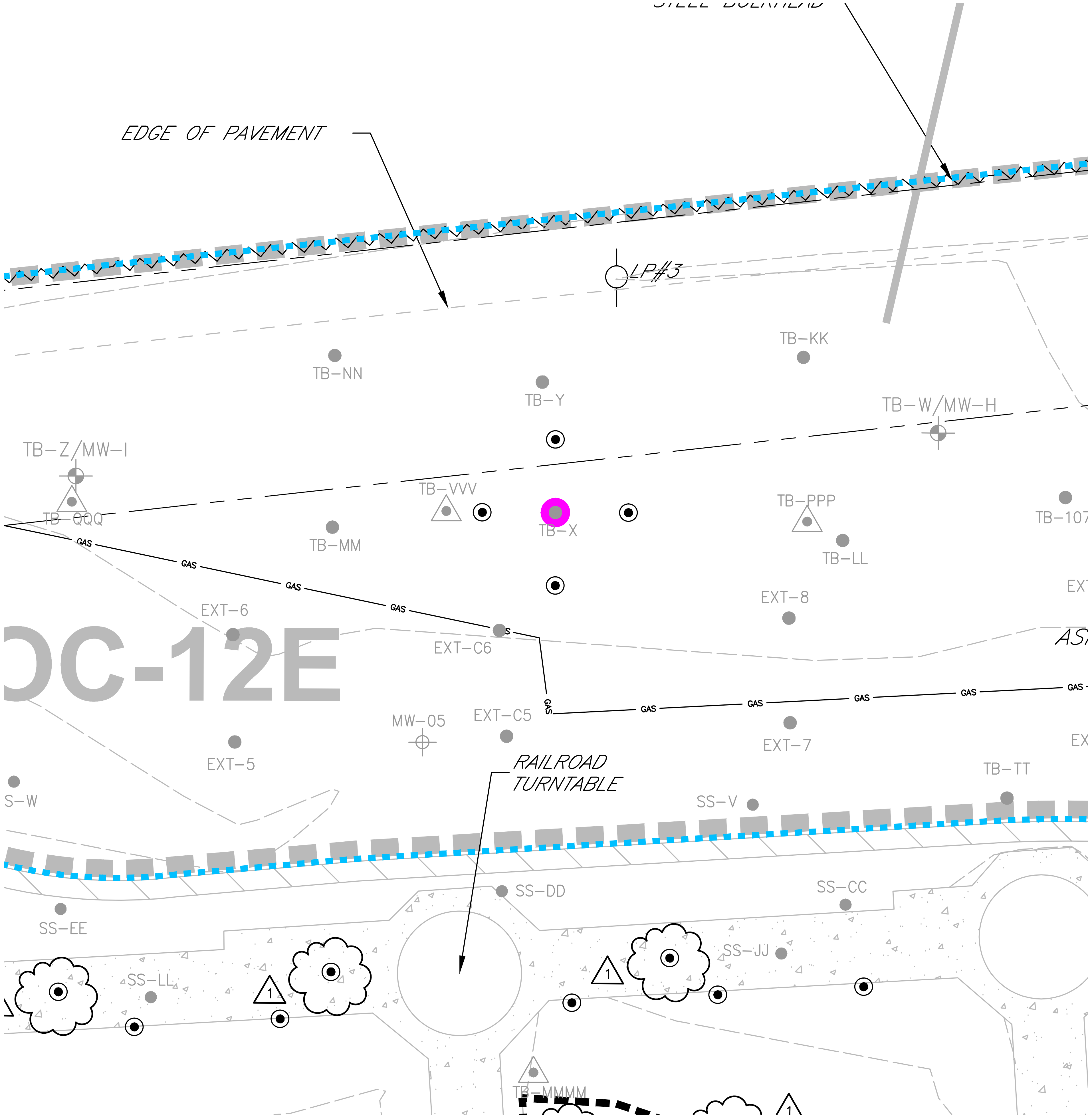
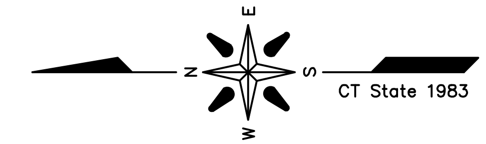
FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\Plate-1 Rev-4.dwg -- PLOT DATE: June 19, 2017 - 3:47PM -- LAYOUT: Figure 5-15

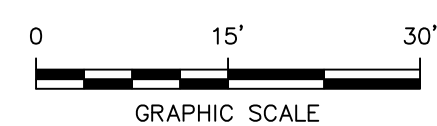




LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ⊙ PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.



NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT: **UNITED ILLUMINATING ENGLISH STATION POWER PLANT**
510 Grand Avenue
New Haven, Connecticut

TITLE: **AOC-12E (PCB AREA 6.2) PROPOSED SAMPLE LOCATIONS**

DRAWN BY: KDH	PROJ NO.: 263951-000001-000000
CHECKED BY: RG	**FIGURE 5-16**
APPROVED BY: MM	
DATE: 10/07/2016	

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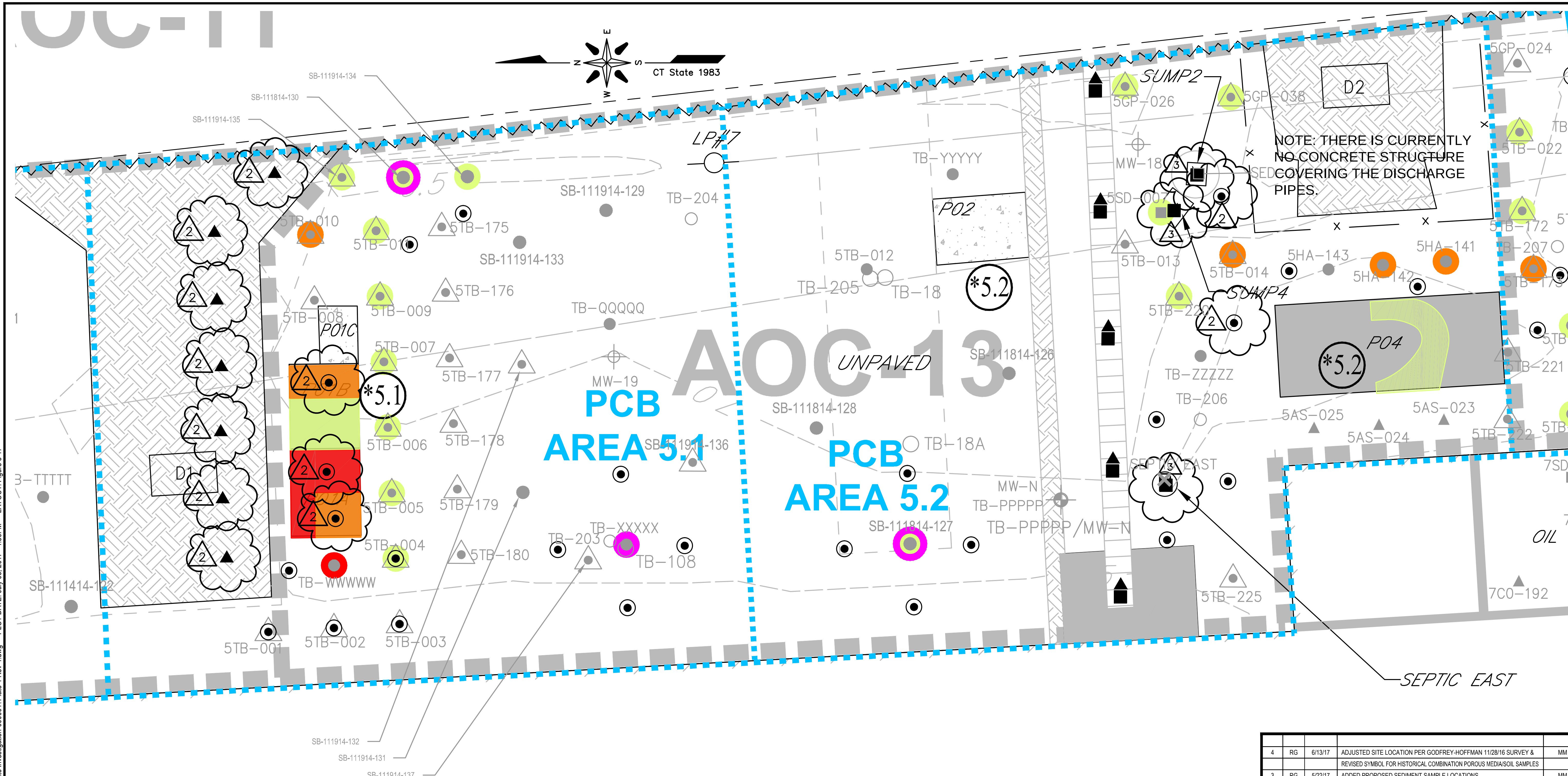
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 3:49PM --- LAYOUT: Figure 5-16



LEGEND

● (red)	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg	▲	PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
● (orange)	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg	■	PROPOSED SEDIMENT SAMPLE LOCATION
● (yellow-green)	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg	⊙	PROPOSED BORING/SOIL SAMPLE LOCATION
● (magenta)	SAMPLE LOCATION WITH TPH/ETPH > I/C DEC		

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED BORING & CONCRETE SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-13
(PCB AREAS 5.1 & 5.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG	**FIGURE 5-17**	
APPROVED BY:	MM		
DATE:	10/07/2016		

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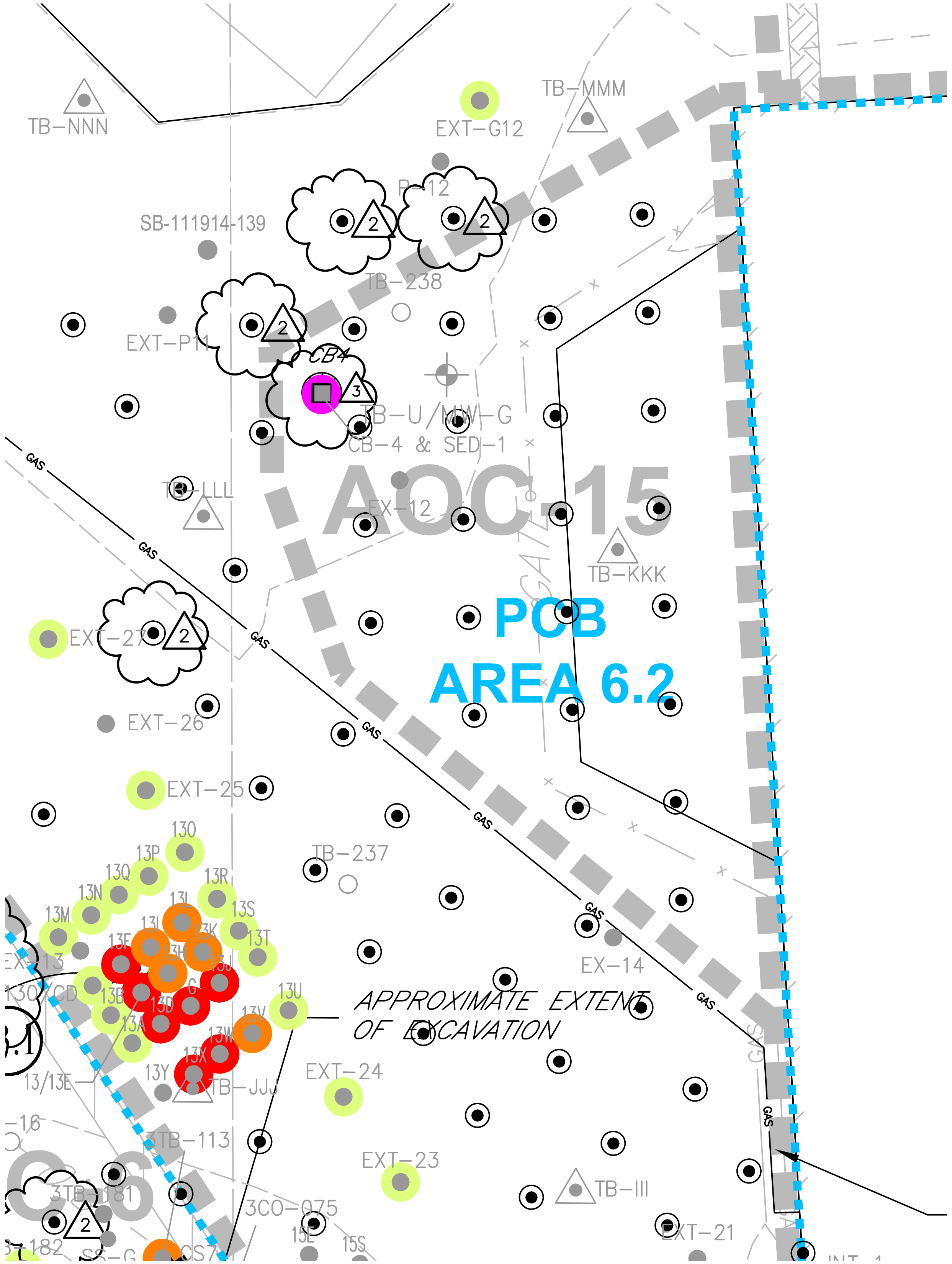
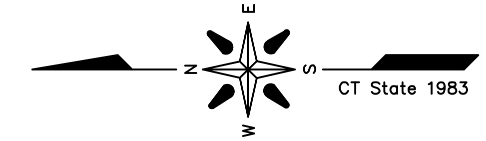
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: July 05, 2017 - 4:36PM --- LAYOUT: Figure 5-17





LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ⊙ PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATION	MM
2	RG	2/27/17	ADD PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-15
(PCB AREA 6.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-18**
APPROVED BY:	MM		
DATE:	10/07/2016		

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FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 3:52PM --- LAYOUT: Figure 5-18

TABLES

TABLE 4-1
PRESENTATION OF THE CONCEPTUAL SITE MODEL
English Station
510 Grand Avenue
New Haven, Connecticut

Area of Concern (AOC)	Description / Operations	COCs (Known or Potential)	PCB Release Area?	Release to Soil, On-Site Sediment, or GW Confirmed?	Release Mechanisms (Known or Potential)	Media Affected or Potentially Affected	Fate and Transport	Notes / Data Gaps
Parcel A AOCs								
AOC-1: Station B Interior	Station B was the original power plant located on Ball Island. It was a coal-fired plant constructed circa 1890 and operations at this plant ceased in the 1920s. Following the cessation of operations, the building was primarily used for storage. By 1939, the southern portion of the Station B building (the boiler house) had been razed.							
AOC-1: Station B Interior (PCB Area 1.1)	**Mezzanine and First Floor (Except Annex III).** The area of PCB impact to the first floor was previously characterized and partially remediated. Note that as the mezzanine floor did not show any indications of staining, nor was there equipment located on the mezzanine, this has been removed from PCB Area 1.1.	PCBs, ETPH	Yes	No	**Primary:** Spill(s) directly to the concrete of the first floor thought to be the result of minor leaks over time from the overhead crane; potential existed for tracking but there is no evidence to indicate that it occurred or that it was a primary mechanism.	Concrete	Limited to absorption into the concrete as there is no exposure to rainwater or groundwater to affect its migration	There are three areas of the floor that were previously scarified that continue to exhibit PCB concentrations greater than 1 mg/kg (including one sample with a PCB concentration of 16,600 mg/kg).
AOC-1: Station B Interior (PCB Area 1.2)	**Former Annex III.** In the late 1970s (following the promulgation of the initial PCB regulations) an Annex III storage area was created in Station B. This area served as storage for PCB-containing equipment that was destined for disposal.	PCBs, ETPH	Yes	No	**Primary:** Spill(s) directly to the concrete of the Annex III area and the result of minor leaks over time from the overhead crane; potential existed for tracking but there is no evidence to indicate that it occurred or that it was a primary mechanism.	Concrete	Limited to absorption into the concrete as there is no exposure to rainwater or groundwater to affect its migration	The area of PCB impact to the floor of Annex III was previously characterized and fully remediated (via scarification) to a concentration of less than 1 mg/kg.
AOC-1: Station B Interior (PCB Area 1.3)	**Basement.** The basement area of Station B was originally constructed with an earthen floor. Fill materials that underlie the Site are also present beneath the Station B building. There are no known or recorded releases to the basement floor of Station B and previous soil sampling and analysis has indicated that the constituents present are inherent to the fill material that comprises the site. A CTDEEP-approved widespread polluted fill variance both acknowledges the condition of the fill materials and provides for a GB PMC exemption. As part of a remediation effort in 2001 (following the collection of samples to confirm the absence of PCBs), AEI poured a concrete floor atop the dirt floor of the basement to render the underlying soils inaccessible. In 2014, HRP cored through the concrete floor of the basement and collected soil samples for analysis of PCBs and confirmed that they are not present above reporting limits.	ETPH, PAHs, Metals, PCBs	No	No	**Primary:** The potential release mechanism for this area (where a dirt floor previously existed) would have been a direct release to the earthen floor and the migration of liquids through cracks or breaches in the first floor.	Soil	Limited to adsorption onto the soil particles as there is no exposure to rainwater or groundwater to further enhance its migration.	There are no data gaps identified in this area.
AOC-2: Station B Former UST Area (overlaps a portion of PCB Area 6.1 - see AOC 12N)	Four gasoline USTs were previously located adjacent to the western side of Station B. Based on information presented in GEI's 1998 Phase I investigation report, there were initially two steel, 2,000-gallon USTs located in this area that were removed in June 1991. Upon removal of these tanks, two fiberglass-reinforced plastic, 1,000-gallon gasoline USTs were installed in the same location. The second set of tanks was subsequently removed in October of 1996.	VOCs, PAHs, ETPH, PCBs	No	Yes	**Primary:** Spills directly to the ground surface during filling operations / a release from the buried tank, associated piping, pumps or fittings directly to the subsurface.	Soil and groundwater	Petroleum resulting from a spill to the surface would have infiltrated through the asphalt into the underlying soils. Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Following the 1996 removal of the tanks from this area, two samples were collected and analyzed for VOCs only. During subsequent investigations, additional soil samples were collected from the vicinity of the former USTs and confirmed the presence of impacts to the soil. Soil was excavated from the area in 2002 and confirmatory soil samples were collected that indicated the presence of ETPH and PAHs. While there are PAHs inherent to the fill material, the presence and magnitude of the PAHs may be linked to this known historic release.

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AOC-3: Former Septic Systems	Information provided in GEI's 1998 Phase I investigation report indicates that a P-5 report generated by the CTDEEP in 1967 references the Site having been served by six septic systems. The septic system associated with Parcel A was historically located along the southeastern side of the former boiler house for Station B (demolished sometime prior to 1938). At least two other septic-type systems are present on Parcel B and are discussed later in this table, under the Parcel B heading.	VOCs, SVOCs, ETPH, PCBs, Metals	No	Potentially	**Primary:** A release from a buried septic tank, associated piping, or fittings directly to the subsurface.	Soil and groundwater	Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Historic reports referenced the presence of up to six septic systems at the English Station site, however, the locations of all six systems/tanks have not been identified. Historic mapping shows the locations of a septic tank (not a modern-day system constructed with leaching fields). This tank was located behind Station B has been investigated through past efforts and as such, no additional work is proposed.
AOC-12N: Former Station B Boiler House and Coal Storage Area (PCB Area 6.1)	This portion of the Site is located to the south of the Station B building and includes the footprint of the former Boiler House for Station B that was demolished sometime prior to 1939. After demolition of the Boiler House, the area was used for the storage of coal.	PCBs, ETPH, PAHs and Arsenic	No	Yes	**Primary:** Direct release to ground surface from coal storage, dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Tracking of surficial contamination is a potential concern in this area.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Samples collected as part of the previous investigations revealed the presence of the constituents that relate to the widespread fill, as well as an area of elevated ETPH concentrations in soil adjacent to the cooling water discharge tunnel. PCBs were not determined to be an issue in the soils in this area, however, additional work will be proposed to evaluate tracking as well as to define the identified ETPH impact to soil.
AOC-12W: Elevated Railroad Tracks and Foundations (PCB Area 2.1)	Coal storage began at the Site as early as the late 1880s and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s.	PCBs, ETPH, PAHs and Arsenic	Yes	Yes	**Primary:** Over-spraying for dust suppression; **Tracking:** Tracking/spreading of contamination is a potential along the elevated rails due to the movement of coal bins.	Soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	This area was investigated previously by others and there have been minimal impacts identified. Despite the previous findings, however, additional work is proposed in order to evaluate any impact that tracking may have had on the area.
AOC-12W: Former Coal Storage Area (PCB Area 2.2)	Coal storage began at the Site as early as the late 1880s and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s.	PCBs, ETPH, PAHs and Arsenic	Yes	Yes	**Primary:** Direct release to ground surface from coal storage, dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Tracking of surficial contamination is a potential issue in this area.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	This area has been investigated by others during previous investigations and further, there have been soil remediation efforts undertaken to address the identified impacts. Despite the investigation and cleanup work conducted to date, additional sampling is proposed for this area to evaluate the area in general, as well as tracking issues.
AOC-14: Former Cooling Water Discharge Tunnel	Historical drawings obtained from UI indicate that a former cooling water discharge tunnel associated with Station B runs from the south side of Station B through the former coal yard and to an unidentified discharge point at a location along the eastern side of the Site. The tunnel is approximately 3 feet tall and 4 feet wide, and is buried approximately 1 foot below grade (AEI, 2002). The tunnel is reportedly sealed off at both ends and no longer discharges to the Mill River. Previous investigations by AEI noted that at least two catch basins, identified as CB-1 and CB-2, located within the former coal yard, tie into this tunnel.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Likely the result of impacted storm water run-off from the two catch basins located in the former coal storage area that are tied into the discharge tunnel.	Concrete and sediment	Impacts resulting from potential infiltration through the concrete of the discharge tunnel or to cracks, seams or joints in the tunnel to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Sediment from the accessible length of the tunnel requires additional sampling in order to fill the primary data gap in this area. Concrete samples also need to be investigated to determine if contact with potentially impacted sediments has resulted in impacts to the concrete.

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Parcel B AOCs (Including those that cover both Parcels - AOCs 4, 11 and 18)								
AOC-3: Former Septic Systems	Information provided in GEI's 1998 Phase I investigation report indicates that a P-5 report generated by the CTDEEP in 1967 references the Site having been served by six septic systems, however, the locations of all six systems/tanks have not been identified. Historic mapping shows the locations of two septic structures (not modern-day systems constructed with leaching fields); one located on the western side of the Site which has not been specifically targeted historically for investigation and one manhole along the eastern side of the Site labelled as "Septic East". The vicinity of the tank located on the far western side of the site, "Septic West", has been partially investigated in that a sludge sample from the tank was previously collected and analyzed for PCBs.	VOCs, SVOCs, ETPH, PCBs, Metals	No	Potentially	**Primary:** Direct dumping of material to septic structures or manholes; Carrying of surficial contaminant by stormwaters into manholes or structures; **Secondary:** A release from a buried septic structure, associated piping, or fittings directly to the subsurface.	Soil, groundwater, sediment (within structures), and concrete/asphalt	Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and fluctuating water table.	Additional investigation of the "Septic West" structures and surrounding area will be completed to more thoroughly evaluate potential impacts. As the sturctures that make up "Septic East" and the surrounding area has not previously been investigated, additional investigation is planned here as well.
AOC-4: Past Spills	There have been numerous spills reported for the Site from 1975 through present. Many of the spill reports referenced releases to the Mill River, while the remainder of the spill report generally do not reference the specific locations on the Site where releases occurred. Of note is that this Site was developed in the late 1800s and progressively through the 1950s and it was operational into the early 1990s. Much of its operating history occurred before there were environmental regulations and the means to report releases.	VOCs, SVOCs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Spills or releases directly to the ground surface (e.g., soil, asphalt, concrete); **Secondary:** Infiltration through the ground surface (including cracks, seams and other breaches in media other than soil) and into the soil below.	Asphalt, concrete, soil, sediment and groundwater	Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	A review of the CTDEEP spill files associated with the 510 Grand Avenue property was conducted on September 22, 2016 to ensure that this CSM is up-to-date. Areas that have been impacted by documented historic spills (with the exception of the new AOC 15; Catch Basin Release and Oil Stain Area located just to the north of the English Station building) have been and will continue to be addressed through the investigation of the other AOCs/PCB Investigation Areas across the site.
AOC-5: Bulkhead PCB Remediation Area (PCB Area 3.2)	This former soil remediation area is located along the western side of the Site (just to the north of English Station). The remediation effort was conducted in 1998 in response to a 1997 report of oil-impacted soil from the site that was falling into the Mill River through a collapsed portion of the metal bulkhead that surrounds the island.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** The exact release mechanism is unknown, however, it is most likely two-fold. First, there was dust suppression conducted in areas where coal was handled; therefore, direct application of oils to the ground surface likely occurred. Also, based on the reported presence of NAPL, a leakage from a subsurface source may have occurred; **Secondary:** The potential for tracking exists due to activities conducted at the site between completion of the remediation and the present; **Tracking:** Tracking of surficial contamination across this area is a concern as surface contamination has been identified in the vicinity.	Soil and groundwater	Releases directly or indirectly to the subsurface were entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would have been subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Additional investigation to the north and east of the original remediation area has confirmed the presence of PCBs in soils beyond the limits (PCB Area 3.2) of the initial UI remediation area. The potential for impacts to the surface due to tracking is a data gap that has been identified in this AOC.
AOC-6: Capacitor Release / Outdoor Capacitor Banks 1-3 (PCB Area 3.1)	Capacitor Banks 1 through 3 were formerly located in the central portion of the Site. A 1984 spill report summarized in GEI's 1998 Phase I investigation report indicated that a capacitor "blew up" at the Site (location not specified). Based on anecdotal information, it appears that Capacitor Bank 1 suffered damage that resulted in a release to the environment. Impacted soils in this area were subsequently remediated. Capacitor Bank 1 is located flush with the ground and the remaining pad is surrounded by asphalt while Capacitor Banks 2 and 3 sat on elevated concrete pedestals. Subsequent evaluation of the asphalt and soils surrounding Capacitor 1 indicated the need for additional PCB remediation which was subsequently completed in 2002. PCB results depicted on a February 2005 figure prepared by AEI indicate there are elevated concentrations remaining in the concrete pad and surrounding asphalt.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Leakage from the oil-filled equipment onto its concrete base/foundation; **Secondary:** Seepage into the surrounding soil and asphalt from the surface of the concrete pad on which the capacitors sat or seepage through cracks or breaches in the concrete structure to the soil below; **Tracking:** Tracking of surficial contamination is a concern in this area due to the movement of equipment and materials associated with nearby demolition activities.	Concrete, asphalt, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Additional investigation of the area around Capacitor 1 (including the soils underlying the asphalt that exhibits elevated PCB concentrations) is warranted; including samples to evaluate potential tracking issues. Historically, samples of concrete collected from the raised pedestals of Capacitors 2 and 3 did not exhibit concentrations of PCBs in excess of 1 mg/kg. As the concrete would have been the first media to be impacted had a spill occurred from the capacitors and there was no evidence of impacts, it stood to reason that there were no PCB impacts identified in surrounding soils. As such, there are no data gaps identified associated with the portion of AOC 6 / PCB Area 3.1 that includes Capacitors 2 and 3. However, based on the demolition activities which ocurred after the cessation of investigation, this area will be evaulated further due to tracking concerns.
AOC-7: Former Waste Oil AST/Oil Pump Room Area (PCB Area 5.3)	**Exterior Area Adjacent to Oil Pump Room.** The Oil Pump Room served high-pressure boiler units 7 and 8 during their operation.	PAHs, ETPH, PCBs and VOCs/Metals (due to the proximity to the waste oil AST)	Yes	Yes	**Primary:** Leakage from oil-filled equipment being brought out of the building through the nearby overhead door onto the ground surface (asphalt/gravel or soil); **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches); **Tracking**: Tracking is a concern in this area given the shallow nature of the impacts defined to date and the demolition activities which have taken place.	Asphalt, concrete, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	PCB impacts have been identified from the ground surface to a depth of approximately 6 feet below grade in this area. This area of impacts, as previously defined, appears to extend to the north into the adjacent AOC 13. The available data suggests that vertical delineation of impacts in this area are not complete and, given the potential for tracking, additional investigatory work as proposed for this area.

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AOC-7 (PCB Area 5.4)	**Former Waste Oil AST Area.** Historically, there was a waste oil AST located adjacent to the southeastern corner of English Station. This waste oil AST was located just to the south of and adjacent to the southern wall of the Oil Pump Room.	VOCs, PAHs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Leakage from the tank and/or associated piping and fittings to the ground surface; **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches), seepage into concrete pads or structures through seams, cracks, other breaches; **Tracking:** Due to the widespread occurrance of surficial contamination and demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, on-site sediment (located in pipe trench; a portion of which runs through this area), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	The results of previous soil sampling in this area identified impacts to shallow soil underlying the asphalt surface (PCBs > 50 mg/kg) at one boring location and this has not been fully delineated. The concrete pads in this area were sampled previously and did not show signs of impacts, however, concrete will be evaluated as part of the delineation of potential tracking issues in this area. In addition, the sediment (if present) located within the pipe trench in this area will be sampled. If possible, the concrete bottom of the trench will be sampled for PCBs as well.
AOC-7 (PCB Area 5.5)	**Tower GH-4 Area.**	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Unknown, but likely the result of a release to the surface; **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches).	Asphalt, concrete, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	Samples collected from 4 feet below grade exhibited elevated PCB concentrations (greater than 10 mg/kg) and additional sampling has not been conducted to define the vertical extents of the impacts. Additional investigatory work is proposed for this area.
AOC-7 (PCB Area 5.6)	**Former Storage Building Area.**	VOC, SVOCs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Unknown, but likely the result of a release to the surface; **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches), seepage into the concrete pipe trench through seams, cracks, other breaches; **Tracking:** Due to the presence of surficial contamination of the surrounding area and the demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, on-site sediment (located in pipe trench; a portion of which runs through this area), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	Previous sampling has indicated the presence of PCBs in soil at one location in excess of 10 mg/kg. This isolated hotspot requires definition and additional work is proposed for the soils in this area. Additional samples of the sediment (if present) in the pipe trench will also be sampled. The concrete that comprises the trench will be sampled for PCBs as well. Several concrete pads/structures will be sampled and/or re-sampled due to tracking concerns.
AOC-8: Former Fuel Oil ASTs (PCB Area 5.7)	One 50,000-gallon No. 6 fuel oil vertical tank was previously located within a concrete containment berm located in the far southern end of the Site. Following the cessation of the use of coal in the 1950s, No. 6 fuel oil was used as the fuel source for the Plant. To the west of the former No. 6 fuel oil tank, there were two 5,000-gallon No. 2 fuel oil ASTs that were formerly located in concrete cradles. During a recent site visit, it was noted that these tanks, although still present at the Site, are no longer located within their cradle structures. Rather, they have been emptied and are currently located to the west of their respective cradles (between the cradle structures and the Foam House building). The No. 2 fuel oil formerly housed in these tanks fueled the boilers installed to heat the building to a base temperature (boiler units 7 and 8) during the winter months after the Plant had been moth-balled in the early 1990s.	VOCs, PAHs, ETPH, PCBs	Yes	Yes	**Primary:** Incidental spills from filling operations (or, the case of the ASTs that have been moved) leaks from valves, piping, fittings to the ground surface or subsurface (relative to the appurtenances); **Secondary:** Seepage into soils underlying concrete or asphalt through infiltration through cracks, seams or other breaches; **Tracking:** Tracking is a concern in this area, particularly due to the fact that the identified impacts include PCBs at concentrations greater than 50 mg/kg in shallow soils along the bulkhead where it is not paved.	Asphalt, concrete, soil, on-site sediment (located in pipe trench; a portion of which runs through this area), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	Although the concrete that comprises the containment dike for the former No. 6 fuel oil tank did not exhibit any impacts during previous PCB sampling efforts and there are no known or reported spills within, there will be samples of the underlying soils proposed for other petroleum-related constituents (particularly if there are breaches observed of the floor of the containment). In addition, as the ASTs that were previously settled in their cradle structures have been removed and placed nearby on the ground surface, sampling is proposed to evaluate the potential of spillage during the pump-out or moving of the tanks. There are sediments present in the portion of the piping trench located within this AOC. Previous sampling has indicated the presence of PCBs in these sediments at a concentration of greater than 50 mg/kg. Additional sampling will be proposed to define the extent of the impacted sediments in the trench and the concrete within which the impacted sediments are in contact will also be sampled. There are five small areas of PCB-impacted soils within AOC 8 (four of which are located right along the southern bulkhead and the remaining one is located between the southern end of English Station and the pipe trench) which require additional delineation. In addition, given the shallow impacts in these areas (which are exposed soil), additional work is proposed to evaluate potential tracking issues.

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AOC-9: Transformer Areas (PCB Area 3.3)	**Northwest Transformer / Capacitor Area:** There is one large, pad-mounted transformer (identified as Transformer G) located adjacent to the northwestern corner of English Station. It is located on a concrete pedestal that is, in turn, located in a concrete containment dike. Just behind (to the east of) Transformer G are two circuit breakers that are also located within the footprint of the containment dike that served Transformer G. It was noted in previous reports that a sticker indicating PCBs less than 50 ppm was affixed to Transformer G. Labels indicating PCB concentrations less than 1 ppm were affixed to both the circuit breakers and a small tank associated with Transformer G.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Surface releases from oil-filled electrical equipment (e.g., transformers and capacitors) to concrete pads and dikes, absorption into concrete surfaces; **Secondary:** Seepage/migration through concrete via cracks, breaches or sumps into the underlying soil, migration with precipitation into adjacent paved (asphalt) and unpaved surfaces, seepage into underlying soils; **Tracking:** Given the location of this area, tracking of surface contamination is a concern.	Concrete, asphalt, soil, sediment (in sumps, manholes and containment structures), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	A soil sample collected in the north-central portion of this area exhibited PCB concentrations >10 mg/kg at a depth of 7 ftbgs., however, the area is well defined. A nearby soil sample (just to the south of Enclosure 2) also exhibited PCB concentrations in excess of 10 mg/kg, however, this location requires additional delineation (particularly vertically). A third soil sample located to the northwest of the remains of the chlorination tower also exhibited PCB concentrations in excess of 10 mg/kg, however, this location is delineated. There are six concrete structures included in this area, five of which have been sampled. The concrete that overlies the intake was not sampled, but will be as part of this effort. The remaining concrete samples that were collected either did not exhibit detectable levels of PCBs or, in the case of Enclosure 2, exhibited PCBs at concentrations greater than 1 mg/kg and less than 10 mg/kg. Of particular note is the concrete containment dike/pedestal on top of which Transformer G sits. The sampling of this structure indicated that it is not PCB-impacted. There was one sediment sample collected from the bottom of the containment and it exhibited very low PCB concentrations. At least one additional sample of sediment will be collected from the base of the containment in order to confirm that result. Due to the high potential for tracking of shallow contamination in this area, additional samples of asphalt, concrete and soils will be collected.
AOC-9: Transformer Areas (PCB Area 4.1)	**Former Transformer Area on the West Side of English Station:** Three pad-mounted transformers (Identified as Service Transformers 1-3) were previously located adjacent to the western exterior wall of English Station (in the approximate center of the building length). These transformers were all reportedly affixed with labels that indicated PCB concentrations less than 50 ppm.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Surface releases from oil filled electrical equipment (e.g. transformers and capacitors) to concrete pads, absorption into concrete surfaces; **Secondary:** Seepage/migration through concrete via cracks, breaches or sumps into the underlying soil, migration with precipitation into adjacent paved (asphalt) and unpaved surfaces, seepage into underlying soils; **Tracking:** Given the location of this area, tracking of surface contamination is a concern.	Concrete, asphalt, soil, sediment (in sumps, manholes and containment structures), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	There are two areas of PCB impacts (PCBs greater than 50 mg/kg) located to the west of the locations of three former transformers (previously located immediately adjacent to the building). There are also soil impacts identified (PCBs greater than 10 mg/kg) in between the two highest concentration locations and to the west of the southern-most location with high concentrations. The impacted area requires additional vertical delineation. There are several concrete structures included in this area, and a minimal number of samples have been collected. Due to the high potential for tracking of shallow contamination in this area, additional samples of asphalt, concrete and soils will be collected.
AOC-9: Transformer Areas (PCB Area 4.3)	**Southwest Transformer and Former Capacitor Area:** The area in which the transformers and former Capacitor Bank No. 4 are located is in the southwestern portion of the Site; specifically in the area that is considered the exterior courtyard portion of English Station. Two transformers (identified as 7A and 37A) were previously located within a containment "tub" located along the southern exterior wall of the screen house. As of the date of a recent visit, these transformers had been removed from the tub (filled with squelching stone) and placed along the southwestern wall of the portion of the English Station building that creates the courtyard. In addition to the transformers, Capacitor Bank No. 4 was previously located within fenced enclosure (also filled with squelching stone) located in the courtyard.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Surface releases from oil filled electrical equipment (e.g. transformers and capacitors) to concrete pads and containment tubs, absorption into concrete surfaces; **Secondary:** Seepage/migration through concrete via cracks, breaches or sumps into the underlying soil, migration with precipitation into adjacent paved (asphalt) and unpaved surfaces, seepage into underlying soils. Tracking: Given the location of this area, tracking of surface contamination is a concern.	Concrete, asphalt, soil, sediment (in sumps, manholes and containment structures), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	There are three areas of PCB impacts (PCBs greater than 50 mg/kg), two of which are located adjacent to former Transformers 7-A and 37-A and Capacitor Bank #4 (previously located immediately adjacent to the building). The third area is located in the far southwestern portion of AOC 9, in between concrete pads P-13A and P-13B. Note that the release mechanism associated with the third area mentioned is unknown, as there has not been anything identified historically that would indicate a source and the there was only positive detection of PCBs (just over 1 mg/kg) in the concrete of Pad 13A. There are also soil impacts identified (PCBs greater than 10 mg/kg) in the central portion of this sub-area of AOC 9 (located between the two primary hot-spot areas likely associated with the former transformers and capacitor). Further delineation of the impact to soil in between the concrete pads will be conducted. In addition, as the two additional hot-spot areas over 50 mg/kg in this area are within tubs/containment structures that are filled with squelching stone and it not known whether the structures have concrete bottoms, vertical delineation is proposed in these areas, but it is not known if it will be possible to ascertain until these areas are remediated. There are three concrete pads in this portion of AOC, only two of which (P-13A and P-13B) have been sampled. Only one of the concrete samples collected from these two pads exhibited a PCB concentration of greater than 1 mg/kg (but less than 10 mg/kg). The pad identified as P-14 was not sampled. Due to the high potential for tracking of shallow contamination in this area, additional samples of asphalt, concrete and soils will be collected.

TABLE 4-1
PRESENTATION OF THE CONCEPTUAL SITE MODEL
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Area of Concern (AOC)	Description / Operations	COCs (Known or Potential)	PCB Release Area?	Release to Soil, On-Site Sediment, or GW Confirmed?	Release Mechanisms (Known or Potential)	Media Affected or Potentially Affected	Fate and Transport	Notes / Data Gaps
AOC-10: Former Interior Chemical Storage Areas Excluding English Station (Foam House)	The Foam House is a small, stand-alone structure located at the southern tip of the Site (to the west of the former AST location). There is little known (and further, nothing readily ascertained from available documentation) about its potential chemical storage history. GEI, in their 1998 Phase I assessment report, indicated that there were several pumps and pump stands observed in this building at the time of their site inspection.	VOCs, SVOCs, ETPH, PCBs, Metals	No	Unknown	**Primary:** Direct releases to the floor of the building; **Secondary:** Assuming that the floor of the building is comprised of concrete, a secondary mechanism would be potential seepage through crack, seams or other breaches in the floor to the underlying soils; **Tracking:** Tracking into or out of the building is not likely (Note that tracking will be generally evaluated in the areas outside of this building.)	Concrete, soil and groundwater	Spills to the surface may have infiltrated through the concrete floor of the building into the underlying soils. Secondary releases resulting from potential infiltration through the floor to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	There is little information about the use of this building. Given the general lack of sampling in this building, additional evaluation for potential COCs is proposed.
AOC-10: Former Interior Chemical Storage Areas Excluding English Station (PCB Area 4.2)	**Storage and Shop Building Interior.** This building is located along the western side of the Site between English Station and the bulkhead. According to a historic map of the Site and anecdotal information provided by UI personnel (as documented in the GEI 1998 Phase I), this one-story building was previously used, at least in part, for storage/a shop and as a contractor office.	PCBs, ETPH, VOCs, SVOCs, Metals	Yes	Yes (immediately adjacent to the building, but unknown beneath the building)	**Primary:** Direct releases to the floor of the building; **Secondary:** Absorption into the concrete, seepage through cracks, seams or other breaches in the floor to the underlying soil; **Tracking:** Tracking is likely both into and out of this building.	Concrete, sediment (contained in a sump located in the building), soil (likely), groundwater	Spills to the surface may have infiltrated through the concrete floor of the building into the underlying soils. Secondary releases resulting from potential infiltration through the floor to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Concrete samples collected from the floor of the building exhibited PCB concentrations in excess of 1 mg/kg in the northern and north-western portion; in excess of 10 mg/kg in the eastern, central and northern portions of the building and in excess of 50 mg/kg in the eastern and north-central portion of the building. In addition, as referenced earlier in this table, there was sediment collected from a sump located in the northeastern portion of the building that exhibited PCBs at concentrations of greater than 1 mg/kg. Based on the presence of PCBs and the use of this building as a shop and for storage in which there may have been a variety of chemicals used or handled, there will be additional concrete and soil samples are proposed.
AOC-10: Former Interior Chemical Storage Areas Excluding English Station (PCB Area 4.4)	**Assembly Hall Interior:** This one-story masonry building is also located along the western side of the Site (between English Station and the bulkhead) and to the north of the Storage/Shop building. This building was reportedly used as an assembly hall for workers at the Plant.	PCBs	Yes	Unknown but unlikely based on the primary release mechanism)	**Primary:** Tracking into the building from outside areas (identified as such due to the fact that the documented historic use of this building was for contractor meetings).	Concrete	Given that tracking is considered the likely primary release mechanism in this area (as opposed to spills or leaks) and the interior of the building is not fully exposed to the elements, it is likely that any impacts would remain on the surface of the floor and would not be subject to migration.	There has been some sampling of the concrete floor within this building and PCBs have been identified at concentrations greater than 1 mg/kg in the southern portion. In order to fill the data gap in this sub-area (i.e., in order to confirm tracking as the source of the identified impacts to the concrete), additional sampling of the concrete will be conducted.
AOC-11: On-Site Fill Material	Ball Island is a land mass that was created within the Mill River. As documented in historic reports for the Site, the island was created from spoils generated from dredging operations in the late 1800s and well into the 1900s in the Mill River to maintain navigable waters. As the Mill River was the receiving water body for many discharges emanating from industrial operations over the years, the spoils that comprise the island are inherently impacted with petroleum hydrocarbons, PAHs and metals.	PAHs, ETPH, Metals	No	No	The COCs identified are inherent in the materials that comprise the island on which English Station and Station B are located. As such, although considered a site-wide AOC, the fill itself does not constitute a release to the environment.	N/A	N/A	The fill that comprises the site has been adequately characterized by others during previous investigatory efforts. As such, there are no data gaps identified.
AOC-12W: Former Coal Storage Area (PCB Area 3.2)	**Area Adjacent to PCB Bulkhead Remediation.** This portion of the Site is located to the south of the Station B. Coal storage began at the Site as early as the late 1880s and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s.	PCBs, ETPH and PAHs	Yes	Yes	**Primary:** Direct release to ground surface from coal storage, dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Due to the widespread surficial contamination of nearby areas and demolition activities that have taken place, tracking is a potential concern in this area.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Previous investigation in this area has identified PCB hotspots (both greater than 10 mg/kg and greater than 50 mg/kg) that require additional delineation (particularly to the north and east of the former excavation area). Tracking may be an issue in this area and as such, additional sampling will be conducted.
AOC-12E (PCB Area 6.2)	**Mill River East Branch Area.**	PCBs, ETPH, PAHs	No	Yes	**Primary:** Potential direct release to ground surface from dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Tracking is a potential issue in this area as it is the main point of access to the Site.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	This area was investigated previously by others and there have been minimal impacts identified. Despite the previous findings, however, additional work is proposed in order to evaluate any impact that tracking may have had on the area.

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AOC-13: Former Wastewater Treatment System (PCB Area 5.1)	**Former Dumpster Area.**	VOCs, SVOCs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Leakage or spillage onto the concrete pad on which the dumpsters sat; direct discharge to the ground surface; **Secondary:** Infiltration through the asphalt or concrete or through cracks, seams or other breaches in the asphalt or concrete to the underlying soils; **Tracking:** Due to the widespread presence of surficial contamination in this area and the demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Soil samples collected from a boring located in the west-central portion of this area exhibited PCB concentrations greater than 50 mg/kg and this hot-spot area has not been fully horizontally delineated and as such, requires additional work. There is also a soil boring located along the eastern-central portion of this area from which soil samples exhibited PCB concentrations greater than 10 mg/kg. Although this location technically requires additional delineation to the northeast, it abuts discharge D1 which will prevent further investigation via drilling. The concrete that comprises pads P01A and P01B exhibited PCB concentrations greater than 10 mg/kg across approximately half of its surface (not contiguously). There is a data gap identified herein as there were no samples collected beneath the concrete pad. As such, additional work is proposed to evaluate underlying soil conditions, as well as soils in the vicinity of the impacted pad that may have been subject to tracking.
AOC-13: Former Wastewater Treatment System (PCB Area 5.2)	**Former Wastewater Treatment System Area.** This area is located to the east of English Station and includes remnants of a former wastewater treatment system (primarily concrete pads). The operational history of this former treatment system is not well documented in historic reports associated with the site.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Leakage or spillage onto the concrete pads on which former treatment system components were located or asphalt surfaces in the area; direct discharge to the ground surface; **Secondary:** Infiltration through the asphalt or concrete or through cracks, seams or other breaches in the asphalt or concrete to the underlying soils; **Tracking:** Due to the widespread presence of surficial contamination in this area and the demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, sediment and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	A wastewater piping trench is located within this area. It is constructed similarly to the fuel piping trench located in AOC 8 in that it is covered with the same sectional concrete panels. As such, there are likely sediments present in the piping trench. Samples of the concrete panels that overlie this trench are proposed, as is the collection of samples of sediment in the trench (if accessible). There is one area of PCB-impacted soils (greater than 10 mg/kg) within this portion of AOC 13 which requires additional delineation. There is also a boring that exhibited PCBs in soil at concentrations greater than 1 mg/kg and due to the lack of borings surrounding that location, additional borings are proposed in order to ensure the surrounding concentrations. Although there are no PCB hotspots greater than 50 mg/kg in this area based on previous data, the soil borings/samples proposed for this area will serve to evaluate potential tracking issues as well.
AOC-15: Oil Stained Area North of English Station / Release to Catch Basin 4	In 2011 and 2012, demolition and asbestos abatement work was being conducted within English Station. A primary route of egress from the building for the workers was through the Oil Storage Room where many drums and other containers of oil were reported to have been stored. Spillage and/or deliberate dumping and subsequent tracking through the area has resulted in a large oil stain on the pavement on the north side of the building that was documented in 2013/2014. Catch Basin 4 is located within the oil stain and due to the concern that this release was impacting the adjacent Mill River, the USCG executed response actions in 2014.	ETPH, PAHs, PCBs	Suspected	Yes	**Primary:** Documented direct spillage and tracking from the nearby interior Oil Storage Room where breached oil containers/drums and a partially-filled AST were located and migration into the nearby catch basin; **Secondary:** Infiltration directly through the asphalt or through cracks, seams or other breaches into the underlying soils and infiltration through the concrete that comprises the bottom of the catch basin and from joints along the piping that conveyed the storm water; **Tracking:** Based on the release mechanism associated with this area (direct spillage to the ground), tracking is a concern in this area.	Asphalt, concrete, soils, catch basin sediment, groundwater	Petroleum resulting from a release to the surface may have infiltrated through the asphalt into the underlying soils. Impacts that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	This area was minimally investigated upon its discovery in 2014. PCBs were not detected in the sediment sample collected from the bottom of Catch Basin 4. Additional investigation is needed in this area to fill data gaps and to evaluate tracking issues.
AOC-16: English Station Interior (PCB Area 7)	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify the full extent of staining and therefore, the locations that will require investigation.	VOCs, SVOCs, ETPH, PCBs, Metals	Suspected	Suspected	**Primary:** Direct spillage or leakage to the floor of the building; **Secondary:** Absorption into the concrete and infiltration to the soils underlying the building; **Tracking:** Tracking into, throughout and out of the building is very likely an issue in this AOC.	Concrete, soil, sediment (in sumps), surface water (contained in sumps, trenches and pits), and groundwater	Spills to the surface may have infiltrated through the concrete floor of the building via drains, cracks or other breaches into the underlying soils. Secondary releases resulting from potential infiltration through the floor to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface may be subject to migration to the groundwater through the changes in the tide causing fluctuations in the groundwater table.	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify the full extent of staining and therefore, the locations that will require investigation.

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AOC-17: Drainage Structures Associated with/beneath English Station	Although not specifically detailed as of the date of preparation of this CSM given the condition of the interior of English Station, it is evident from some limited markings on a historic drawing that there is a robust drainage system underlying the floor of the building.	VOCs, SVOCs, ETPH, PCBs, Metals	Suspected	Suspected	**Primary:** Direct spillage to floor drains, trench drains, sumps; **Secondary:** Infiltration through the bottoms of drainage structures into the underlying soils;**Tracking:** Tracking is a likely issue, as materials caught in the treads of mobile equipment may have been deposited through the grates that cover certain floor drainage features.	Concrete, soil, sediment (in sumps), surface water (contained in sumps, trenches and pits), and groundwater	Spills into the drainage structures may have infiltrated through the concrete floor of the building via drains, cracks or other breaches into the underlying soils and may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through fluctuations of the tide causing fluctuations in the groundwater table.	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify drainage features and therefore, the locations that will require investigation.
AOC-18: Loading Docks and Overhead Doors	Although not specifically detailed as of the date of preparation of this CSM given the condition of the interior of English Station, it is evident that there are interior portions of former loading docks that will need to be assessed.	VOCs, SVOCs, ETPH, PCBs, Metals	Suspected	Suspected	**Primary:** Direct spillage or leakage to the floor of the building or to the surface immediately outside of the building; **Secondary:** Absorption into concrete and/or asphalt and infiltration to the underlying soils;**Tracking:** Tracking into, throughout and out of the building is very likely an issue in this AOC.	Concrete, asphalt, soil, sediment and groundwater	Spills to the surface may have infiltrated through the concrete floor of the building or into asphalt or concrete aprons outside of the building into the underlying soils. Secondary releases resulting from potential infiltration through the concrete or asphalt to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the changes in the tide causing fluctuations in the water table.	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify interior conditions associated with loading docks and overhead doors where chemicals were handled. The exterior portions of the loading docks will also be further evaluated, although they have been subject to a great deal of sampling already through the evaluation of other AOCs across the Site.

Note that "Tracking" includes not only that which happens via anthropogenic means, but also may be the result of the flooding of the Site during storm events.

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
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AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
PARCEL A (STATION B)												
1	**Station B Building Interior**											
	PCB Area 1.1: Mezzanine and First Floor	PCBs, ETPH	No additional investigative sampling is proposed. Additional remediation will be required in this area, followed by verification sampling in accordance with 40 CFR 761 Subpart O (5-ft. sampling grid).	--				--	**Concerete verification samples as needed.**	--	--	--
	PCB Area 1.2: Former Annex III	PCBs, ETPH	None; Previously remediated.	--				--	--	--	--	--
	PCB Area 1.3: Basement	Metals, PCBs, ETPH, PAHs	None; Previously investigated.	--				--	--	--	--	--
2	**Station B Former UST Area**	VOCs, PAHs, ETPH, PCBs	4 soil sample locations to confirm that past elevated detections of PAHs in this area are related to fill materials and not a release.	**4**		4	4	--	--	--	--	**Figure 5-1**
3	**Former Septic Systems**	VOCs, SVOCs, ETPH, PCBs, Metals	One former septic system location has historically been identified on Parcel A. The former septic system on Parcel A was located to the south of Station B. This location was evaluated as part of past investigations and has been adequately characterized. No further investigation in this area is planned. Two additional locations have been identified on Parcel B where other septic systems or structures may have been located. These areas have been identified previously as "Septic East" and "Septic West". Investigation is proposed at those locations and is summarized below under the proposed work for Parcel B.	--				--	--	--	--	--
12	**Former Coal Yard (Includes AOC-12N and 12W)**											
12N	PCB Area 6.1: Former Station B Area	PCBs, ETPH, PAHs, Arsenic	4 soil sample locations to confirm past detections of TPH at previous sampling location TB-6. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those boring locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**4**	--	4	4	--	**4**	--	--	**Figure 5-2**
12W	PCB Area 2.1: Elevated Railroad Tracks and Foundations	PCBs, ETPH, PAHs, Arsenic	18 soil / porous media samples (depending on the material present at the time of the investigation) from the elevated rails to further evaluate the presence of PCBs and to test for other COCs not tested for previously.	**18**	18	--	--	--	--	--	--	**Figures 5-3 and 5-4**
	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	87 soil sample locations from the areas in between Tracks B, C, and D of the elevated rail system to evaluate areas not yet fully characterized. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those boring locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected. Sample points will be located on a 20-foot sampling grid.	**87**	87	87	87	--	87	--	--	**Figure 5-3**
14	Former Cooling Water Discharge Tunnel	PCBs, ETPH and PAHs	In order to remediate the tunnel, it will have to be exposed and the sediment removed. Sediment will require characterization prior to disposal. Once exposed and cleared of sediment, the tunnel will be sampled and handled based on the results of that sampling. Based on an approximate tunnel length of 400 ft. and a 10 ft. sample spacing, 40 concrete samples are assumed.	--				**40**	**40**	--	--	--

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
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AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
PARCEL B (ENGLISH STATION)												
3	**Former Septic Systems (Septic East and Septic West)**	VOCs, SVOCs, ETPH, PCBs, Metals	3 soil sample locations to evaluate impacts to soil in the vicinity of a structure identified as Septic East and 1 sediment sample each will be collected from the Septic East, Sump 2 and Sump 4 structures in association with Septic East (located on the east side of English Station).	**3**	3	3	3	**3**	--	--	--	**Figures 5-10 and 5-17**
			3 soil sample locations to evaluate impacts to soil in the vicinity of a structure identified as Septic West, located along the west side of English Station. 2 sediment samples will be collected from Septic West, depending on the number of chambers in the structure. 2 concrete samples will be taken from the top of Septic West to evaluate tracking of PCBs in this area.	**3**	3	3	3	**2**	**2**	--	--	**Figures 5-10 and 5-17**
4	**Past Spills**	VOCs, SVOCs, ETPH, PCBs, Metals	Past spills at the Site have been evaluated through updated research conducted during development of this Plan. No specific investigation of past spills is proposed, however, known spills or releases (such as at Capacitor Bank #1) will be evaluated through the investigation of other AOCs.	--				--	--	--	--	--
5	**Bulkhead PCB Remediation Area**	PCBs, ETPH, PAHs	9 shallow soil samples from across the former Bulkhead PCB Remedition area to evaluate tracking; deeper soil samples collected from 3 locations to confirm that past remediation met goals.	**9**	9	--	3	--	--	--	--	**Figure 5-5**
6	**Capacitor Release / Outdoor Capacitor Banks 1-3**											
	PCB-3.1: Former Capacitor Area	PCBs, ETPH, PAHs	6 soil sample locations to delineate PCB hotspots (>10 mg/kg) horizontally. 7 soil sample locations to evaluate tracking and staging of building debris. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected. The concrete pedestal/foundation on which the former Capacitor Bank #1 sat, contains PCBs at concentrations >50 mg/kg.	**13**	13	13	13	--	**13**	--	--	**Figure 5-6**
			4 concrete samples collected from the former capacitor pads and adjacent cable wall to evaluate tracking and staging of building debris.	--				--	**4**	--	--	**Figure 5-6**
7	**Former Waste Oil AST / Oil Pump Room Area**											
	PCB Area 5.3: Exterior Area Adjacent to Oil Pump Room	PAHs, ETPH, PCBs, VOCs, Metals (due to the proximity to the former Waste Oil AST)	8 soil sample locations to delineate PCB hotspots (>10 mg/kg) and to provide better vertical delineation of known contamination areas, including those locations with elevated ETPH/TPH. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**8**	8	8	8	--	**8**	--	--	**Figure 5-7**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
	PCB Area 5.4: Former Waste Oil AST Area	VOCs, PAHs, ETPH, PCBs, Metals	4 soil borings to delineate a PCB hotspot (>50 mg/kg) and provide better vertical delineation. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**4**	4	4	4	--	**4**	--	--	**Figure 5-7**
			2 concrete samples from pipe trench covers to evaluate tracking; 2 sediment samples from within the pipe trench if accessible; 2 concrete samples from the trench itself, if accessible. 2 concrete samples from structure P09.	--				**2**	**6**	--	--	**Figure 5-7**
7	PCB Area 5.5: Tower GH-4 Area	PCBs, ETPH, PAHs	3 soil borings to delineate a PCB hotspot (>10 mg/kg) and provide better vertical delineation. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected. 3 soil borings will be advanced around SB-093014-112 to evaluate/delineate potential petroleum-related contamination observed in that boring. 2 soil borings will be advanced around SB-093014-113 to evaluate similar impacts observed at that boring location.	**8**	8	8	8	--	**8**	--	--	**Figure 5-7**
	PCB Area 5.6: Former Storage Building Area	VOCs, SVOCs, ETPH, PCBs, Metals	4 soil borings to provide additional horizontal and vertical delineation of PCB and ETPH contaminated soils. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**4**	4	4	4	--	**2**	--	--	**Figure 5-7**
			2 concrete samples from pipe trench covers to evaluate tracking; 2 sediment samples from within the pipe trench if accessible; 2 concrete samples from the trench itself, if accessible.	--				**2**	**4**	--	--	**Figure 5-7**
			2 concrete samples from structure P07 due to a lack of previous data; 7 concrete samples from structure P08 to evaluate tracking.	--				--	**9**	--	--	**Figure 5-7**
			1 sediment sample collected from the manhole in structure P07.	--				**1**	--	--	--	**Figure 5-7**
8	**Former Fuel Oil ASTs**											
	PCB Area 5.7: Fuel Oil Tank Area	VOCs, PAHs, ETPH, PCBs	9 soil samples beneath the former AST containment dikes;	**9**	9	--	--	--	--	--	--	**Figure 5-8**
			6 soil sample locations to delineate PCB hotspots (>50 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**6**	6	6	6	--	**6**	--	--	**Figure 5-8**
			4 concrete samples of the pipe trench covers; 4 concrete samples of the trench bottom; 2 concrete samples from structure P10	--				--	**10**	--	--	**Figure 5-8**
			4 sediment samples from within the pipe trench; 2 sediment samples from sumps associated with the secondary containment dikes; 1 sediment sample from within P10; 1 sediment sample from within Catch Basin CB5.	--				**8**	--	--	--	**Figure 5-8**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
9	**Transformer Areas**											
	PCB Area 3.3: Northwest Transformer Area	PCBs, ETPH, PAHs	5 soil sample locations to delineate PCB hotspots (>10 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**5**	5	5	5	--	**5**	--	--	**Figure 5-9**
			1 sediment sample from within Enclosure EN03; 1 sediment sample from the manhole at structure P19; 1 sediment sample from the manhole at structure P20; 1 sediment sample from the manhole at structure P21; 1 sediment sample from the sump at Enclosure EN02.	--				**5**	--	--	--	**Figure 5-9**
			6 concrete samples collected from structure P19; 2 concrete samples collected from structure P20; 2 concrete samples collected from structure P21; 7 porous media samples collected from structure P22.	--				--	**17**	--	--	**Figure 5-9**
	PCB Area 4.1: Former Transformer Area on the West Side of English Station	PCBs, ETPH, PAHs	15 soil sample locations to delineate PCB hotspots (>10 and 50 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**15**	15	15	15	--	**15**	--	--	**Figure 5-10**
			5 concrete samples collected from structure P16; 3 concrete samples collected from structure P18.					--	**8**	--	--	**Figure 5-10**
			1 sediment sample collected from the manhole at structure P16.	--				**1**	--	--	--	**Figure 5-10**
	PCB Area 4.3: Southwest Transformer and Former Capcitor Area	PCBs, ETPH, PAHs	28 soil sample locations to vertically and horizontally delineate PCB hotspots (>10 and 50 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**28**	28	28	28	--	**28**	--	--	**Figure 5-11**
			4 concrete samples to characterize structure P14; 5 concrete samples to evaluate tracking across structure P15; 2 concrete samples to evaluate possible tracking of contaminated soil across pads P13A and P13B.	--				--	**11**	--	--	**Figure 5-11**
			1 sediment sample collected from the manhole in structure P14.	--				**1**	--	--	--	**Figure 5-11**
10	**Former Interior Chemical Storage Areas (Excluding English Station Interior)**											
	Foam House	VOCs, SVOCs, ETPH, PCBs, Metals	2 concrete samples of the Foam House floor.					--	**2**	--	--	**Figure 5-8**
			2 soil sample locations beneath the floor in the same locations as the concrete samples above.	**2**	2	2	2	--	--	--	--	**Figure 5-8**
			4 wipe samples of non-porous surfaces if staining or other indication of contamination is present.					--	--	**4**	--	**Figure 5-8**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
10	PCB Area 4.2: Storage and Shop Building	PCBs, ETPH, VOCs, SVOCs, Metals	28 concrete samples of the floor of the Storage building.					--	**28**	--	--	**Figure 5-12**
			11 soil samples collected from beneath the floor of the Storage Building, below select concrete sample locations.	**11**	11	11	11	--	--	--	--	**Figure 5-12**
			8 wipe samples of non-porous surfaces if staining or other indication of contamination is present.	--				--	--	**8**	--	**Figure 5-12**
			1 sediment sample collected from the sump in the Storage Building.	--				**1**	--	--	--	**Figure 5-12**
	PCB Area 4.4: Assembly Hall Building	PCBs	14 concrete samples collected from the floor of the Assembly Hall.					--	**14**	--	--	**Figure 5-13**
			4 soil sample locations beneath floor sample locations.	**4**	4	4	4	--	--	--	--	**Figure 5-13**
11	**On-Site Fill Material (Evaluation of tracking across pads/structures not captured by other AOCs/PCB Areas)**	PAHs, ETPH, Metals	No soil sampling; the fill that comprises the Site has been adequately characterized based on previous work.	--				--	--	--	--	--
			3 concrete samples to evaluate tracking across structure P12.	--				--	**3**	--	--	**Figure 5-11**
			2 sediment samples collected from the 2 manholes present in structure P12 (unless the manholes access the same chamber).	--				**2**	--	--	--	**Figure 5-11**
12	**Former Coal Yard (Includes AOC-12N, 12E, and 12W)**											
12W	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	14 soil sample locations in between Tracks A and B to further characterize the area with respect to PCBs and to delineate ETPH/TPH impacted soil in the vicinity of previous sample location TB-R.	**14**	14	14	14	--	--	--	--	**Figure 5-4**
	PCB Area 3.2: Area Adjacent to Bulkhead PCB Remediation	PCBs, ETPH, PAHs	11 soil sample locations to further delineate PCB hotspots (>10 mg/kg and >50 mg/kg); provide further evaluation on the northern side of the former excavation area. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**11**	11	11	11	--	**11**	--	--	**Figure 5-14**
12E	PCB Area 6.2: Mill River East Branch Area	PCBs, ETPH, PAHs	60 soil sample locations laid out on a 10-foot sampling grid to further evaluate the main access point into the southwestern portion of the Site, and to further evaluate a PCB hotspot (>50 mg/kg) and SEH area formerly indentified in front of English Station. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**60**	60	60	60	--	**60**	--	--	**Figure 5-15**
			4 soil sample locations to further delineate high concentrations of ETPH/TPH at previous sample location TB-X.	**4**	4	--	4	--	**4**	--	--	**Figure 5-16**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
13	**Former Wastewater Treatment System**											
	PCB Area 5.1: Dumpster Area	VOCs, SVOCs, ETPH, PCBs, Metals	3 soil sample locations beneath the former dumpster pads; 5 soil sample locations to delineate PCB contamination >50 mg/kg to the immediate west of the dumpster pads; 6 soil sample locations to delineate ETPH impacts at previous sample locations.	**14**	14	14	14	--	--	--	--	**Figure 5-17**
			7 porous media (or surface soil) and shallow soil samples collected from the area north of the former dumpster pads and 5TB-010 to evaluate tracking	**7**	7	--	--	--	**7**	--	--	**Figure 5-17**
	PCB Area 5.2: Former Wastewater Treatment System Area	PCBs, ETPH and PAHs	4 soil sample locations to delineate/evaluate PCB contamination in the vicinity of previous sample locations where vertical or horizontal delineation isn't complete; 3 soil sample locations along the eastern side of PCB Area 5.2, where little investigation has been done to date. 4 soil sample locations to delineate ETPH impacts to soil at previous sample location SB-111814-127. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**11**	11	11	11	--	**11**	--	--	**Figure 5-17**
			5 concrete samples of the pipe trench covers that run through this area; 5 samples of the trench bottom (if accessible).	--				--	**10**	--	--	**Figure 5-17**
			5 sediment samples from within the pipe trench in this area	--				**5**	--	--	--	**Figure 5-17**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
15	**Oil Stained Area North of English Station / Release to Catch Basin 4**	PCBs, ETPH and PAHs	28 soil sample locations to investigate contamination related to the release of oil to the ground surface in this area. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**28**	28	28	28	--	**28**	--	--	**Figure 5-18**
			The catch basin discharge piping location will be determined through utility location and leaks from the discharge piping to the surrounding soils will be evaluated with a series of soil samples collected from either side of the line. Currently, the discharge piping, direction and location are not known with certainty, but may have previously discharged directly to the Mill River, along the east side of the Site. For the purposes of this table, it is assumed that the piping run is 160 ft. long. 1 sediment sample from the catch basin is also planned.	**8**	8	8	8	**1**	**8**	--	--	--
16	**English Station Interior**											
	PCB Area 7.0: English Station Interior	VOCs, SVOCs, ETPH, PCBs, Metals	Investigation of the interior of English Station will be deferred until such time as proper abatement of asbestos and the removal of debris is completed sufficient to allow such investigation.	--				--	--	--	--	--
17	**Drainage Structures Associated With / Beneath English Station**	VOCs, SVOCs, ETPH, PCBs, Metals	Investigation of the interior of English Station will be deferred until such time as proper abatement of asbestos and the removal of debris is completed sufficient to allow such investigation.	--				--	--	--	--	--
18	**Loading Docks and Overhead Doors**	VOCs, SVOCs, ETPH, PCBs, Metals	Spills, releases and tracking associated with the movement of materials through access/egress points along the exterior areas of English Station have been investigated and will continue to be evaluated during the investigation of other adjacent AOCs.	--				--	--	--	--	--
Site-Wide Groundwater		VOCs, SVOCs, ETPH, PCBs, Metals	As part of the initial investigation efforts at the Site, a well condition survey will be conducted in order to evaluate the viability of the wells that remain. A decision regarding the number of wells needed to bolster any remaining viable wells will be made following the condition survey. Final well placement may also be subject to the findings of the soil investigation. All proposed well locations will be subject to the approval of the CTDEEP.									--

Notes:

1 Where the collection of porous media samples is specified, porous media will be sampled in accordance with the USEPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), dated May 2011. If no porous media is present where specified, then a surficial soil sample will be collected from the ground surface to a maximum depth of no greater than 3 inches.

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
PARCEL A (STATION B)																							
1	**Station B Building Interior**										--	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 1.1: Mezzanine and First Floor	PCBs, ETPH	--				--	**Concerete verification samples as needed.**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 1.2: Former Annex III	PCBs, ETPH	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 1.3: Basement	Metals, PCBs, ETPH, PAHs	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	**Station B Former UST Area**	VOCs, PAHs, ETPH, PCBs	**4**	--	4	4	--	--	--	--	**8**	**4**	**8**	**2**	**8**	**4**	--	--	--	**8**	**2**	--	--
3	**Former Septic Systems**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	**Former Coal Yard (Includes AOC-12N and 12W)**																						
12N	PCB Area 6.1: Former Station B Area	PCBs, ETPH, PAHs, Arsenic	**4**	--	4	4	--	**4**	--	--	**12**	**4**	**1**	--	**8**	--	--	--	**1**	--	--	--	--
12W	PCB Area 2.1: Elevated Railroad Tracks and Foundations	PCBs, ETPH, PAHs, Arsenic	**18**	18	--	--	--	--	--	--	**18**	--	**5**	--	**5**	--	--	--	**5**	--	--	--	--
	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	**87**	87	87	87	--	**87**	--	--	**348**	**87**	**23**	--	**23**	**11**	--	--	**23**	--	--	--	--
14	Former Cooling Water Discharge Tunnel	PCBs, ETPH and PAHs	--				**40**	**40**	--	--	**80**	--	**10**	--	**10**	--	--	--	--	--	--	--	--

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
PARCEL B (ENGLISH STATION)																							
3	**Former Septic Systems (Septic East and Septic West)**	VOCs, SVOCs, ETPH, PCBs, Metals	**3**	3	3	3	**3**	--	--	--	**12**	**4**	--	--	**9**	--	**9**	--	--	**9**	**5**	**9**	**5**
			3	3	3	3	**2**	**2**	--	--	**13**	**5**			**8**		**8**			**8**	**4**	**8**	**4**
4	**Past Spills**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	**Bulkhead PCB Remediation Area**	PCBs, ETPH, PAHs	**9**	9	--	3	--	--	--	--	**12**	--	**3**	--	**3**	--	--	--	--	--	--	--	--
6	**Capacitor Release / Outdoor Capacitor Banks 1-3**																						
	PCB-3.1: Former Capacitor Area	PCBs, ETPH, PAHs	**13**	13	13	13	--	**13**	--	--	**52**	**15**	**2**	--	**13**	**13**	--	--	--	--	--	--	--
			--				--	**4**	--	--	**4**	--	--	--	--	--	--	--	--	--	--	--	
7	**Former Waste Oil AST / Oil Pump Room Area**																						
	PCB Area 5.3: Exterior Area Adjacent to Oil Pump Room	PAHs, ETPH, PCBs, VOCs, Metals (due to the proximity to the former Waste Oil AST)	**8**	8	8	8	--	**8**	--	--	**32**	**8**	**2**	--	**8**	**8**	**2**	--	--	**2**	--	--	--
	PCB Area 5.4: Former Waste Oil AST Area	VOCs, PAHs, ETPH, PCBs, Metals	**4**	4	4	4	--	**4**	--	--	**16**	**4**	**1**	--	**4**	**4**	**1**	--	--	**1**	--	--	--
			--				**2**	**6**	--	--	**8**	--	**2**	--	**2**	--	**2**	--	--	**2**	--	--	--
	PCB Area 5.5: Tower GH-4 Area	PCBs, ETPH, PAHs	**8**	8	8	8	--	**8**	--	--	**32**	**8**	**1**	--	**18**	**9**	--	--	--	--	--	--	--
	PCB Area 5.6: Former Storage Building Area	VOCs, SVOCs, ETPH, PCBs, Metals	**4**	4	4	4	--	**2**	--	--	**14**	**4**	--	--	**8**	**4**	**1**	--	--	**1**	--	**1**	--
			--				**2**	**4**	--	--	**6**	--	--	--	**1**	--	--	**1**	--	**1**	--	**1**	--
			--				--	**9**	--	--	**9**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**1**	--	--	--	**1**	--	--	--	**1**	--	--	**1**	--	**1**	--	**1**	--

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
8	**Former Fuel Oil ASTs**																						
	PCB Area 5.7: Fuel Oil Tank Area	VOCs, PAHs, ETPH, PCBs	**9**	9	--	--	--	--	--	--	**9**	--	**9**	**9**	**9**	**9**	--	--	--	**9**	--	--	--
			6	6	6	6	--	**6**	--	--	**24**	**6**	**6**	**4**	**6**	**4**	--	--	--	**2**	--	--	--
			--				--	**10**	--	--	**10**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**8**	--	--	--	**8**	--	--	--	**8**	--	--	**8**	--	**8**	--	**8**	--
9	**Transformer Areas**																						
	PCB Area 3.3: Northwest Transformer Area	PCBs, ETPH, PAHs	**5**	5	5	5	--	**5**	--	--	**20**	--	**4**	**2**	**4**	**2**	--	--	--	--	--	--	--
			--				**5**	--	--	--	**5**	--	--	--	**5**	--	**5**	--	--	**5**	--	**5**	--
			--				--	**17**	--	--	**17**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 4.1: Former Transformer Area on the West Side of English Station	PCBs, ETPH, PAHs	**15**	15	15	15	--	**15**	--	--	**60**	**15**	**8**	**4**	**8**	**4**	--	--	--	--	--	--	--
			--				--	**8**	--	--	**10**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**1**	--	--	--	**2**	--	--	--	**2**	--	**2**	--	--	**2**	--	**2**	--
	PCB Area 4.3: Southwest Transformer and Former Capcitor Area	PCBs, ETPH, PAHs	**28**	28	28	28	--	**28**	--	--	**112**	--	**8**	**8**	**8**	**8**	--	--	--	--	--	--	--
			--				--	**11**	--	--	**11**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**1**	--	--	--	**1**				**1**		**1**			**1**		**1**	

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
10	**Former Interior Chemical Storage Areas (Excluding English Station Interior)**																						
	Foam House	VOCs, SVOCs, ETPH, PCBs, Metals					--	**2**	--	--	**2**	--	--	--	--	--	--	--	--	--	--	--	--
			2	2	2	2	--	--	--	--	**6**	--	--	--	**2**	--	--	**2**	--	**2**	--	**2**	--
							--	--	**4**	--	**4**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 4.2: Storage and Shop Building	PCBs, ETPH, VOCs, SVOCs, Metals					--	**28**	--	--	**28**	--	--	--	--	--	--	--	--	--	--	--	--
			11	11	11	11	--	--	--	--	**33**	**11**	--	--	**3**	--	--	**3**	--	**3**	--	**3**	--
							1	--	**8**	--	**9**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 4.4: Assembly Hall Building	PCBs					--	**14**	--	--	**14**	--	--	--	--	--	--	--	--	--	--	--	--
			4	4	4	4	--	--	--	--	**12**	**4**	--	--	--	--	--	--	--	--	--	--	--
11	**On-Site Fill Material (Evaluation of tracking across pads/structures not captured by other AOCs/PCB Areas)**	PAHs, ETPH, Metals	--				**2**	**3**	--	--	**5**	--	--	--	**2**	--	**2**	--	--	**2**	--	**2**	--
12	**Former Coal Yard (Includes AOC-12N, 12E, and 12W)**																						
12W	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	**14**	14	14	14	--	--	--	--	**42**	**14**	**4**	--	**14**	**14**	--	--	**4**	--	--	--	--
	PCB Area 3.2: Area Adjacent to Bulkhead PCB Remediation	PCBs, ETPH, PAHs	**11**	11	11	11	--	**11**	--	--	**44**	**11**	**3**	**3**	**3**	**3**	--	--	--	--	--	--	--
12E	PCB Area 6.2: Mill River East Branch Area	PCBs, ETPH, PAHs	**60**	60	60	60	--	**60**	--	--	**240**	**60**	**15**	**15**	**30**	**15**	--	--	--	--	--	--	--
			4	4	--	4	--	**4**	--	--	**12**	**4**	**8**	**8**	**8**	**8**	--	--	--	--	--	--	--

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
13	**Former Wastewater Treatment System**																						
	PCB Area 5.1: Dumpster Area	VOCs, SVOCs, ETPH, PCBs, Metals	**14**	14	14	14	--	--	--	--	**42**	**14**	--	--	**4**	--	**4**	--	--	**4**	--	**4**	--
			7	7	--	--	--	**7**	--	--	**14**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 5.2: Former Wastewater Treatment System Area	PCBs, ETPH and PAHs	**11**	11	11	11	--	**11**	--	--	**44**	**11**	**3**	--	**3**	--	**3**	--	--	--	--	--	--
			--				--	**10**	--	--	**10**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**5**	--	--	--	**5**	--	--	--	**5**	--	**5**	--	--	**5**	--	**5**	--
15	**Oil Stained Area North of English Station / Release to Catch Basin 4**	PCBs, ETPH and PAHs	**28**	28	28	28	--	**28**	--	--	**112**	**28**	**7**	--	**28**	--	--	--	--	--	--	--	--
			8	8	8	8	**1**	**8**	--	--	**33**	**8**	**1**	--	**8**	--	**1**	--	--	**1**	--	**1**	--
16	**English Station Interior**																						
	PCB Area 7.0: English Station Interior	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	**Drainage Structures Associated With / Beneath English Station**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	**Loading Docks and Overhead Doors**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Site-Wide Groundwater		VOCs, SVOCs, ETPH, PCBs, Metals	The number of groundwater samples collected will depend on the final well network. See Table 5-1A for further discussion on Site-Wide groundwater.								--	--	--	--	--	--	--	--	--	--	--	--	--
Totals			**402**	**394**	**355**	**362**	**74**	**477**	**12**	**0**	**1677**	**329**	**134**	**55**	**290**	**120**	**46**	**15**	**33**	**77**	**11**	**53**	**9**
Total Proposed Sample Locations			**607**																				
Total Proposed Samples			**1674**																				

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
PARCEL A								
2	**Station B Former UST Area**	Four soil borings will be advanced in areas where elevated PAHs were detected in soil around a former UST location. Soil samples will be collected from two separate depth intervals (intermediate and deep).	~8'	14'	No	--	7'-8'	13'-14'
12N	**PCB Area 6.1: Former Station B Area**	Four soil borings will be advanced around an area where elevated concentrations of TPH were detected in soil. Soil samples will be collected from two separate depth intervals (intermediate and deep) below porous media.	7'	7'	Yes	--	6'-7'	10'-11'
12W	**PCB Area 2.1: Elevated Railroad Tracks and Foundations**	Based on historical environmental reports, Tracks A, B, C, and D are covered by soil. All proposed samples will be surface soil samples unless concrete or asphalt is present. If concrete or asphalt is present at the surface of a planned sample location, the sample will be a porous media sample.	0.3'	1.5'	Yes, if present	0-0.25'	--	--
12W	**PCB Area 2.2: Former Coal Storage Areas**	Eighty seven soil borings will be advanced across this area of the Site to provide additional soil characterization. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media.	0-0.3'	4.3'-6.3'	Yes	0.5'-1.5'	3'-4'	7'-8'
PARCEL B								
3	**Former Septic Systems**	Little to no evaluation of soils surrounding the "Septic East" and "Septic West" structures has been completed to date. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) in the borings planned around these structures.	NA	NA	Yes	3'-4'	7'-8'	11'-12'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
5	**Bulkhead PCB Remediation Area**	Nine soil borings will be advanced across the former bulkhead remediation area. Shallow soil samples will be collected from all nine soil borings; deep soil samples will be collected from three of the nine borings.	8.5'	~12.5'	No	0-0.25'	--	12'-13'
6	**PCB Area 3.1: Former Capacitor Area**	Thirteen soil borings will be advanced across this area. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media in each of the thirteen borings.	0-0.3'	2.3'-4.3'	Yes	0.5'-1.5'	2'-3'	5'-6'
7	**PCB Area 5.3: Exterior Area Adjacent to Oil Pump Room**	Eight soil borings will be advanced in this area. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the eight borings.	0.3'-1.3'	~12'	Yes	0.5'-1.5'	5.5'-6.5'	12'-13'
7	**PCB Area 5.4: Former Waste Oil AST Area**	Four soil borings will be advanced around a previous soil boring location where elevated concentrations of PCBs were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the four borings.	0.3'-1.3'	5.3'	Yes	0.3'-1.3'	3'-4'	5'-6'
7	**PCB Area 5.5: Tower GH-4 Area (PCB Delineation)**	Three soil borings will be advanced around a PCB hotspot to delineate impacts horizontally and vertically. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the three borings.	2'-2.3'	8'-8.3'	Yes	2'-3'	4'-5'	9'-10'
7	**PCB Area 5.5: Tower GH-4 Area (Petroleum Delineation)**	Five soil borings will be advanced around previous boring locations where minor petroleum-related impacts were observed in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the five borings.	Odors and staining observed from 8.5'-15'	15'	Yes	8'-10'	13'-15	15'-17'
7	**PCB Area 5.6: Former Storage Building Area**	Four soil borings will be advanced around past sampling locations where PCB and petroleum-related impacts were detected in shallow soils. Two of the proposed soil borings will be drilled through concrete pad P08. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the four borings.	0.5'	1.8'	Yes	0.5'-1.5'	2'-3'	7'-8'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
8	**PCB Area 5.7: Fuel Oil Tank Area (Petroleum Delineation)**	Nine soil borings will be advanced beneath the former containment dikes for the former fuel oil ASTs. Shallow soil samples will be collected from beneath the concrete containment structures in this area.	NA	NA	No	Directly below containment structure (~1'-2')	--	--
8	**PCB Area 5.7: Fuel Oil Tank Area (PCB Delineation)**	Six soil borings will be advanced in the vicinity of previous soil borings that exhibited elevated PCB concentrations. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the six borings.	0-0.25'	1.7'-2'	Yes	0.5'-1.5'	2'-3'	5'-6'
9	**PCB Area 3.3: Northwest Transformer Area**	Five soil borings will be advanced around previous boring locations where elevated concentrations of PCBs were detected. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the five borings.	5'-7'	20'-25' (1 isolated detection)	Yes	0.5'-1.5'	6'-7'	11'-12'
9	**PCB Area 4.1: Former Transformer Area on the West Side of English Station**	Fifteen soil borings will be advanced across this area, in close proximity to previous soil boring locations where elevated concentrations of PCBs were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the fifteen borings.	0-0.3'	6'-8'	Yes	0.5'-1.5'	2'-3'	6'-7'
9	**PCB Area 4.3: Southwest Transformer and Former Capcitor Area**	Twenty eight soil borings will be advanced across this area to further delineate the horizontal and vertical extents of PCB contaminated soils identified during previous investigations. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the twenty eight borings.	0.3'-1.3'	6.3'-8.3' (1 isolated detection)	Yes	0.5'-1.5'	1.5'-2.5'	5.5'-6.5'
10	**Foam House**	Two soil borings will be advanced through the floor of the Foam House building to collect soil samples. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below the floor of the building at both boring locations.	0-0.25' (located south of the Foam House)	0.75'-1.5'	Yes, the concrete floor of the Foam House will be sampled	0.5'-1.5'	1.5'-2.5'	2.5'-3.5'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
10	**PCB Area 4.2: Storage and Shop Building**	Eleven soil borings will be advanced through the floor of the former Storage and Shop Building to collect soil samples. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below the floor of the building, at each of the boring locations.	0-0.3' along the southern side of the building	6'-8' along the southern side of building	Yes, the concrete floor of the Storage and Shop Building will be sampled	0.5'-1.5'	1.5'-2.5'	8'-9'
10	**PCB Area 4.4: Assembly Hall Building**	Four soil borings will be advanced through the floor of the former Assembly Hall to collect soil samples. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below the floor of the building at each of the boring locations.	Soil beneath, and in the immediate vicinity of the building has not been characterized.		Yes, the concrete floor of the Assembly Hall Building will be sampled	0.5'-1.5'	1.5'-2.5'	2.5'-3.5'
12W	**PCB Area 2.2: Former Coal Storage Areas (PCB Delineation)**	Ten soil borings will be advanced in this area to provide additional soil data where previous investigation is limited. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) at each of the boring locations.	Soil in this area of the Site has not been well characterized.		No	0-0.25'	0.5'-1.5'	3'-4'
12W	**PCB Area 2.2: Former Coal Storage Areas (PCB and Petroleum Delineation)**	Four soil borings will be advanced in the vicinity of a previous boring location where elevated concentrations of TPH were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) at each of the boring locations.	5'-7'	10'-12'	No	5'-7'	10'-12'	12'-14'
12W	**PCB Area 3.2: Area Adjacent to Bulkhead PCB Remediation**	Eleven soil borings will be advanced in the vicinity of the former Bulkhead Remediation Area, and in an area where widespread PCB contamination of soil has been identified. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep), below porous media in each of the eleven borings.	2'-4'	4.3'-6.3'	Yes	1'-2'	3'-4'	7'-8'
12E	**PCB Area 6.2: Mill River East Branch Area (PCB Delineation)**	Sixty soil borings will be advanced across this area of the Site to better characterize soils in this area, and to further delineate known areas of soil contamination. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep), below porous media at each boring location.	~0-1'	~0-1'	Yes	0.5'-1.5'	1.5'-2.5'	5'-6'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
12E	**PCB Area 6.2: Mill River East Branch Area (Petroleum Delineation)**	Four soil borings will be advanced in the vicinity of a previous boring location where elevated concentrations of TPH were detected in soil. Soil samples will be collected from two separate depth intervals (shallow and deep) at each of the boring locations.	0-2'	0-2'	Yes	1'-3'	--	5'-7'
13	**PCB Area 5.1: Dumpster Area (PCB Delineation)**	Eight soil borings will be advanced in this area to further delineate the vertical extents of PCB contamination. Three of the soil borings will be advanced through the concrete pad at the former dumpster location; five soil borings will be advanced throuth the asphalt to the west of the dumpster pad. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep), below porous media in all eight of the borings.	0.3'-2.3'	3.3'-5.3'	No	0.5'-1.5'	2'-3'	5'-6'
13	**PCB Area 5.1: Dumpster Area Cooling Water Discharge Structure (PCB Delineation)**	Seven shallow soil or porous media samples (depending upon which material is present) will be collected from the area immediately north of the dumpster pad.	NA	NA	Yes, if present	0-0.25'	--	--
13	**PCB Area 5.1: Dumpster Area (Petroleum Delineation)**	Six soil borings will be advanced in the vicinity of previous boring locations where elevated concentrations of TPH were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) at each of the boring locations.	8'	13'	No	5'-7'	7'-9'	15'-17'
13	**PCB Area 5.2: Former Wastewater Treatment System Area (PCB Delineation)**	Seven soil borings will be advanced in this area where previous investigations have identified but not delineated PCB contamination in soil and where data gaps exist. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the seven borings.	0.25'-1.0'	2.3'-4.0'	Yes	0.5'-1.5'	1.5'-2.5'	5'-6'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
13	**PCB Area 5.2: Former Wastewater Treatment System Area (PCB and Petroleum Delineation)**	Four soil borings will be advanced in the vicinity of a previous boring location where PCBs and petroleum-related impacts were identified. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the four borings.	13'-15'	13'-15'	Yes	11'-12'	14'-15'	17'-18'
15	**Oil Stained Area North of English Station**	Twenty eight soil borings will be advanced in an area along the northern side of English Station where a large oil stain is present. No significant effort has been undertaken to date to characterize this release. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the twenty eight borings.	NA	NA	Yes	0.5'-1.5'	1.5'-2.5'	4'-5'
15	**Release to Catch Basin 4**	Eight soil borings will be advanced along the Catch Basin 4 discharge piping (once located) to evaluate impacts to the surrounding soil resulting from the release of the large oil spill (detailed above) along the northern side of English Station. No significant effort has been undertaken to date to characterize this release. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the eight borings.	NA	NA	Yes	4'-5'	6'-7'	8'-9'

NOTES:

1 Where the collection of porous media samples is specified, porous media will be sampled in accordance with the USEPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), dated May 2011. If no porous media is present where specified, then a surficial soil sample will be collected from the ground surface to a maximum depth of no greater than 3 inches.

2 Soil sample ranges presented are approximate. Actual sample depths may be adjusted based on historic contaminant detections, field observations and/or measurements, or unanticipated conditions.

3 Soil sample ranges are generally presented as 1-foot sample intervals, however 6-inch intervals may be used to collect PCB samples.

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Soil	VOCs	Field Sample, Field Duplicate, MS/MSD, EB, and Trip Blank	SW-846 5035A/8260B	Methanol - preserved in the field and Cool to 4°C (high-level); and water – preserved in the field and Cool to 4°C (low-level). (Soil/preservative ratio: 1:1)	High-Level: 14 days to analysis Low-Level: 48 hours to freezing at <- 7°C; 14 days to analysis	2-40 mL Methanol preserved VOA vials (high-level); or 2-40 mL vials with lab reagent water and magnetic stir bar (low-level)
Soil	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C, 3545A, 3546/8270D	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4 oz. amber glass jar with Teflon lined cap
Soil	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	14 days to extraction 40 days to analysis	1-4 oz glass jar w/Teflon lined cap
Soil	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C/8082A	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4oz amber glass jar with Teflon lined cap
Soil	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3050B/ 6010C/6020A/ 7471A	Cool to 4°C	Mercury: 28 days to analysis Other Metals: 180 days to analysis	1-8 oz. polyethylene/glass bottle and cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Soil/ Sediment	pH	Field Sample, Field Duplicate, and Lab Duplicate	SW-846 9045D	Cool to 4°C	24 hours to analysis	1-4 oz. glass jar with Teflon-lined cap
Soil/ Sediment	ORP	Field Sample, Field Duplicate, and Lab Duplicate	ASTM Method D 1498-00, modified	Cool to 4°C	24 hours to analysis	1-4 oz. glass jar with Teflon-lined cap
Soil/ Sediment	Corrosivity	Field Sample, Field Duplicate, and Lab Duplicate	SW-846 9045D	Cool to 4°C	24 hours to analysis	1-4 oz. amber glass jar with Teflon lined cap
Soil/ Sediment	Ignitability	Field Sample, Field Duplicate, and Lab Duplicate	SW-846 1030	Cool to 4°C	None	1-4 oz. amber glass jar with Teflon lined cap
Soil/ Sediment	TCLP VOCs	Field Sample, Field Duplicate, and MS/MSD	SW-846 1311/5030B/ 8260B	Cool to 4°C No headspace	14 days to analysis	1-4 oz glass jar with Teflon lined cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Soil/ Sediment	TCLP SVOCs	Field Sample, Field Duplicate, and MS/MSD	SW-846 Method 1311/3510C/ 8270D	Cool to 4°C	14 days to TCLP extraction; 7 days from TCLP extraction to SVOC extraction; 40 days from SVOC extraction to analysis	1-8 oz glass jar with Teflon lined cap
Soil/ Sediment	TCLP Metals	Field Sample, Field Duplicate, and MS/DUP	SW-846 1311/3005A, 3015A/6010C/ 7470A	Cool to 4°C	Mercury: 28 days Other metals: 180 days to analysis	1-8 oz glass bottle and cap
Soil/ Sediment	Reactive cyanide	Field Sample, Field Duplicate, and MS/DUP	SW-846 Update III Chapter 7, Section 7.3.4	Cool to 4°C; no headspace	3 days to analysis	1-4 oz. amber glass jar with Teflon lined cap
Soil/ Sediment	Reactive sulfide	Field Sample, Field Duplicate, and MS/DUP	SW-846 Update III Chapter 7, Section 7.3.3	Cool to 4°C; no headspace	3 days to analysis	1-4 oz. amber glass jar with Teflon lined cap
Wipe	PCBs	Field Sample, Field Duplicate	SW-846 3540C/8082A	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4oz amber glass jar with Teflon lined cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Sediment	VOCs	Field Sample, Field Duplicate, EB, MS/MSD, and Trip Blank	SW-846 5035A/ 8260B	Methanol - preserved in the field and Cool to 4°C (high-level); and water – preserved in the field and Cool to 4ºC (low-level). (Sediment/ preservative ratio: 1:1)	High-Level: 14 days to analysis Low-Level: 48 hours to freezing at <- 7ºC; 14 days to analysis	2-40 mL Methanol preserved VOA vials (high-level); or 2-40 mL vials with lab reagent water and magnetic stir bar (low-level)
Sediment	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C, 3545A, 3546/8270D	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4 oz. amber glass jar with Teflon lined cap
Sediment	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	14 days to extraction 40 days to analysis	1-4 oz glass jar w/Teflon lined cap
Sediment	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C/8082A	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4oz amber glass jar with Teflon lined cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Sediment	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3050B/ 6010C/6020A/ 7471A	Cool to 4°C	Mercury: 28 days to analysis Other Metals: 180 days to analysis	1-8 oz. polyethylene/glass bottle and cap
Groundwater	VOCs	Field Sample, Field Duplicate, EB, MS/MSD, and Trip Blank	SW-846 5030B/8260B	Cool to 4°C HCl to pH<2	14 days to analysis	2-40 mL VOA vials
Groundwater	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8270C	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Groundwater	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	7 days to extraction 40 days to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Groundwater	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8082A	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Groundwater	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3005A, 3015A/6010C/ 6020A/7470A	pH <2 with HNO_3; Cool to 4°C	Mercury: 28 days to analysis Other Metals: 180 days to analysis	1 1-liter polyethylene/glass container

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Surface Water	VOCs	Field Sample, Field Duplicate, EB, MS/MSD, and Trip Blank	SW-846 5030B/8260B	Cool to 4°C HCl to pH<2	14 days to analysis	2-40 mL VOA vials
Surface Water	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8270C	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Surface Water	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	7 days to extraction 40 days to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Surface Water	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8082A	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Surface Water	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3005A, 3015A/6010C/ 6020A/7470A	pH <2 with HNO_3; Cool to 4°C	Surface water	Metals

Note: Solid media (e.g., concrete, asphalt, etc.) sampling and analytical methods will be as described for soils, with results reported on a dry weight basis.

TABLE 6-1
ESTIMATED PCB BULK SAMPLE QUANTITIES-STATION B AND EXTERIOR LOCATIONS
English Station
510 Grand Avenue
New Haven, Connecticut

General Location	Estimated Quantity of Bulk Building Material Product Samples
Station B - Basement	36
Station B – 1st Floor	171
Station B – 2nd Floor	12
Station B – Roof	39
Station B – Exterior	57
Exterior – Satellite Buildings/Structures	87
Exterior – Debris/ Miscellaneous	36
SAMPLE TOTAL	438

APPENDIX A

COPY OF PARTIAL CONSENT ORDER COWSPCB 15-001

STATE OF CONNECTICUT	:	AOWSPCB 13-001
	:	
V.	:	
	:	
THE UNITED ILLUMINATING COMPANY		

PARTIAL CONSENT ORDER NUMBER COWSPCB 15-001[1]

Date Issued: _____

A. The Commissioner of Energy and Environmental Protection (the "Commissioner") finds:

1. Respondent The United Illuminating Company ("UI") is a regional electric distribution company, established in New Haven, Connecticut in 1899, currently engaged in the purchase, transmission, distribution and sale of electricity and related services to residential, commercial and industrial customers.

2. Respondent has a business address of 180 Marsh Hill Road, Orange, Connecticut.

3. From 1914 until December of 2000, Respondent owned an approximately 8.9 acre parcel of land located at 510 Grand Avenue in New Haven, Connecticut, as set forth in Sections A.5. through A.10. below, said site is presently described in two deeds recorded at page 14 of volume 7814, and page 195 volume 7817 of the City of New Haven land records (the "Site"). The Site, part of an island in the Mill River, is depicted on the map included as Exhibit A to this Consent Order. For purposes of Respondent's obligations under this Consent Order, any reference to the Site includes all soil, surface water, groundwater and sediment located within the perimeter of the Site as shown on Exhibit A, but shall not include offsite soil, groundwater and sediment in the Mill River, including the East and West branches of said River or any areas that are offsite from the Site.

4. The Site is referred to and known as "English Station."

5. On or about August 16, 2000, Respondent transferred the Site to Quinnipiac Energy, LLC ("Quinnipiac Energy") as described in a deed which is recorded at page 72 of volume 5716 of the City of New Haven land records.

[1] This Consent Order is referred to herein as "Partial Consent Order", "Consent Order" or "order."

6. At some point prior to December 9, 2006, the Site was divided into two parcels, Parcel A and Parcel B.

7. Parcel A is located on the northern portion of the Site adjacent to Grand Avenue and includes, among other structures, a building known as Station B.

8. Parcel B is located on the southern portion of the Site and includes, among other structures, a former power generation building.

9. On December 9, 2006, Quinnipiac Energy sold Parcel A to Evergreen Power, LLC ("Evergreen"), as described in a deed which is recorded at page 14 of volume 7814 of the City of New Haven land records.

10. On December 13, 2006, Quinnipiac Energy sold Parcel B to ASNAT Realty, LLC ("ASNAT"), as described in a deed which is recorded at page 195 of volume 7817 of the City of New Haven land records.

SITE HISTORY AND ENVIRONMENTAL SETTING

11. Groundwater below and near the Site is classified as a GB groundwater area.

12. The surface water of the adjacent Mill River is classified as SD/SB.

13. From 1929 through 1992 Respondent operated an electrical power plant ("the Plant") at the Site.

14. The Plant was constructed on a man-made island in the middle of the Mill River located south of Grand Avenue in New Haven, CT. The island is constructed of historically placed fill and comprised of ash, dredge spoils, and other miscellaneous debris.

15. In 1992 the Plant was placed on deactivated status.

16. Respondent's activities on the Site involved the use and storage of equipment and oil, both containing polychlorinated biphenyls ("PCBs").

17. PCBs are a class of human-made chemicals whose manufacture, along with many of its uses, was banned by the United States Environmental Protection Agency ("EPA") in 1979. PCBs have been shown to cause cancer in animals. PCBs have been shown to cause other non-cancer health effects in animals and humans including, but not limited to, effects on the immune system, reproductive system, endocrine system, and

nervous system. Studies in humans provide supportive evidence for the potential impact of PCBs on humans.

18. Respondent's activities on the Site also involved the use and/or management of other equipment and/or materials that contained various pollutants including but not limited to metals, volatile organic compounds, semivolatile organic compounds, and total petroleum hydrocarbons.

19. Respondent operated five (5) PCB transformers ("PCB Transformers"), seventy (70) large high voltage capacitors, and eight (8) pieces of PCB containing electrical equipment including additional transformers and circuit breakers.

20. Respondent also operated two (2) PCB storage areas at the Site.

21. Respondent's employees routinely sprayed waste oil, including transformer oil contaminated with PCBs, for dust control, on coal piles, transit areas and handling areas.

22. Between 1975 and 1997, Respondent filed a number of spill reports with the Commissioner in connection with spills at the Site.

23. On or about December 8, 1997, while excavating on the Site, Respondent's employees discovered an oily material on the groundwater table at the Site, which later broke out through a rotted bulkhead and spilled into the Mill River. Analysis of the oily material indicated the presence of PCBs at levels near 350 parts per million ("ppm").

24. The Site has been the subject of a number of plans, reports and investigations that, among other things, have confirmed the presence of PCBs and other hazardous contaminants at the Site at levels exceeding Connecticut's Remediation Standards Regulations ("RSRs"), Regulations of Connecticut State Agencies ("R.C.S.A.") §§22a-133k-1 through 22a-133k-3. Notwithstanding that not all of the these plans, reports or investigations, may have been reviewed and approved by the Commissioner, these plans, reports and investigations shall be taken into account by Respondent in connection with its investigation and remedial actions hereunder, including the following:

- A 1999 Draft Asbestos and Hazardous Materials Survey for English Station, prepared by GEI Consultants, Inc.;

- A May 2000 Draft Remedial Action Report prepared by GEI Consultants, Inc.;

- A 2000 Dismantling Cost Study prepared by TLG Services, Inc.;

- A 2002 Site-Wide PCB Characterization and Clean-Up Plan, prepared by Advanced Environmental Interface;

- A 2012 Conceptual Remediation Action Plan for PCB Impacted soil, prepared by Stantec Consulting Services;

- A 2015 Subsurface Investigation Report for the Former English Station, prepared by HRP Associates; and

- A Revised Equipment Decontamination Work Plan, prepared by Partner Engineering and Science, Inc.

25. The RSRs apply to any action taken to remediate polluted soil or other environmental media, surface water or a groundwater plume at or emanating from a release area which action is required pursuant to Chapter 445 or 446k of the General Statutes.

26. On March 27, 2003 the Commissioner granted a Widespread Polluted Fill Variance for the Site in accordance with R.C.S.A. § 22a-133k-2(f)(1) ("Fill Variance").

27. On or about March 1, 2005, Quinnipiac Energy submitted a Significant Environmental Hazard Report to the Commissioner reporting that PCBs, at concentrations greater than thirty (30) times the industrial/commercial direct exposure criteria established by the RSRs, were present in surface soils at the Site, posing a potential risk to human health through contact and exposure as required by Connecticut General Statutes ("C.G.S.") § 22a-6u.

28. On or about May 22, 2007, EPA Region 1 conditionally approved a PCB cleanup plan for Parcel A of the Site proposed by Quinnipiac Energy, although the clean-up was not completed.

29. To date, five (5) PCB Transformers, which contained PCB transformer oil, remain at the Site in the Plant on Parcel B.

ESTABLISHING A FACILITY, CREATING A CONDITION, AND/OR MAINTAINING A FACILITY OR CONDITION WHICH CAN REASONABLY BE EXPECTED TO CREATE A SOURCE OF POLLUTION TO THE WATERS OF STATE

30. By virtue of the above, prior to the transfer of the Site to Quinnipiac Energy on August 16, 2000, Respondent established a facility or created a condition and/or maintained a facility or condition which reasonably can be expected to create a source of pollution to the waters of the State; maintained a discharge of waste in violation of Conn. Gen. Stat. §22a-427; initiated, created, or originated or maintained an unpermitted discharge in

violation of Conn. Gen. Stat. §22a-430; and/or disposed of PCBs or PCB-containing items, products or materials in violation of Conn. Gen. Stat. §22a-467. Respondent denies each such allegation and admits no liability hereunder.

31. Proper disposal of PCBs and the prevention of pollution are within the jurisdiction of the Commissioner under the provisions of Chapters 439, 445 and 446k of the Connecticut General Statutes, including but not limited to, §§ 22a-5, 22a-6, 22a-427, 22a-430, 22a-432, 22a-464, 22a-465, and §22a-467.

32. On April 8, 2013, the Commissioner issued Administrative Order # AOWSPCB 13-001 to Respondent and several other respondents, including ASNATand Evergreen (collectively, the "Current Owner"), Uri Kaufman, Ira Schwartz, and Mehboob Shah, as well as Quinnipiac Energy, and Grant MacKay Company Inc.

33. By agreement to the issuance of this Consent Order Respondent makes no admission of fact or law with respect to the matters addressed herein, including the allegations set forth above, other than the facts asserted in Sections A.1 through 5, A.13, A.15 and A.34 and Respondent shall not be deemed to have made any such admissions by the fact that the Respondent has agreed to perform work pursuant to this Consent Order.

34. The Commissioner and Respondent acknowledge and agree that the current zoning for the Site is heavy industrial and further acknowledge and agree that the remedial actions shall be consistent with this current zoned use.

B. Now, therefore, with the agreement of Respondent, the Commissioner, acting under §22a-6, §22a-424, §22a-425, §22a-427, §22a-430, §22a-431, §22a-432, §22a-449, §22a-465, and §22a-467 of the Connecticut General Statutes, orders Respondent as follows:

1. On-Site Remediation: Respondent shall conduct the investigation and cleanup of the Site in accordance with this Consent Order. Such investigation and cleanup shall be completed pursuant to a schedule acceptable to the Commissioner, provided however that the cleanup, not including any confirmatory monitoring performed by Respondent after the completion of such cleanup activities, shall be completed within 3 years of the Access Date defined in Section B.5 below, unless a later completion date is specified in writing by the Commissioner. Whenever this Consent Order refers to the RSRs, the standards shall be those in effect at the time of the Effective Date unless the Commissioner and the Respondent otherwise agree. The Commissioner and Respondent further agree as follows:

    a. On or before thirty (30) days from the Effective Date of this order, Respondent shall retain one or more Licensed Environmental Professional(s) ("LEP"(s)) acceptable to the Commissioner to prepare the documents and

implement or oversee the actions required by this order and shall, by that date, notify the Commissioner in writing of the identity of such LEP(s). Respondent shall retain one or more LEP(s) acceptable to the Commissioner until this order is fully complied with, and, within ten (10) days after retaining any LEP(s) other than the one(s) originally identified under this section, Respondent shall notify the Commissioner in writing of the identity of such other LEP(s). The consultants (LEP(s)) retained to perform PCB investigation, remediation, disposal, and confirmatory sampling must be familiar with the PCB requirements of both the applicable state and federal regulations, including but not limited to, those found at 40 CFR Part 761. Respondent shall submit to the Commissioner a description of the LEP's education, experience and training which is relevant to the work required by this order within ten (10) days after a request for such a description. Nothing in this section shall preclude the Commissioner from finding a previously acceptable LEP unacceptable; the Commissioner has determined that the LEPs listed on Exhibit B hereto are acceptable.

b. On or before sixty (60) days from the Access Date of this order, Respondent shall submit for the Commissioner's review and written approval a scope of study for an investigation of the Site and its potential impact on human health and the environment, including, but not limited to, the existing and potential extent and degree of contamination of soil and ground water, surface water, and sediment within the Site boundary (i.e., within the tunnel on the Site), as well as contamination of the Plant and any other building structures on the Site and any content therein (the "Scope of Study"). The Scope of Study shall:

- be consistent with and comply with the sampling requirements in 40 CFR Part 761 for PCBs, including but not limited to the Standard Operating Procedure for sampling on, into and through concrete;

- identify, document, inventory and assess asbestos and asbestos-containing materials to determine if such materials are friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order, and to determine how to conduct asbestos abatement in a manner that is necessary to comply with all applicable laws in connection with a plan of abatement for such materials in accordance with Section B.1.e.8. below.

- other than with respect to asbestos characterization as addressed above, fully characterize PCB constituents of all caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants and all other materials. Notwithstanding the above, Respondent shall investigate the presence of lead and mercury.

- identify non-hazardous and hazardous waste and other hazardous materials at the Site; and

- comply with all prevailing standards and guidelines, including, but not limited to, the Connecticut Department of Energy and Environmental Protection's (the "Department" or "DEEP") Site Characterization Guidance Document; and

- include:

    - the proposed location and depths of any additional ground water monitoring wells;

    - a proposed sampling and analytical program including at least the parameters to be tested, proposed sampling and analytical methods, for sediments within the boundary of the Site and soils, surface water, groundwater, the Plant and other structures at the Site and any contents therein as set forth above;

    - quality assurance and quality control procedures; and

    - a schedule for conducting the investigation.

The proposed Scope of Study for the Commissioner's review and approval may reference and evaluate existing data to support the proposed investigation.

c. If the Commissioner determines that the investigation carried out under the approved Scope of Study, in addition to previous studies and investigations of the Site, does not fully characterize the extent and degree of soil, sediment (within the boundaries of the Site), ground water, and surface water pollution at the Site as well as contamination of the Plant or other structures on the Site and any contents therein, to the satisfaction of the Commissioner, Respondent shall perform additional investigation in accordance with a supplemental plan and schedule approved in writing by the Commissioner. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted by Respondent for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that such supplemental plan is required.

d. Respondent shall implement the approved Scope of Study and, if same are required, any approved supplemental plan(s), in accordance with the approved schedule(s). Respondent shall notify the Commissioner of the date and time of installation of monitoring wells and of each soil, on-site

sediment, building material and water sampling event at least five (5) full business days prior to such installation or sampling.

e. Except as may be provided in the investigation schedule approved by the Commissioner, on or before thirty (30) days after the approved date for completion of the investigation, Respondent shall submit for the Commissioner's review and written approval a comprehensive and thorough report which:

1) describes in detail the investigation performed;
2) identifies the type, quantity and location of all asbestos, non-hazardous and hazardous wastes or other hazardous materials on the Site;
3) defines the existing and potential extent and degree of soil, sediment within the boundary of the Site, ground water, and surface water pollution as well as all contamination of the Plant and any other structures on the Site and contents therein;
4) evaluates the alternatives for remedial actions to abate on-site pollution and impacts for industrial/commercial use of the Site, including but not limited to any alternative specified by the Commissioner, which alternatives are in compliance with all applicable state and federal statutes and regulations, provided that

- to address the direct exposure and volatilization requirements under the RSRs for all contaminants (other than PCBs which are addressed below), Respondent will not be obligated to evaluate alternatives for remedial actions other than those required to comply with the commercial/industrial provisions in the RSRs;

- for PCBs, for direct exposure, a) outside the buildings, Respondent will not be obligated to evaluate alternatives for remedial actions other than those required to comply with 40 CFR Part 761 and with the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs, b) inside the buildings, the Respondent shall only be obligated to evaluate alternatives for remedial actions associated with the high occupancy standards in 40 CFR Part 761, and c) under the buildings, the Respondent shall only be obligated to evaluate alternatives for remedial actions associated with the more stringent of the high occupancy standards in 40 CFR Part 761 and the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs; and

- The RSR Pollutant Mobility provisions, for both PCBs and for releases into fill, apply in full to all alternatives; the Fill Variance exempts the Pollutant Mobility provisions with respect to the fill itself. The alternatives for remedial actions evaluated by Respondent must also include those alternatives for remedial actions required to comply with this Consent Order as set forth in this subsection B.1. and any approval

issued to Respondent by the Connecticut Department of Public Health requiring Respondent to abate asbestos containing materials that are friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order.

5) states in detail the most expeditious schedule for performing each alternative;
6) lists all permits and approvals required for each alternative, including but not limited to any permits required under Sections 22a-32, 22a-42a, 22a-342, 22a-361, 22a-368, 22a-430, 22a-465 or 22a-467 of the Connecticut General Statutes;
7) proposes a preferred alternative from among those evaluated pursuant to and consistent with the provisions identified in Section B.1.e.4., with supporting justification therefor;
8) provides that Respondent shall only be required to abate asbestos that is friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order, and to determine how to conduct asbestos abatement in a manner that is necessary to comply with all applicable laws; and
9) proposes a detailed program and schedule to perform the preferred on-site remedial actions, including but not limited to a schedule for applying for and obtaining all permits and approvals required for such remedial actions.

f. Unless otherwise specified in writing by the Commissioner, on or before thirty (30) days after approval of the report described in the preceding section, Respondent shall submit, for the Commissioner's review and written approval, contract plans and specifications for the approved remedial actions, a revised list of all permits and approvals required for such on-site actions, and a revised schedule for applying for and obtaining such permits and approvals, consistent with all applicable state and federal statutes and regulations and this Consent Order. Respondent shall use best efforts to obtain all required permits and approvals.

g. Respondent shall implement the approved remedial actions in accordance with the approved schedule. Respondent shall notify the Commissioner at least five (5) full business days prior to conducting remedial actions at the Site. Any such notice may include multiple dates that Respondent expects to be undertaking remediation at the Site. Within fifteen (15) days after completing such actions, Respondent shall certify to the Commissioner in writing that the actions have been completed as approved.

h. Except as may be provided in the approved remedial action schedule, on or before thirty (30) days after the approved date for completion of the remediation, Respondent shall submit for the Commissioner's review and written approval a comprehensive and thorough report which describes all remedial actions performed at the Site. Such report shall also include a soil,

on-site sediment, ground water and surface water post-remediation monitoring program to determine the degree to which the approved on-site remedial actions have been effective, and a schedule for performing the post-remediation monitoring program. Respondent shall implement the approved monitoring program to determine the effectiveness of the remedial actions in accordance with the approved schedule.

i. If the approved remedial actions do not result in the prevention and abatement of soil, on-site sediment, ground water, and surface water pollution and contamination of the Plant, other structures on the Site or items contained therein, in a manner that complies with all applicable state and federal statutes and regulations, to the satisfaction of the Commissioner, additional remedial actions and measures for monitoring and reporting on the effectiveness of those actions shall be performed in accordance with a supplemental plan and schedule approved in writing by the Commissioner, provided Respondent shall not be required to take actions more stringent than as provided in section B.1.e.4. and section B.1.k. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that such supplemental plan is required.

j. On a schedule established by the Commissioner or, if no such schedule is established, on a quarterly basis beginning no later than ninety (90) days after completion of the approved remedial actions or, as applicable, supplemental remedial actions, Respondent shall submit for the Commissioner's review and written approval a report describing the results to date of the approved monitoring program to determine the effectiveness of the on-site remedial actions.

k. The current zoning of the Site is heavy industrial. The remedial actions shall be consistent with the current zoned use and be no more stringent than those alternatives referenced in Section B.1.e.4. and Section B.1.e.7., and, if approved therein, may make use of environmental land use restrictions ("ELURs") and/or existing or constructed features that render soil inaccessible or environmentally isolated in accordance with the RSRs. Nothing herein prevents Respondent from agreeing to a more stringent standard of remediation.

2. Revisions. Respondent may, by written request, ask that the Commissioner approve, in writing, revisions to any document approved hereunder in order to make such document consistent with law or for any other appropriate reason.

3. Site Security. Subject to Section B.18. concerning Site Access, upon the Access Date of this Consent Order and until Respondent is in full compliance with the requirements of Section B.1. hereto (as provided in Section B.7.), Respondent shall maintain security at the Site. Respondent shall maintain security at the Site to, at a

minimum, the current level of security maintained at the Site by the Current Owner and approved by the Commissioner.

4. Effective Date. Respondent's parent company has made application to the Public Utilities Regulatory Authority ("PURA") and Massachusetts Department of Public Utilities ("MDPU") for approval of a merger transaction ("Transaction") with a subsidiary of Iberdrola USA, Inc. (the "PURA Application"). Respondent shall promptly notify the Commissioner when the Transaction closes. The "Effective Date" of this order shall be the later of the Closing of the Transaction or when this Consent Order becomes a final order of the Commissioner; provided, however, that if the Transaction does not close within ninety (90) days following the receipt of PURA approval and approval of the MDPU, then the Commissioner has the discretion to terminate this agreement. If PURA does not approve the PURA Application then this agreement is null and void. Respondent shall have no obligations under this Consent Order until the Effective Date.

5. Access Date. The "Access Date" is the date that the Commissioner provides written notification to Respondent that the Commissioner has secured "Required Access" as defined in Section B.18. and that such Required Access is in effect after the Effective Date. For purposes of this Consent Order, Respondent shall have no obligations under this Consent Order prior to the Effective Date.

6. Progress Reports. On or before the last day of each month following the Effective Date and continuing until all actions required by this order have been completed as approved and to the Commissioner's satisfaction, Respondent shall submit a progress report to the Commissioner describing the actions which Respondent has taken to date to comply with this order including the amounts incurred regarding such compliance; provided, however, that for any period in which actions required by this order consist solely of groundwater monitoring, Respondent shall submit a progress report on or before the last day of each month in which a groundwater monitoring event takes place.

7. Full Compliance. Respondent shall not be considered in full compliance with this Consent Order until all actions required by this order have been completed as approved and to the Commissioner's satisfaction. Subject to Section B.15., upon such full compliance or in the event of payment by Respondent as provided in Section B.18. or Section B.24., the Commissioner will issue to Respondent a certificate of compliance, which shall fully and finally conclude Respondent's obligations with respect to the Site, and Respondent shall have no further obligation or liability for any matter within the jurisdiction of the Commissioner relating thereto, except in the event of Respondent's unlawful behavior or gross negligence.

8. Sampling. All sampling shall be performed in accordance with procedures specified or approved in writing by the Commissioner, or, if no such procedures have been specified or approved, in accordance with the most recent final version of EPA publication SW-846, entitled "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods," Standard Operating Procedures for Sampling Porous Surfaces For Polychlorinated Biphenyls, the most recent final version of the Department's "Site Characterization Guidance Document," and relevant policies and guidelines issued by the Commissioner.

9. Sample Analyses. All sample analyses which are required by this order and all reporting of such sample analyses shall be conducted by a laboratory certified by the Connecticut Department of Public Health and approved to conduct such analyses. In addition,

    - The Reasonable Confidence Protocols shall be used when there is a method published by Department. In all cases where the Reasonable Confidence Protocol method is used, a properly completed laboratory QA/QC certification form, certified by the laboratory shall be provided to the Commissioner with the analytical data.
    - In cases where a Reasonable Confidence Protocol method has not been published, the analytical data shall be generated using a method approved by the Commissioner, such method shall include and report a level of quality control and documentation equivalent to the Reasonable Confidence Protocols.
    - The reporting limit shall be established consistent with the Reasonable Confidence Protocols and standard industrial and laboratory practices. The Reporting Limit shall not be set at levels greater than those used in such standard practices, as determined by the Commissioner, in consultation with the Commissioner of Public Health and in no case shall be greater than the Applicable Criteria or Background Concentration established in §22a-133k-1 through §22a-133k-3 of the Regulations of Connecticut State Agencies. The Reporting Limit for a given sample shall be corrected for specific sample weight or volume, and dilutions, and, for soil and sediment samples moisture content (reported as dry weight).

10. Approvals. Respondent shall use best efforts to submit to the Commissioner all documents required by this order in a complete and approvable form. If the Commissioner notifies Respondent that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondent shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty (30) days of the Commissioner's notice of deficiencies. In approving any document or other action under this order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this order. Nothing in this section shall excuse noncompliance or delay. Any reference in this Consent Order to an approved document such as a scope of work or a schedule shall mean approved by the Commissioner.

11. Definitions. As used in this order, "Commissioner" means the Commissioner or a representative of the Commissioner.

12. Dates. The date of submission to the Commissioner of any document required by this order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this order, including but not limited to, notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this order, the word "day" as used in this order means calendar day. Any document or action which is required by this order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday or Connecticut or federal holiday.

13. Certification of Documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this order shall be signed by Respondent or, if a Respondent is not an individual, by such Respondent's chief executive officer or a duly authorized representative of such officer, or by a "responsible corporate officer" of Respondent as that term is defined in §22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the LEP(s) or other individual(s) responsible for actually preparing such document, and Respondent or Respondent's chief executive officer and each such individual shall certify in writing as follows:

> "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

14. False Statements. Any false statement in any information submitted pursuant to this order is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.

15. Commissioner's Powers. Subject to provisions of Section B.23., nothing in this order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this order have not successfully corrected all violations, fully characterized the extent and degree of any pollution or successfully abated or prevented pollution, the Commissioner may institute any

proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution; provided, however, that in the event the Commissioner issues a certificate of compliance pursuant to Section B.7., the Commissioner may only institute any proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution after issuing a certificate of compliance if the Commissioner determines that a certificate of compliance was obtained through the submittal of materially inaccurate or erroneous information, or otherwise materially misleading information or that material misrepresentations were made in connection with the obtaining of the certificate of compliance. In accordance with Conn. Gen. Stat. Sec. 22a-6dd, the requirements and standards for remediation required of Respondent pursuant to this Consent Order shall not be modified by the Department unless both the Department and Respondent agree to such modification.

16. Respondent's Obligations Under Law. Nothing in this order shall relieve Respondent of other obligations under applicable federal, state and local law.

17. No Assurance by Commissioner. No provision of this order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondent pursuant to this order will result in compliance or prevent or abate pollution.

18. Access to Site. The Commissioner and Respondent acknowledge that Respondent does not currently own, or control access to, the Site, and that Respondent requires access, without interference from the Current Owner or the property owner, necessary to be able to comply with its obligations under this Consent Order to investigate, remediate, monitor and secure the Site and shall not be obligated to proceed with such obligations that require Site access unless and until it has such access and only for so long as it continues to have access pursuant to the terms of this Section B.18. The Commissioner will endeavor, using all reasonable efforts, to obtain and, if so obtained, will use all reasonable efforts to maintain, access to, or control of, the Site, pursuant to a written access agreement, on terms that enable Respondent to comply with the terms and conditions of this Consent Order requiring Respondent to investigate, remediate, monitor and secure the Site, and that require the Current Owner (or, as applicable, any subsequent owners) to (i) refrain from engaging in actions that adversely, substantially and materially affect Respondent's ability to comply with the obligations under this Consent Order or otherwise engaging in activities that cause environmental conditions or exacerbate or contribute to existing environmental conditions at the Site that cause a significant increase in costs, (ii) agree to the recordation and implementation of ELURs pursuant to 40 CFR Part 761 and the RSRs, as applicable, and (iii) include notice of such ELURs in any sale or lease agreement regarding the Site and terms that expressly condition any such sale or lease agreement on the purchaser’s or lessee’s (as applicable) agreement to assume all liabilities arising from the failure by such purchaser or lessee to comply with the ELUR(s) (“Required Access”). Respondent shall make all reasonable efforts to

support any effort by the Commissioner to obtain the Required Access and shall not take any actions to impede or prevent the Required Access. Reasonable efforts by Respondent shall include, but not be limited to, providing a release, indemnification and hold harmless to the Current Owner from liability as the Current Owner arising solely out of the activities of Respondent or its contractors on the Site in the course of performing work under this Consent Order, and shall further include, if requested by the Commissioner, a release by Respondent of contribution claims against the Current Owner in respect of onsite conditions at the Site as long as the Current Owner, on behalf of itself and its owners, agents, officers, directors, shareholders, partners and members, also agrees to provide a reciprocal general release reasonably acceptable to Respondent. Reasonable efforts by Respondent shall not include paying the Current Owner or its owners, agents, officers, directors, shareholders, partners and members or reimbursing or funding, directly or indirectly, all or any part of any payment to the Current Owner or its owners, agents, officers, directors, shareholders, partners and members by others or remediating to standards that are more stringent than required by this Consent Order. In the event that the Commissioner after the Effective Date, in his sole discretion, determines (following consultation with Respondent) that the Commissioner is unable to secure the Required Access, the Commissioner may direct Respondent to make payment to the Commissioner in accordance with this section in lieu of completing performance of work otherwise required in this Consent Order. In the event that the Commissioner, after the Effective Date, is unable to maintain Required Access to the Site, then the three year period for completion in Section B.1. is tolled until either the Commissioner obtains access or until the Commissioner, following consultation with Respondent, but in his sole discretion, directs Respondent to make payment to the Commissioner in accordance with this section in lieu of completing performance of work otherwise required by this Consent Order. The Commissioner shall give notice of such direction to Respondent together with a draft certificate of compliance. Within one hundred twenty (120) days of receipt of such notice, Respondent shall pay, by cashier or certified check, $30 million minus any costs incurred or accrued for remediation and investigation (not including attorney's fees and any direct time charges of Respondent's employees, managers or officers) after the Effective Date of this order for compliance with this order, to the account designated by the Commissioner, and such payment shall fully resolve Respondent’s obligations herein and the Commissioner shall provide a certificate of compliance as provided for in Section B.7. herein. The Commissioner shall use the funds for the investigation and remediation of the Site, and any funds remaining after the completion of the investigation and remediation of the Site shall, with the concurrence of the Governor and the Attorney General, be used for a public purpose. Within thirty (30) days of the Commissioner’s issuance of such notice and certificate of compliance, Respondent shall provide a detailed accounting of any remedial costs incurred. Payment of the funds required by this section shall satisfy Respondent’s obligations under this Consent Order.

19. No Effect on Rights of Other Persons. This order neither creates nor affects any rights of persons, entities (of any form or nature) or municipalities that are not parties to this order. Without limiting the generality of the foregoing, the parties expressly disclaim any intent to create any rights enforceable by any non-parties as third-party beneficiaries hereunder.

20. Notice to Commissioner of Changes. Within fifteen (15) days of the date Respondent becomes aware of a change in any information submitted to the Commissioner under this order, or that any such information was inaccurate or misleading or that any relevant information was omitted, Respondent shall submit the correct or omitted information to the Commissioner.

21. Notification of Noncompliance. In the event that Respondent becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this order or of any document required hereunder, Respondent shall immediately notify by telephone the individuals identified in the next section and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, Respondent shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and Respondent shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondent shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

22. Submission of Documents. Any document required to be submitted to the Commissioner under this order shall, unless otherwise specified in this order or in writing by the Commissioner, be directed to:

    Gary Trombly, Jr.
    Department of Energy and Environmental Protection
    Storage Tank & PCB Enforcement Unit
    79 Elm Street
    Hartford, Connecticut 06106

    And

    Craig Bobrowiecki
    Department of Energy and Environmental Protection
    Remediation Division
    79 Elm Street
    Hartford, Connecticut 06106

23. Effect of Order. Except as provided herein, as of the Effective Date, other than as may be necessary to compel Respondent's compliance with this Consent Order (i) this Consent Order fully resolves all matters alleged in Administrative Order No. AOWSPCB 13-001 against Respondent at the Site, and all known claims of the Commissioner against Respondent related to environmental conditions at the Site, (ii) subject to Section B.15., upon such full compliance or in the event of payment by Respondent as provided for in Section B.18. and Section B.24., the Commissioner will issue to Respondent a certificate of compliance, which shall fully and finally conclude Respondent's obligations with respect to the Site and Respondent shall have no further obligation or liability for any matter within the jurisdiction of the Commissioner relating thereto, except in the event of Respondent's unlawful behavior or gross negligence, (iii) the Commissioner agrees to dismiss all claims, orders, demands, and allegations raised in Administrative Order No. AOWSPCB 13-001 against Respondent in connection with environmental conditions at the Site.Nothing in this Consent Order shall prevent the Commissioner from maintaining Administrative Order No. AOWSPCB 13-001 and proceedings relating thereto, or initiating new proceedings or actions, with respect to environmental impacts at off-site locations, including, but not limited to, sediments, soil, groundwater or any contaminants that have emanated offsite from the Site.

24. Provisions Relating to the Cost of Compliance with this Order. If the total costs to Respondent of performing the obligations after the Effective Date of this Consent Order exceed $30 million, the State, at Respondent's request, will discuss options for recovering or funding any costs above that amount, for example, through public funding or recovery from third parties, but is not bound to agree to or support any means of recovery or funding. Nothing in this section shall alter Respondent's obligation to fully comply with this Consent Order, including but not limited to, the time for compliance during any time that there are discussions about recovery of costs exceeding $30 million. Respondent shall comply with this Consent Order even if the costs of such compliance exceed $30 million, except in the event of payment by Respondent as provided for in Section B.18.

    Respondent shall maintain an accounting of all of the costs incurred or accrued regarding compliance with this Consent Order. Upon issuance of a certificate of compliance pursuant to Section B.7. herein, to the extent that the costs incurred by Respondent under this Consent Order for the investigation and remediation of the Site after the Effective Date are less than $30 million, then Respondent shall remit to the State the difference between such costs and $30 million for a public purpose as determined in the discretion of the Governor, the Attorney General, and the Commissioner .. Within thirty (30) days of a written demand by the Commissioner for the accounting of the costs incurred by Respondent regarding compliance with this Consent Order, Respondent shall provide a detailed accounting of such costs. Within thirty (30) days following a written demand by the Commissioner and the issuance by the Commissioner of a certificate of compliance resolving Respondent's liabilities regarding matters addressed in this

Consent Order, Respondent shall make payment of the difference between such costs (which shall include any costs incurred or accrued in relation to the cessation of activities) and $30 million to the recipient identified by the Commissioner.

Respondent consents to the issuance of this Partial Consent Order without further notice. The undersigned certifies that JAMES P. TORGERSON is fully authorized to enter into this Partial Consent Order and to legally bind Respondent The United Illuminating Company to the terms and conditions of the Consent Order.

Respondent The United Illuminating Company

BY: _____

DATE: 9/16/15

ORDER NO. _____

Issued as a final order of the Commissioner of Energy and Environmental Protection.

BY: _____

Commissioner

DATE: _____

Exhibit A - English Station, 510 Grand Avenue, New Haven

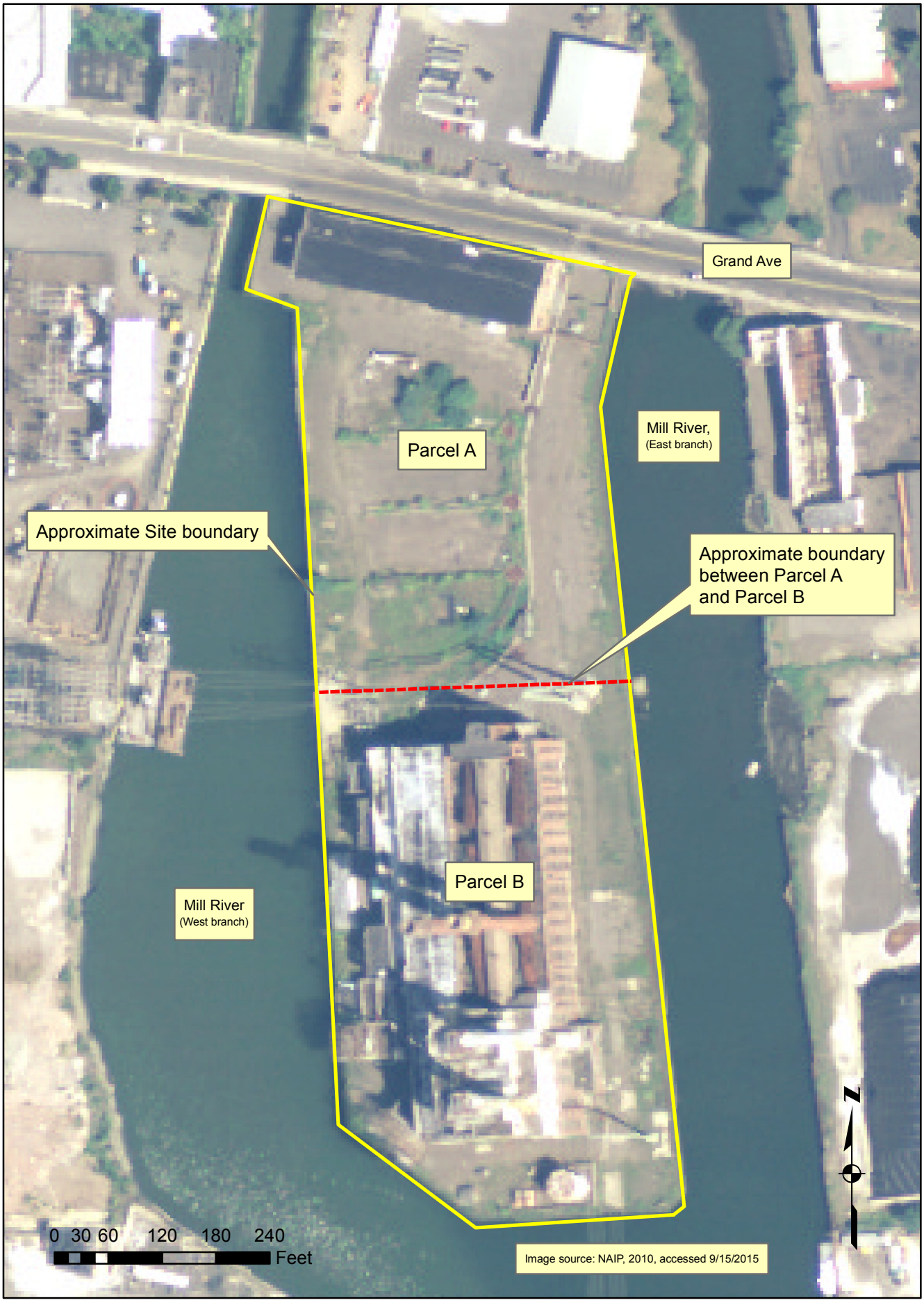

EXHIBIT B TO PARTIAL CONSENT ORDER NUMBER COWSPCB 15-001

Project Management Consultant:
TRC Environmental Corporation
21 Griffin Road North
Windsor, Connecticut 06095
860-298-9692

Project Licensed Environmental Professional (LEP):
Sarah Trombetta, CPG, LEP, CHMM
TRC Windsor, Connecticut Office
Licensed Environmental Professional, Connecticut (#294, 1998)
Certified Professional Geologist, American Institute of Professional Geologist, (#8899, 1993)
Certified Hazardous Materials Manager (#15404, 2010)

Project Support LEP:
Marya Mahoney, LEP
TRC Windsor, Connecticut Office
Licensed Environmental Professional, Connecticut, (#478, 2007)

TRC Project Resources:

Ed Doubleday, Project Management and Project Performance
TRC Windsor, Connecticut Office
Certified Project Management Professional (2011)
FEMA Incident Command Station Certification (2008)
U.S. Naval Academy

Carl Stopper, P.E., Connecticut Professional Engineer, TRC PCB and Site Remediation Expert
TRC Windsor, Connecticut Office
Professional Engineer, Connecticut (#13255, 1984)

Eric Plimpton, P.E., Connecticut Professional Engineer, TRC Asbestos Materials Expert
TRC Windsor Connecticut Office
Professional Engineer, Connecticut (#20593) 1998
Certified Hazardous Materials Manager, Master Level (#11384) 2002
Certified Safety Management Practitioner (#14197) 2013
Asbestos Analyst, AIHA (#4554) 1992
Asbestos Project Monitor, Connecticut (#000082) 1993
Asbestos Management Planner, Connecticut (#000219) 2002
Asbestos Inspector, Connecticut (#000074/000219) 1993
Asbestos Project Designer, Connecticut (#000152) 1999
Lead Inspector/Risk Assessor, Connecticut (#001206) 1996
Lead Planner Project Designer, Connecticut (#001866) 1998

David Sullivan, TRC Indoor TSCA/PCB Expert
TRC Lowell, Massachusetts Office
Massachusetts Licensed Site Professional (#1488, 2004)
Extensive experience with USEPA Region I TSCA Office and Managers

Stacy McAnulty, P.E., TRC Site Remediation and PCB Sediment Expert
TRC Madison, Wisconsin, Office
Professional Engineer in Wisconsin, Maine, Colorado, and North Carolina

APPENDIX B

HISTORICAL ANALYTICAL SUMMARY TABLES

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-001	MW-002	MW-003	MW-004D
	SAMPLE ID	Volatilizaiton	Protection	GW-1	GW-2	GW-3	ES MW4D
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
1,1-Dichloroethane		34800		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	5.0
Chloroform		287	14100	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1.0
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-004S	MW-005	MW-006	MW-007
	SAMPLE ID	Volatilizaiton	Protection	GW-45	MW-5A	GW-6	GW-7
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	1 U	4.0	1 U	1 U
1,1,1-Trichloroethane		20400	82000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-009A	MW-010	MW-012	MW-013
	SAMPLE ID	Volatilizaiton	Protection	GW-9A	GW-10	GW-12	GW-13
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/19/98	06/19/98
1,1-Dichloroethane		34600		1 U	5.0 J	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	2.0 J	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-014D	MW-014S	MW-015	MW-016
	SAMPLE ID	Volatilization	Protection	ES MW14D	GW-14S	GW-15	GW-16
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	12.0	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				2.0	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-021	MW-022
	SAMPLE ID	Volatilizaiton	Protection	GW-21	GW-22
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U
Chloroform		287	14100	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U
Bromodichloromethane				1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-017D	MW-017S	MW-019	MW-020
	SAMPLE ID	Volatilizaiton	Protection	ES MW17D	GW-17S	GW-19	GW-20
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	82000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE SAMPLE ID DATE	Residential Volatilizaiton Jan. 1996	Surface Water Protection Jan. 1996	MW-014D ES MW14D 06/18/98	MW-014S GW-14S 06/19/98	MW-015 GW-15 06/18/98	MW-016 GW-16 06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	[0.47]	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	[0.73]	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	[0.92]	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	[0.36]	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-009A	MW-010	MW-012	MW-013
	SAMPLE ID	Volatilizaiton	Protection	GW-9A	GW-10	GW-12	GW-13
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/19/98	06/19/98
Acenaphthylene			0.3	[2.2]	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	[0.61]	0.07 U	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[ ] = Greater than Action Level

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-004S	MW-005	MW-006	MW-007
	SAMPLE ID	Volatilizaiton	Protection	GW-45	MW-5A	GW-6	GW-7
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	0.07 U	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-001	MW-002	MW-003	MW-004D
	SAMPLE ID	Volatilizaiton	Protection	GW-1	GW-2	GW-3	ES MW4D
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	0.07 U	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-017D	MW-017S	MW-019	MW-020
	SAMPLE ID	Volatilizaiton	Protection	ES MW17D	GW-17S	GW-19	GW-20
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	[0.54]	0.07 U	[1.3]	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-021	MW-022
	SAMPLE ID	Volatilizaiton	Protection	GW-21	GW-22
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-001	MW-002	MW-003	MW-004D
		SAMPLE ID	Volatilizaiton	Protection	GW-1	GW-2	GW-3	ES MW4D
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Cadmium				0.008	0.005 U	0.005 U	0.005 U	0.005 U
Lead				0.013	0.005 U	0.005 U	0.005 U	0.005 U
Selenium				0.05	0.01 U	0.01 U	0.01 U	0.02 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-004S	MW-005	MW-006	MW-007
		SAMPLE ID	Volatilization	Protection	GW-45	MW-5A	GW-6	GW-7
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Cadmium				0.006	0.005 U	0.005 U	0.005 U	0.005
Lead				0.013	0.005 U	[0.022]	[0.021]	0.009
Selenium				0.05	0.01 U	0.01 U	0.01 U	0.01 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

CONSTITUENT (Units in mg/l)	SITE SAMPLE ID DATE	Residential Volatilizaiton Jan. 1996	Surface Water Protection Jan. 1996	MW-009A GW-9A 06/18/98	MW-010 GW-10 06/19/98	MW-012 GW-12 06/19/98	MW-013 GW-13 06/19/98
Cadmium			0.006	0.005 U	0.005 U	0.005 U	0.005 U
Lead			0.013	0.005 U	0.005 UJ	0.005 UJ	0.007 J
Selenium			0.05	0.01 U	<0.01 R	<0.01 R	<0.01 R

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in mg/l)	SITE SAMPLE ID DATE	Residential Volatilizaiton Jan. 1996	Surface Water Protection Jan. 1996	MW-014D ES MW14D 06/18/98	MW-014S GW-14S 06/19/98	MW-015 GW-15 06/18/98	MW-016 GW-16 06/18/98
Cadmium			0.008	0.005 U	0.005 U	0.005 U	0.005 U
Lead			0.013	0.005 U	0.006 J	0.005 UJ	0.005
Selenium			0.05	0.01 J	<0.01 R	<0.01 R	0.01 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-021	MW-022
		SAMPLE ID	Volatilizaiton	Protection	GW-21	GW-22
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98
Cadmium				0.006	0.005 U	0.005 U
Lead				0.013	0.005 UJ	0.005 U
Selenium				0.05	<0.01 R	0.01 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-017D	MW-017S	MW-019	MW-020
		SAMPLE ID	Volatilizaiton	Protection	ES MW17D	GW-17S	GW-19	GW-20
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
Cadmium				0.006	0.005 U	0.005 U	0.005 U	0.005 U
Lead				0.013	0.005 U	0.005 UJ	0.005 UJ	0.005 UJ
Selenium				0.05	0.01 U	<0.01 R	<0.01 R	<0.01 R

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/l)	SITE		MW-021	TB-018	TB-111
	SAMPLE ID	10 Times GA	ES-MW21 (15-17)	ES-TB18 (12-14)	TB-111 (10-12)
	DATE	GWPC	05/28/98	05/28/98	07/01/98
	DEPTH (ft)	CTEDP Jan. 1996	16.00	13.00	11.00
Acenaphthene (SPLP)		4200	5 U	5 U	7.0
Acenaphthylene (SPLP)		4200	5 U	5 U	5.0
Fluorene (SPLP)		2800	5 U	5 U	11.0
Naphthalene (SPLP)		2800	5 U	5 U	16.0
Phenanthrene (SPLP)		2000	5 U	5 U	24.0

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

[redacted]h Station
Summary [redacted]oil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	MW-018 ES-MW18 (14-16) 05/29/98 15.00	MW-021 ES-MW21 (7-9) 05/28/98 8.00	SED-02 ES SED2 (0.5) 06/12/98 0.50	TB-018 ES-TB18 (12-14) 05/28/98 13.00
Lead (SPLP)			0.15	0.008	0.005 U	0.005 U	0.005 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

CONSTITUENT (Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-01B ES-TB1B (12-14) 05/28/98 13.00
Arsenic			10	4.5 J
Barium			4700	51.3
Cadmium			34	0.5 U
Chromium				9.2
Lead			500	[2160]
Mercury			20	0.07
Selenium			340	0.5 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			AST-01	MW-018	MW-021	SED-02
		SAMPLE ID	GB Mobility	Residential	ES AST1 (2)	ES-MW18 (14-16)	ES-MW21 (7-9)	ES SED2 (0.5)
		DATE	Criteria	Criteria	06/11/98	05/29/98	05/28/98	06/12/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	2.00	15.00	8.00	0.50
Arsenic				10	1.5	2.8 J	2.1 J	5.3
Barium				4700	22	18.3	35.8	62
Cadmium				34	0.5 U	0.9	0.5 U	0.5 U
Chromium					26.7 J	14.9	17.9	32.0 J
Lead				500	35.9	36.3	22.7	110
Mercury				20	0.03	0.24	0.07	1.66
Selenium				340	0.5 U	0.5 U	0.5 U	1.5

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	AST-01 ES AST1 (2) 06/11/98 2.00	MW-018 ES-MW18 (14-16) 05/29/98 15.00	MW-021 ES-MW21 (15-17) 05/28/98 16.00	SED-02 ES SED2 (0.5) 06/12/98 0.50
TPH			2500	500	[16263]	238	[3805]	191

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

[redacted] Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-018 ES-TB18 (12-14) 05/28/98 13.00	TB-109 TB-109 (10-12) 07/01/98 11.00	TB-110 TB-110 (5-7) 07/01/98 6.00	TB-110 TB-110 (10-12) 07/01/98 11.00
TPH			2500	500	405	[682]	[1759]	[2749]

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			AST-01	MW-018	MW-021	SED-02
		SAMPLE ID	GB Mobility	Residential	ES AST1 (2)	ES-MW18 (14-16)	ES-MW21 (15-17)	ES SED2 (0.5)
		DATE	Criteria	Criteria	06/11/98	05/29/98	05/28/98	06/12/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	2.00	15.00	16.00	0.50
PCB's				1	[2]	1.0 U	1.0 U	[1]

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Date: 07/27/98

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-110 TB-110 (13-15) 07/01/98 14.00	TB-111 TB-111 (2-4) 07/01/98 3.00	TB-111 TB-111 (5-7) 07/01/98 6.00	TB-111 TB-111 (10-12) 07/01/98 11.00
TPH			2500	500	[2160]	[1267]	244	[1809]

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[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-018 ES-MW18 (14-16) 05/29/98 15.00	MW-021 ES-MW21 (15-17) 05/28/98 16.00	SED-02 ES SED2 (0.5) 06/12/98 0.50	TB-018 ES-TB18 (12-14) 05/28/98 13.00
Acenaphthene		84000	1000000	1000 U	4496.0	10000 U	100 U
Acenaphthylene		84000	1000000	1000 U	1000 U	10000 U	145.0
Anthracene		400000	1000000	1000 U	5414.0	10000 U	100 U
Benzo(a)anthracene		1000	1000	1000 U	[9320.0]	10000 U	182.0
Benzo(a)pyrene		1000	1000	1000 U	[8488.0] J	10000 U	288.0 J
3,4-Benzofluoranthene		1000	1000	1000 U	1000 U	10000 U	203.0
Benzo(k)fluoranthene		1000	8400	1000 U	1000 U	10000 U	100 U
Chrysene		960	84000	1000 U	[8964.0]	10000 U	226.0
Fluoranthene		56000	1000000	1000 U	26005.0 J	10000 U	389.0 J
Fluorene		56000	1000000	1000 U	1272.0	10000 U	100 U
Naphthalene		56000	1000000	1000 U	1000 U	10000 U	[65797.0]
Phenanthrene		40000	1000000	1000 U	9816.0	10000 U	203.0
Pyrene		40000	1000000	1000 U	29130.0	10000 U	529.0

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-018 ES-TB18 (12-14) 05/28/98 13.00
PCB's				1	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-109 TB-109 (10-12) 07/01/98 11.00	TB-110 TB-110 (5-7) 07/01/98 6.00	TB-110 TB-110 (10-12) 07/01/98 11.00	TB-110 TB-110 (13-15) 07/01/98 14.00
Acenaphthene		84000	1000000	10000 U	100 U	10000 U	100 U
Acenaphthylene		84000	1000000	10000 U	100 U	10000 U	100 U
Anthracene		400000	1000000	10000 U	124.0	10000 U	100 U
Benzo(a)anthracene		1000	1000	10000 U	472.0	10000 U	100 U
Benzo(a)pyrene		1000	1000	10000 U	498.0 U	10000 U	100 U
3,4-Benzofluoranthene		1000	1000	10000 U	203.0	10000 U	100 U
Benzo(k)fluoranthene		1000	8400	10000 U	406.0	10000 U	100 U
Chrysene		980	84000	10000 U	508.0	10000 U	100 U
Fluoranthene		56000	1000000	10000 U	797.0	10000 U	100 U
Fluorene		56000	1000000	10000 U	100 U	10000 U	100 U
Naphthalene		56000	1000000	10000 U	100 U	10000 U	100 U
Phenanthrene		40000	1000000	10000 U	414.0	10000 U	100 U
Pyrene		40000	1000000	10000 U	964.0	30159.0	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Station

Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-111 TB-111 (2-4) 07/01/98 3.00	TB-111 TB-111 (5-7) 07/01/98 6.00	TB-111 TB-111 (10-12) 07/01/98 11.00
Acenaphthene		84000	1000000	100 U	1000 U	4848.0
Acenaphthylene		84000	1000000	100 U	1000 U	3898.0
Anthracene		400000	1000000	100 U	1000 U	11650.0
Benzo(a)anthracene		1000	1000	100 U	1000 U	[12803.0]
Benzo(a)pyrene		1000	1000	100 U	1000 U	[8662.0]
3,4-Benzofluoranthene		1000	1000	100 U	1000 U	[7092.0]
Benzo(k)fluoranthene		1000	8400	100 U	1000 U	[4063.0]
Chrysene		960	84000	100 U	1000 U	[11907.0]
Fluoranthene		56000	1000000	100 U	1000 U	38611.0
Fluorene		56000	1000000	100 U	1000 U	7539.0 J
Naphthalene		56000	1000000	100 U	1000 U	2203.0
Phenanthrene		40000	1000000	100 U	1249.0 U	[44611.0]
Pyrene		40000	1000000	100 U	1000 U	36244.0

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[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007 ES-TB7 (5) 06/04/98 5.00	TB-007A ES-TB7A (7-9) 06/04/98 8.00
TPH			2500	500	25 U	[4397] J	489	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-102 TB-102 (6-8) 06/30/98 7.00	TB-102 TB-102 (8-12) 06/30/98 10.00	TB-103 TB-103 (4-6) 06/30/98 5.00	TB-103 TB-103 (8-10) 06/30/98 9.00
TPH			2500	500	63	68	25 U	384

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	CS-005 ES-CS5 (0) 06/11/98 0.00	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007 ES-TB7 (5) 06/04/98 5.00
PCB's				1	[15]	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-103 TB-103 (10-12) 06/30/98 11.00
TPH			2500	500	93

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007 ES-TB7 (5) 06/04/98 5.00	TB-007A ES-TB7A (7-9) 06/04/98 8.00
Anthracene		400000	1000000	100 U	198.0	100 U	100 U
Benzo(a)anthracene		1000	1000	100 U	411.0	124.0	100 U
Benzo(a)pyrene		1000	1000	100 U	393.0	100 U	184.0
Benzo(k)fluoranthene		1000	8400	100 U	426.0	100 U	627.0
Chrysene		960	84000	100 U	692.0	100 U	109.0
Fluoranthene		56000	1000000	100 U	778.0	193.0	206.0
Naphthalene		56000	1000000	100 U	156.0	100 U	100 U
Phenanthrene		40000	1000000	100 U	771.0	142.0	135.0
Pyrene		40000	1000000	100 U	811.0	218.0	228.0

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English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			TB-007A
		SAMPLE ID	GB Mobility	Residential	ES-TB7A (7-9)
		DATE	Criteria	Criteria	06/04/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	8.00
PCB's				1	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 2 Station B Underground Storage Tanks

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-001 ES-MW1 (5-7) 06/02/98 6.00	MW-002 ES-MW2 (13-17) 06/02/98 15.00	TB-001 ES-TB1 (7-8) 06/02/98 7.50	TB-101 TB-101 (12-14) 06/30/98 13.00
TPH			2500	500	[1287]	[1212]	[7179]	25 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007A ES-TB7A (7-9) 06/04/98 8.00
Arsenic				10	2.3	6.1	2.8
Barium				4700	9.0	29.0	44.0
Chromium					4.5	8.4	4.9
Lead				500	2.4	43.1	50.4
Mercury				20	0.02 U	0.25	0.76

Values represent total concentrations unless noted < =Not detected at indicated reporting limit NA =Not analyzed

English Station
Summary of Soil Analytical Data
AOC 3 Former Septic Systems

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-008A ES-TB8A (1-3) 06/04/98 2.00	TB-008B ES-TB8B (15-17) 06/04/98 16.00
Arsenic				10	[23.1]	6.6
Barium				4700	100	28.0
Chromium					3.7	18.4
Lead				500	[807]	18.4
Mercury				20	0.38	0.02
Selenium				340	3.4	0.5 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 2 Station B Underground Storage Tanks

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-001 ES-MW1 (5-7) 06/02/98 6.00	MW-002 ES-MW2 (13-17) 06/02/98 15.00	TB-001 ES-TB1 (7-8) 06/02/98 7.50
Arsenic				10	1.4	1.5	1.0 U
Barium				4700	73	34	22
Chromium					9.3	11.6	11.3
Lead				500	24.5	51.5	11.5
Mercury				20	0.05	0.06	0.03
Selenium				340	0.5 U	0.5 U	0.6

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 3 Former Septic Systems

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE		TB-008A	TB-008B
		SAMPLE ID	GB Mobility	ES-TB8A (1-3)	ES-TB8B (15-17)
		DATE	Criteria	06/04/98	06/04/98
		DEPTH (ft)	CTDEP Jan. 1996	2.00	16.00
Lead (SPLP)			0.15	0.021	0.005 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-11 ES PCB11 (1) 06/11/98 1.00	PCB-12 ES PCB12 (1) 06/11/98 1.00	PCB-13 ES PCB13 (0.5) 06/11/98 0.50	PCB-14 ES PCB14 (1) 06/11/98 1.00
TPH			2500	500	25 U	25 U	27	118

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT (Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-15 ES PCB15 (0.5) 06/11/98 0.50	PCB-16 ES PCB16 (1) 06/11/98 1.00	PCB-17 ES PCB17 (0.5) 06/11/98 0.50	PCB-18 ES PCB18 (1) 06/11/98 1.00
TPH		2500	500	25 U	25 U	25 U	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-18 ES PCB18A (2) 06/11/98 2.00	PCB-19 ES PCB19 (0.5) 06/11/98 0.50	PCB-19 ES PCB19A (2.5) 06/11/98 2.50
TPH			2500	500	25 U	28	25

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Lighthouse Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	CS-001 ES-CS1 (0.5) 06/11/98 0.50	CS-002 ES-CS2 (0.1) 06/11/98 0.10	CS-003 ES-CS3 (0) 06/11/98 0.00	CS-004 ES CS4 (0) 06/11/98 0.00
PCB's				1	[3]	[10]	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-11 ES PCB11 (1) 06/11/98 1.00	PCB-12 ES PCB12 (1) 06/11/98 1.00	PCB-13 ES PCB13 (0.5) 06/11/98 0.50	PCB-14 ES PCB14 (1) 06/11/98 1.00
PCB's				1	1.0 U	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed