TASK 210:
SURFICIAL SITE INVESTIGATION

Interstate 84 Improvements
Waterbury, Connecticut

Volume 1

ConnDOT Assignment No. 201-2161
ConnDOT Project No. 151-273

Prepared for:

State of Connecticut
Department of Transportation
Newington, Connecticut 06131

Prepared by:

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New Britain, Connecticut 06051

February 20, 2002

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1.0 INTRODUCTION

On behalf of the Connecticut Department of Transportation (ConnDOT), Maguire Group Inc. has conducted a Task 210 - Surficial Site Investigation in association with the Realignment and Reconstruction of Interstate 84 in Waterbury, Connecticut. The proposed project will involve the widening of I-84 to consist of 3 meter (10 foot) wide outside shoulders and three, 3.6 meter (12 foot) travel lanes in each direction separated by a minimum 4.2 meter (14 foot) wide median; a shift in the I-84 alignment to the south between Interchanges 23 and 24 to eliminate a curve; the relocation of Reidville Drive to the south to accommodate the highway alignment shift; the construction of a service road south of and parallel to the relocated highway from the vicinity of Interchange 23; the elimination of the westbound exit ramp at Interchange 25 and westbound on-ramp at Interchange 24; the construction of a service road from the Scott Road/Plank Road East intersection to Harpers Ferry Road and the extension of Newington Avenue to intersect with the service road west of Scott Road; improvements to Harpers Ferry Road, Scott Road, Reidville Drive and East Main Street; and the construction of a noise barrier along I-84 eastbound to the west of Pierpont Road.

Based upon a review of the construction plans, it is anticipated that the project will involve rights-of-way taking, cut and fill activities, drainage structure improvements, and utility realignments. This Task 210 - Surficial Site Investigation was conducted in areas of anticipated construction and/or right-of-way activities for this I-84 project, adjacent to parcels that were identified as having a moderate or high risk designation in MGI's November, 1998 Task 110 – Corridor Land Use Evaluation report. Figure 1 depicts the project area.

The purpose of the Task 210 - Surficial Site Investigation was to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts to be encountered during construction. It is anticipated that Task 310 Plans and Specifications will subsequently be prepared to assess construction related activities (i.e. proper storage, classification, transport and disposal of contaminated materials), in relationship to the environmental conditions prevalent within the project limits, as well as to specify remedial work to be included in the Contract Bid Documents.

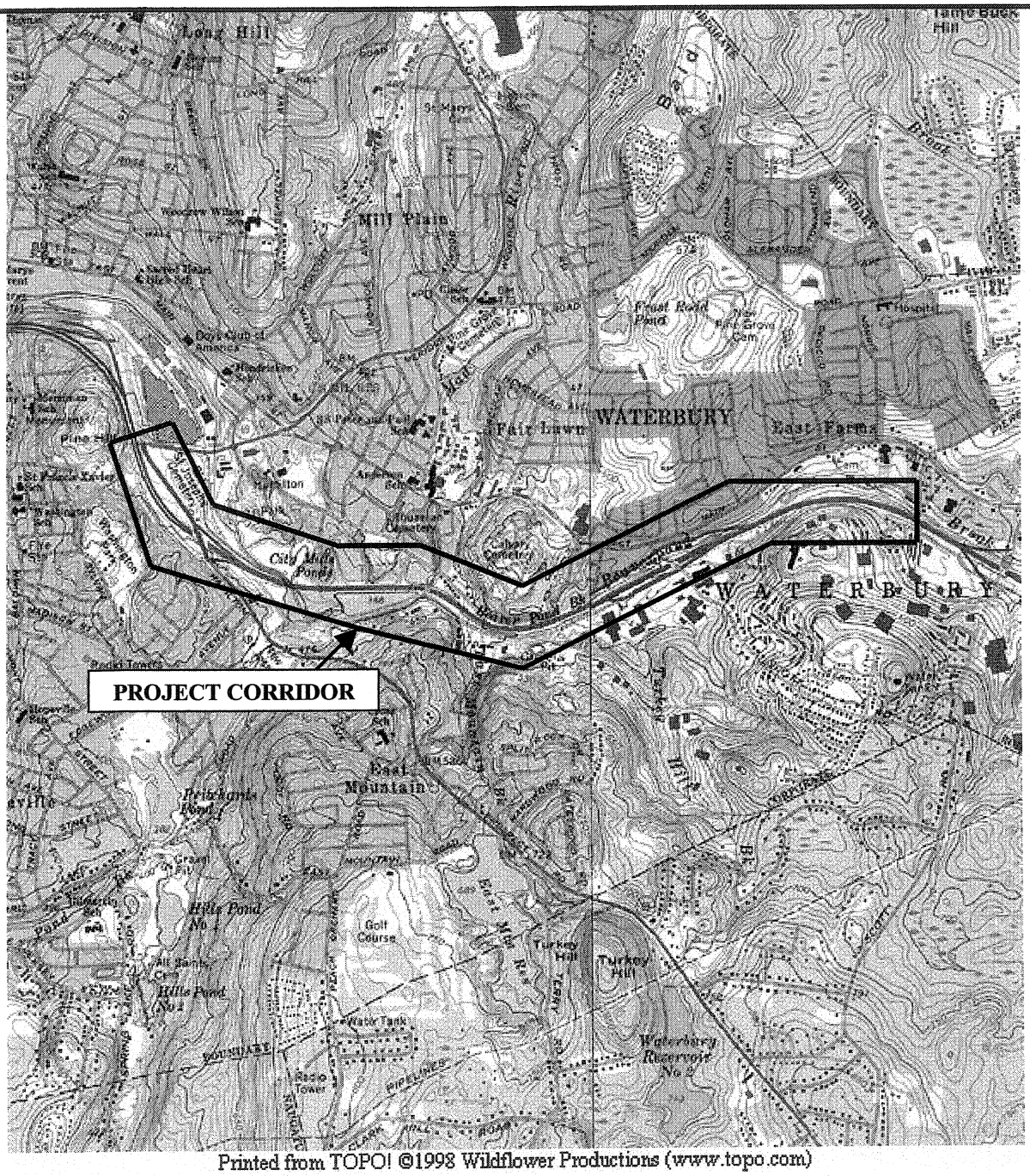


FIGURE 1 – SITE LOCATION PLAN

Interstate 84 Improvements

Waterbury, Connecticut

2.0 SITE DESCRIPTION

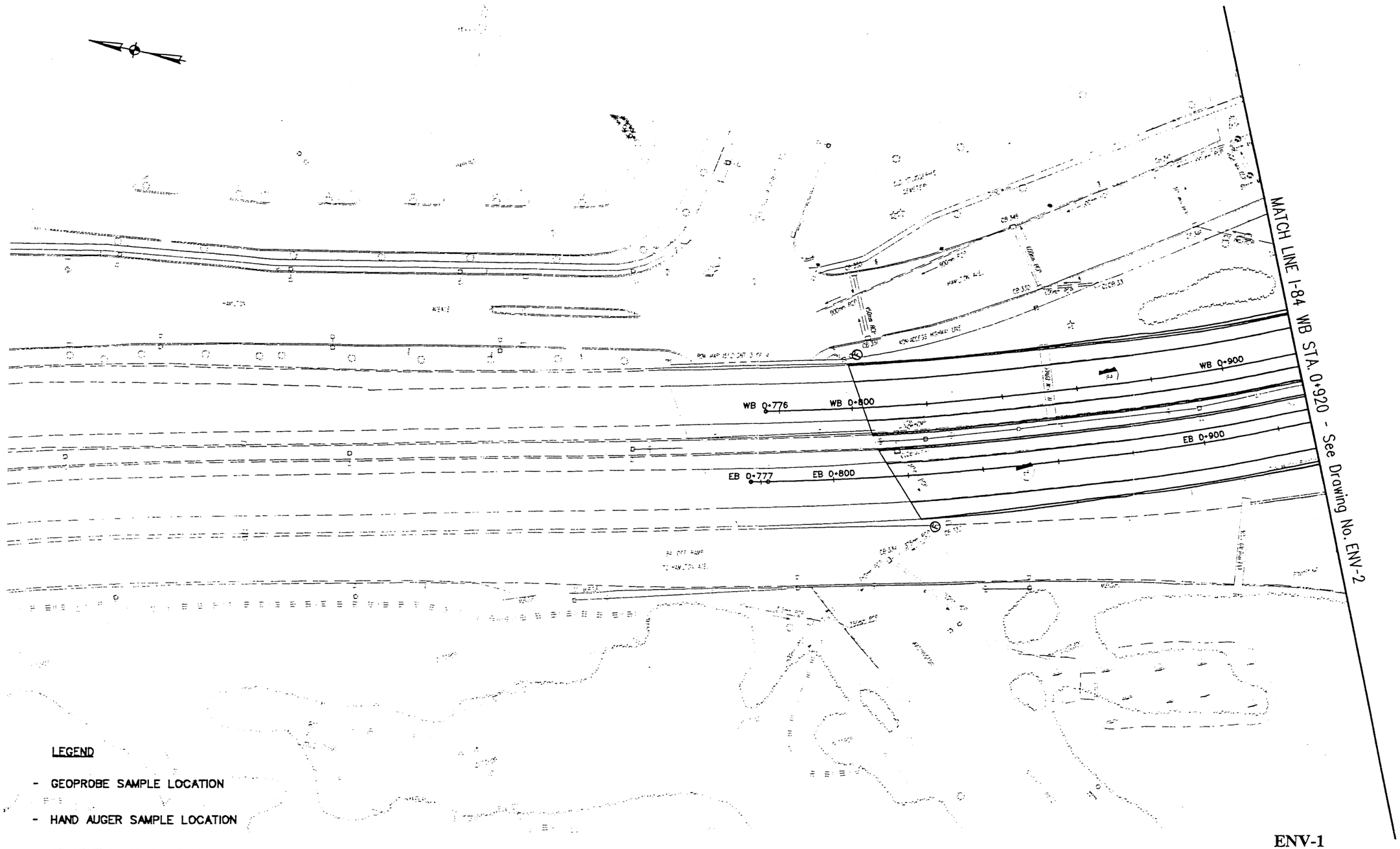
The Task 210 - Surficial Site Investigation was conducted on State-owned and private land located adjacent to the Interstate 84 corridor, in areas of anticipated construction and/or right-of-way activities. The State-owned land is situated adjacent to parcels that were identified as having a moderate or high risk designation in MGI's November, 1998 Task 110 – Corridor Land Use Evaluation report. This Task 210 did not cover properties that will be taken in full by ConnDOT. These properties were investigated individually under a separate Task 210 assignment. The site area is depicted in Figures ENV-1 through ENV-18 – Task 210 Project Corridor & Sampling Locations.

3.0 LOCAL ENVIRONMENT & RECEPTORS

3.1 Groundwater & Topography

Groundwater quality in the vicinity of the project corridor has been classified by the CTDEP as shown on the "Map of Adopted Water Quality Classifications for the Hudson and Housatonic River Basins" (1985). In general, the groundwater classification for the portion of the project corridor situated to the north of I-84 is "GB". Two areas to the south of I-84 have also been classified as "GB". Including the area west of the Reidville Drive/Scott Road intersection, and an area east of Guernsey Avenue along Captain Neville Drive. A "GB" classification indicates that the groundwater is within a highly urbanized area or an area of intense industrial activity, and where a public water supply is available. The groundwater is not considered suitable for direct human consumption without the need for treatment. The groundwater in the remainder of the project corridor is classified a "GA". A "GA" groundwater classification indicates that the groundwater in the area may be within the influence of private and potential public water supply sources. The groundwater is considered suitable for direct human consumption without the need for treatment.

Groundwater was encountered at 1.2 to 3 meters (4 to 10 feet) below grade in various borings throughout the project corridor.



ENV-1

Task 210 Project Corridor & Sampling Locations

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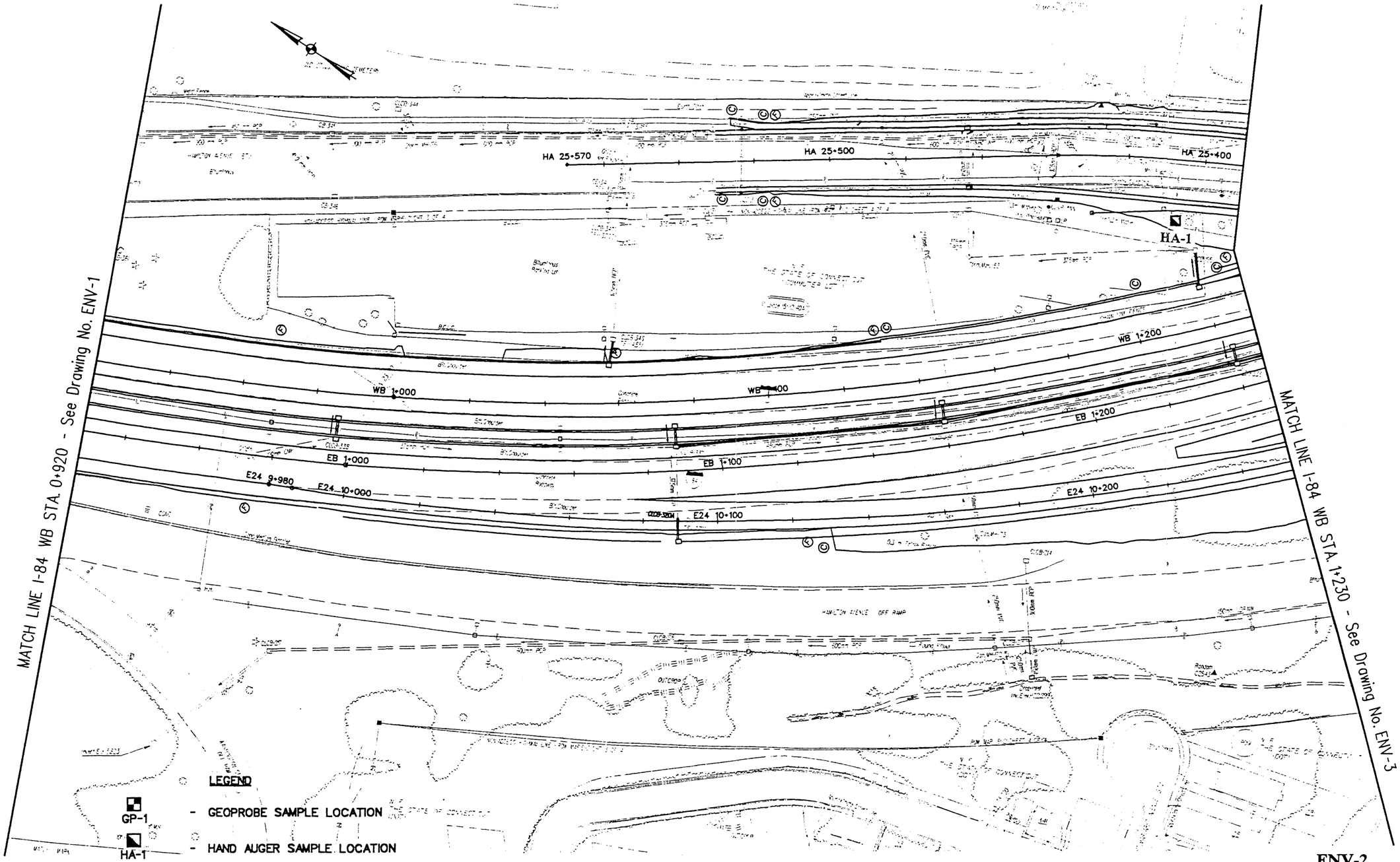

ENV-2

Task 210 Project Corridor & Sampling Locations

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		REVISIONS	

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SCALE 1:500

DESIGNED: MJS
DRAWN: MJS
CHECKED BY: DJG
DATE CHECKED: JULY 2001

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ENGINEER: MAGUIRE GROUP INC.
APPROVED BY: DATE

PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
CADD: 151273002.ENV PLOTTED: JULY 2001

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DRAWING TITLE: ENVIRONMENTAL PLAN - 2

PROJECT NO: 151-273
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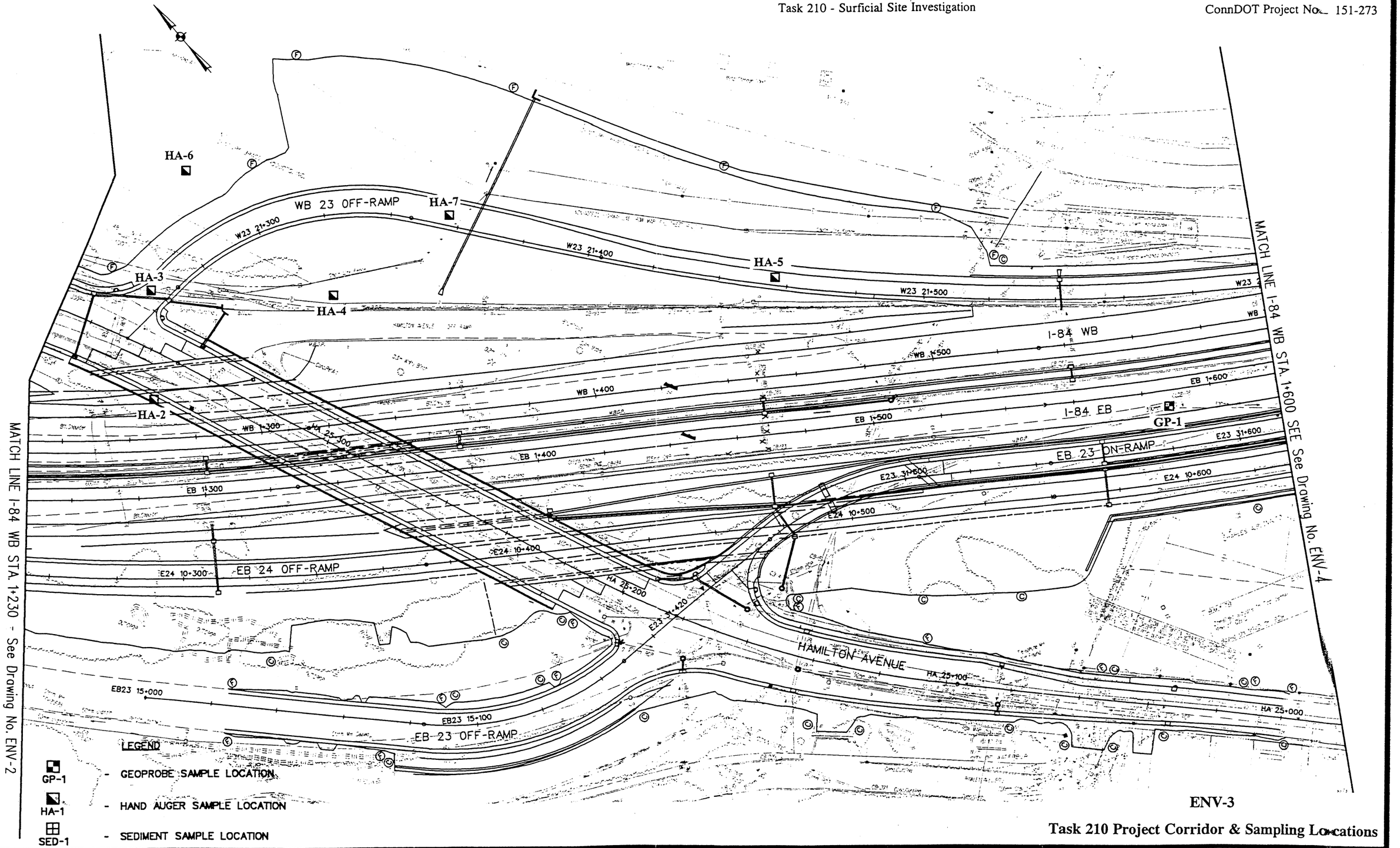

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Task 210 Project Corridor & Sampling Locations

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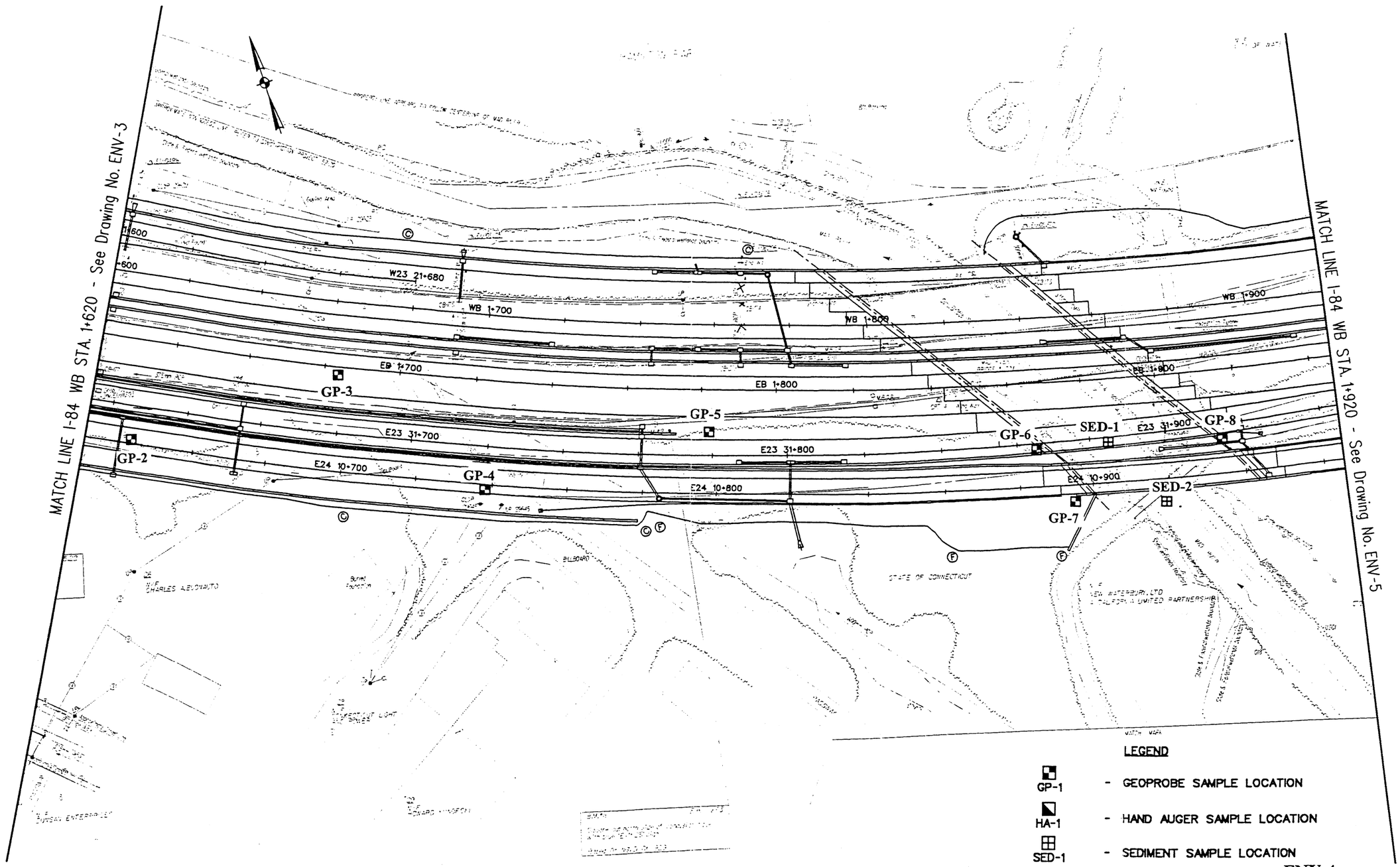

LEGEND

GP-1 - GEOPROBE SAMPLE LOCATION

HA-1 - HAND AUGER SAMPLE LOCATION

SED-1 - SEDIMENT SAMPLE LOCATION

ENV-4

Task 210 Project Corridor & Sampling Locations

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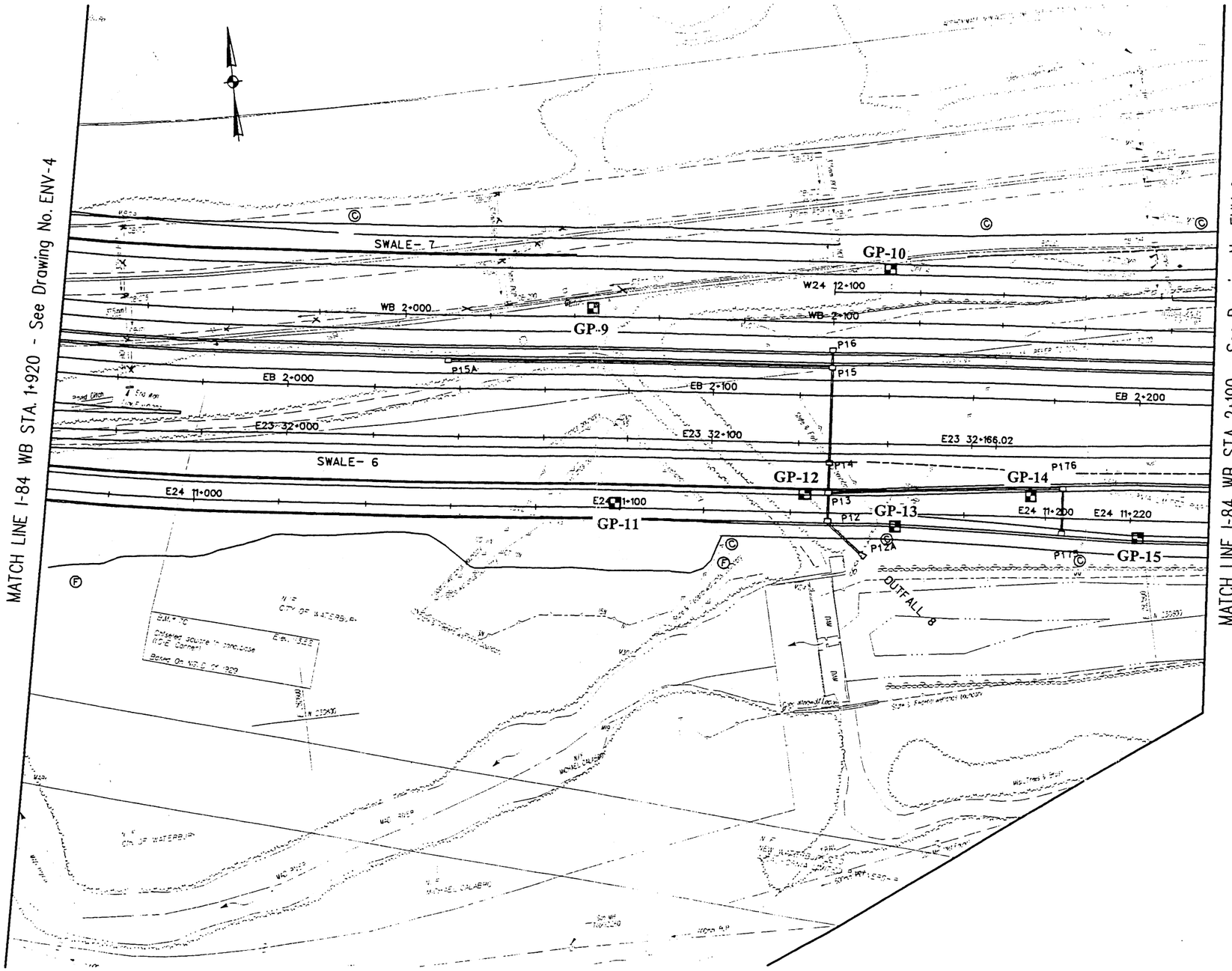

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Task 210 Project Corridor & Sampling Locations

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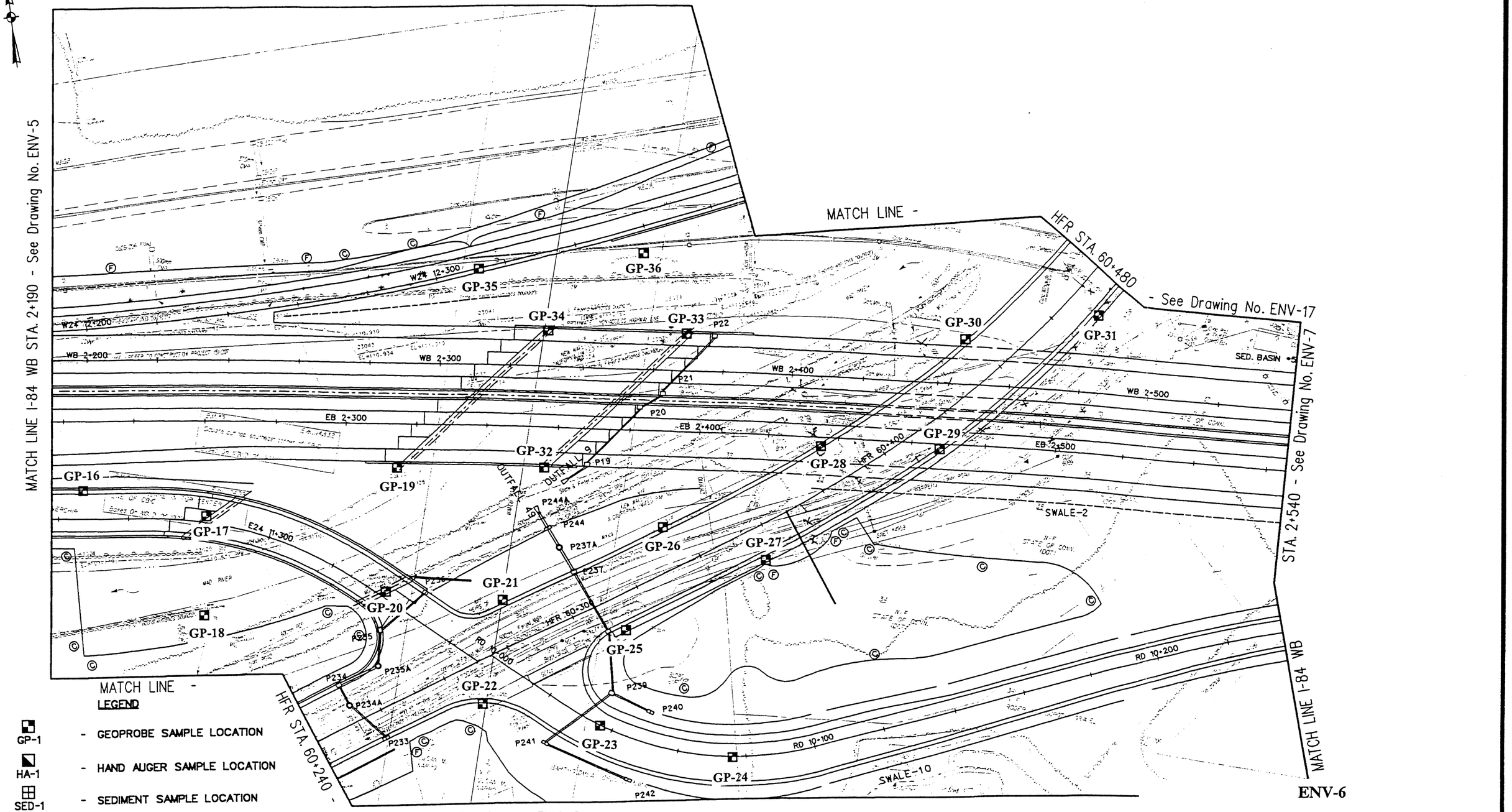

Task 210 Project Corridor & Sampling Locations

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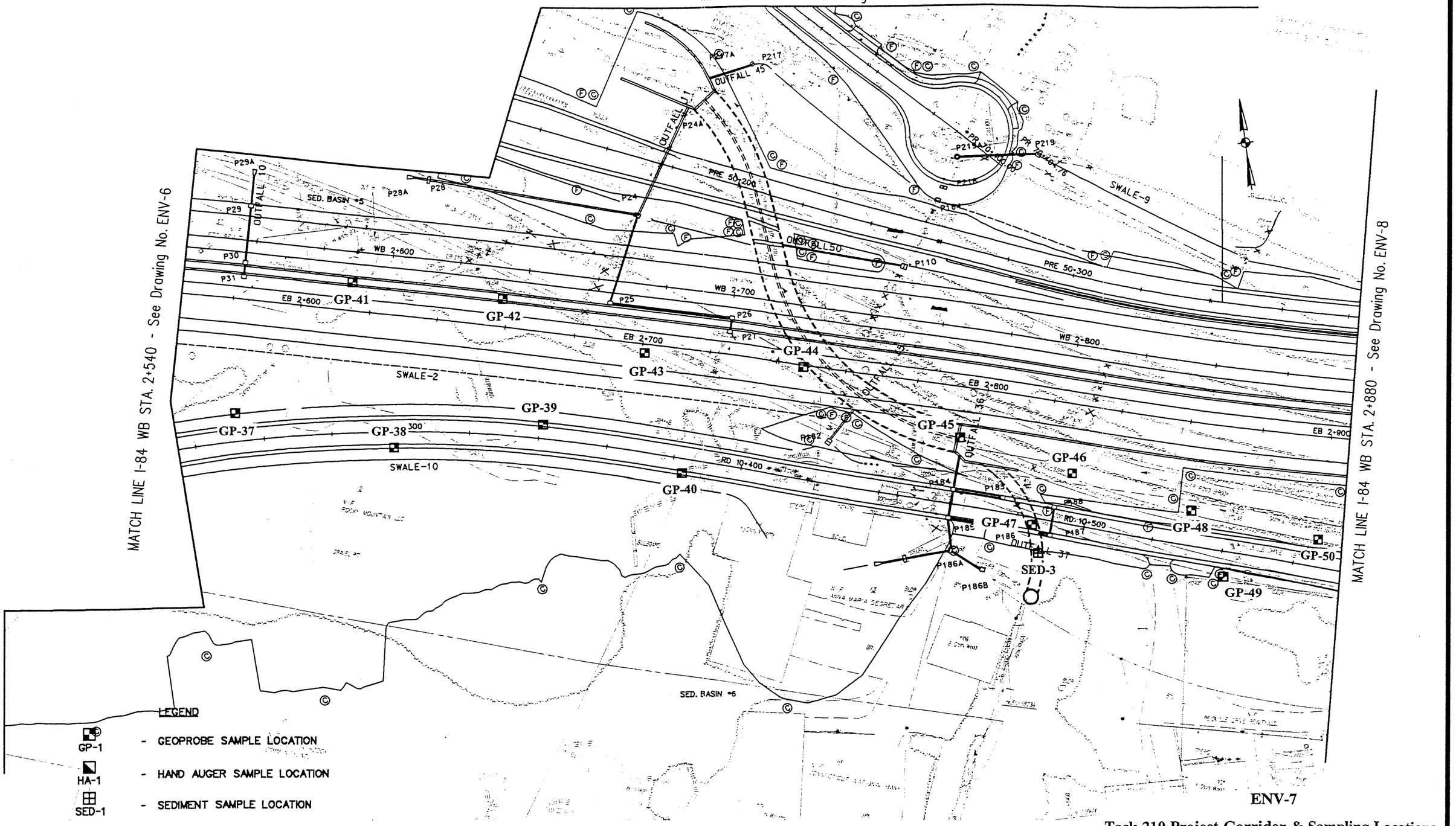

Task 210 Project Corridor & Sampling Locations

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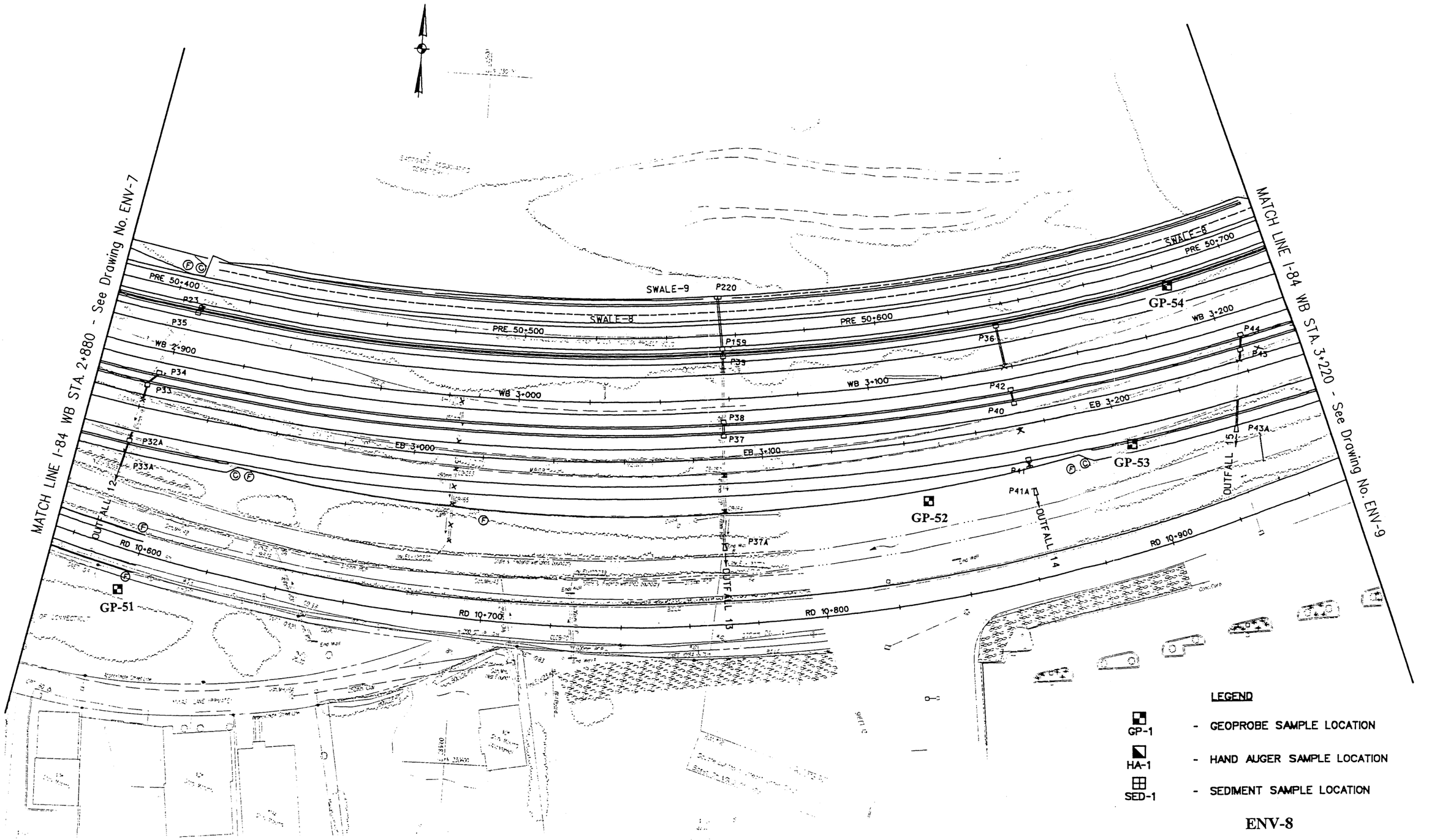

LEGEND

GP-1 - GEOPROBE SAMPLE LOCATION

HA-1 - HAND AUGER SAMPLE LOCATION

SED-1 - SEDIMENT SAMPLE LOCATION

ENV-8

Task 210 Project Corridor & Sampling Locations

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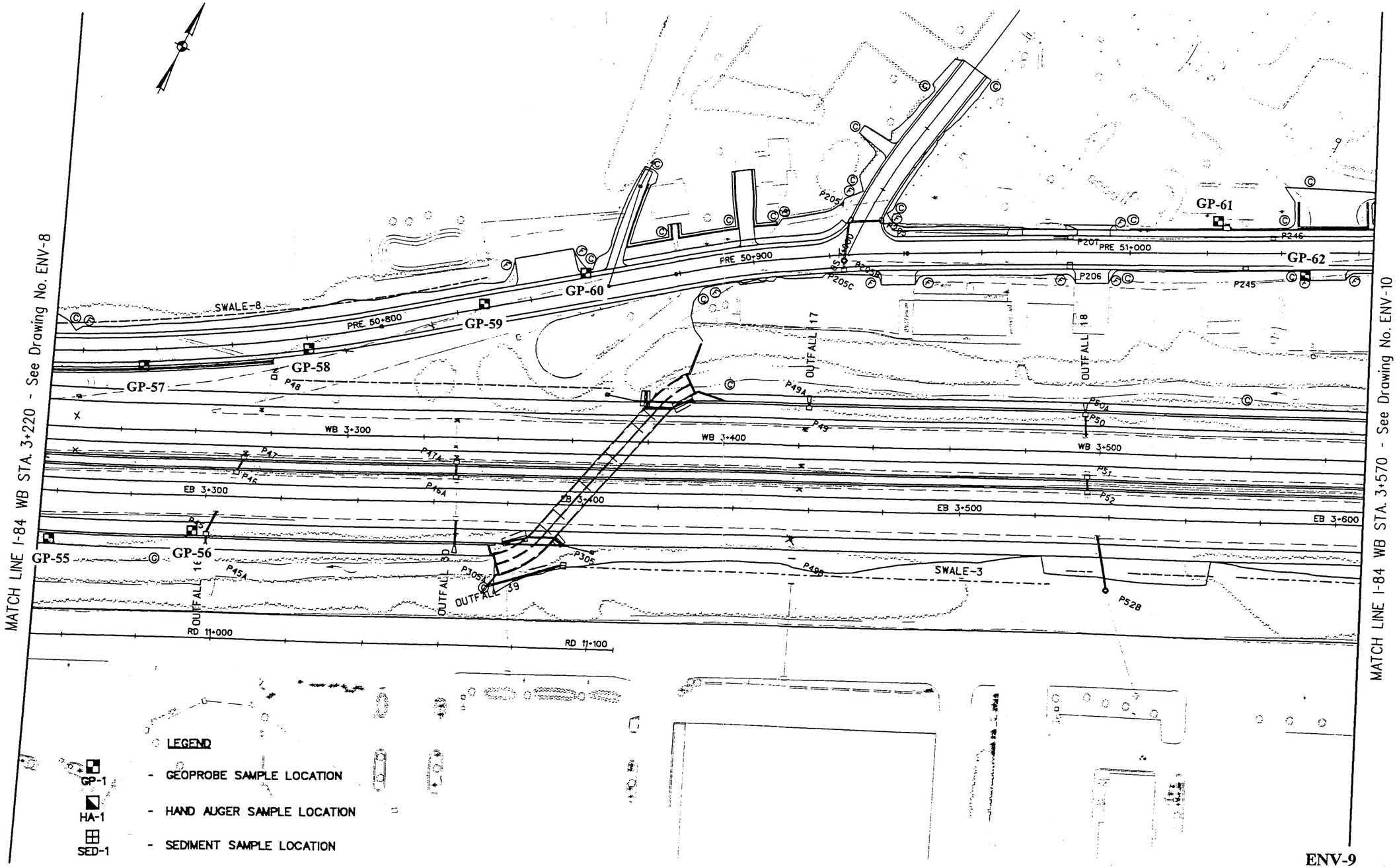

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Task 210 Project Corridor & Sampling Locations

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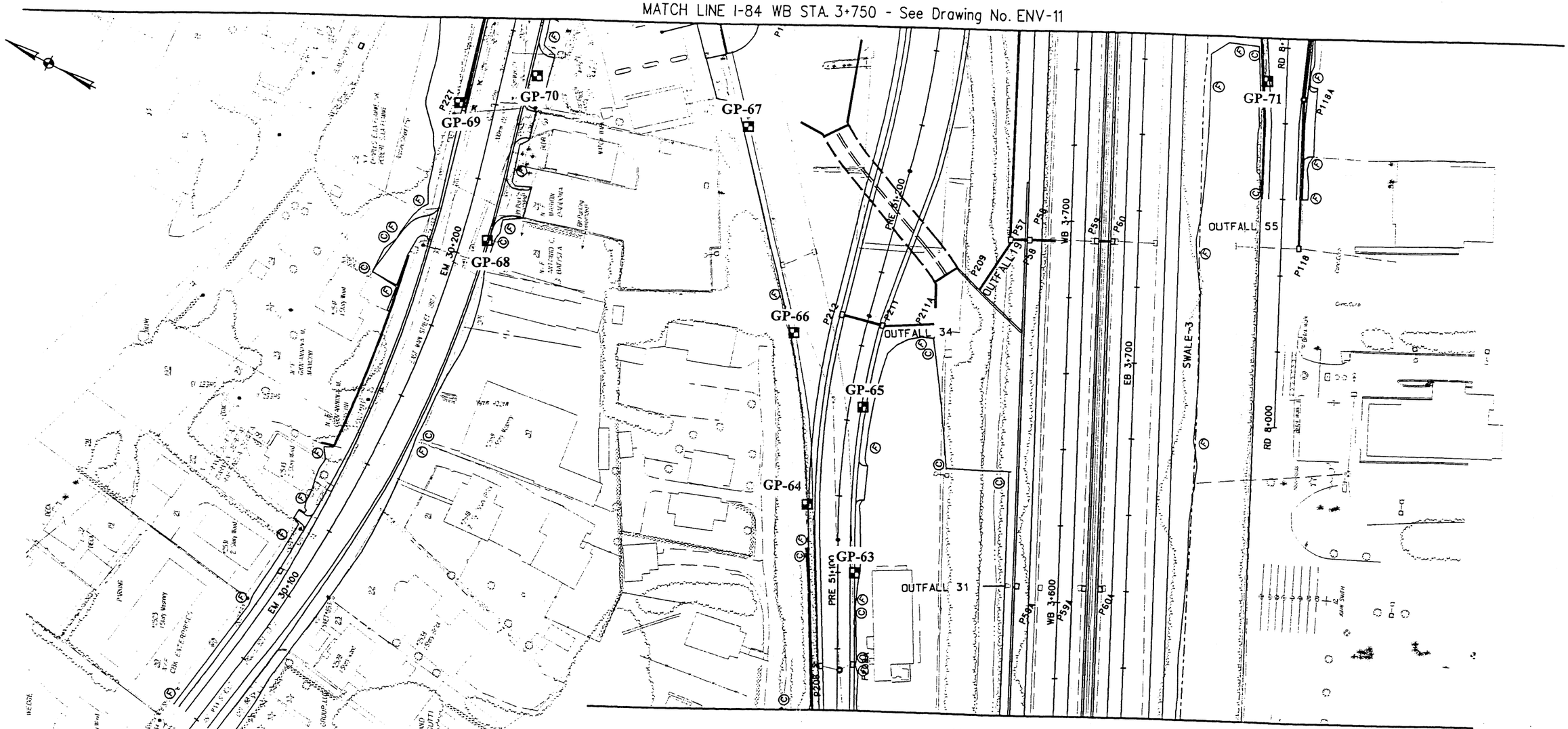

LEGEND

GP-1 - GEOPROBE SAMPLE LOCATION

HA-1 - HAND AUGER SAMPLE LOCATION

SED-1 - SEDIMENT SAMPLE LOCATION

ENV-10

Task 210 Project Corridor & Sampling Locations

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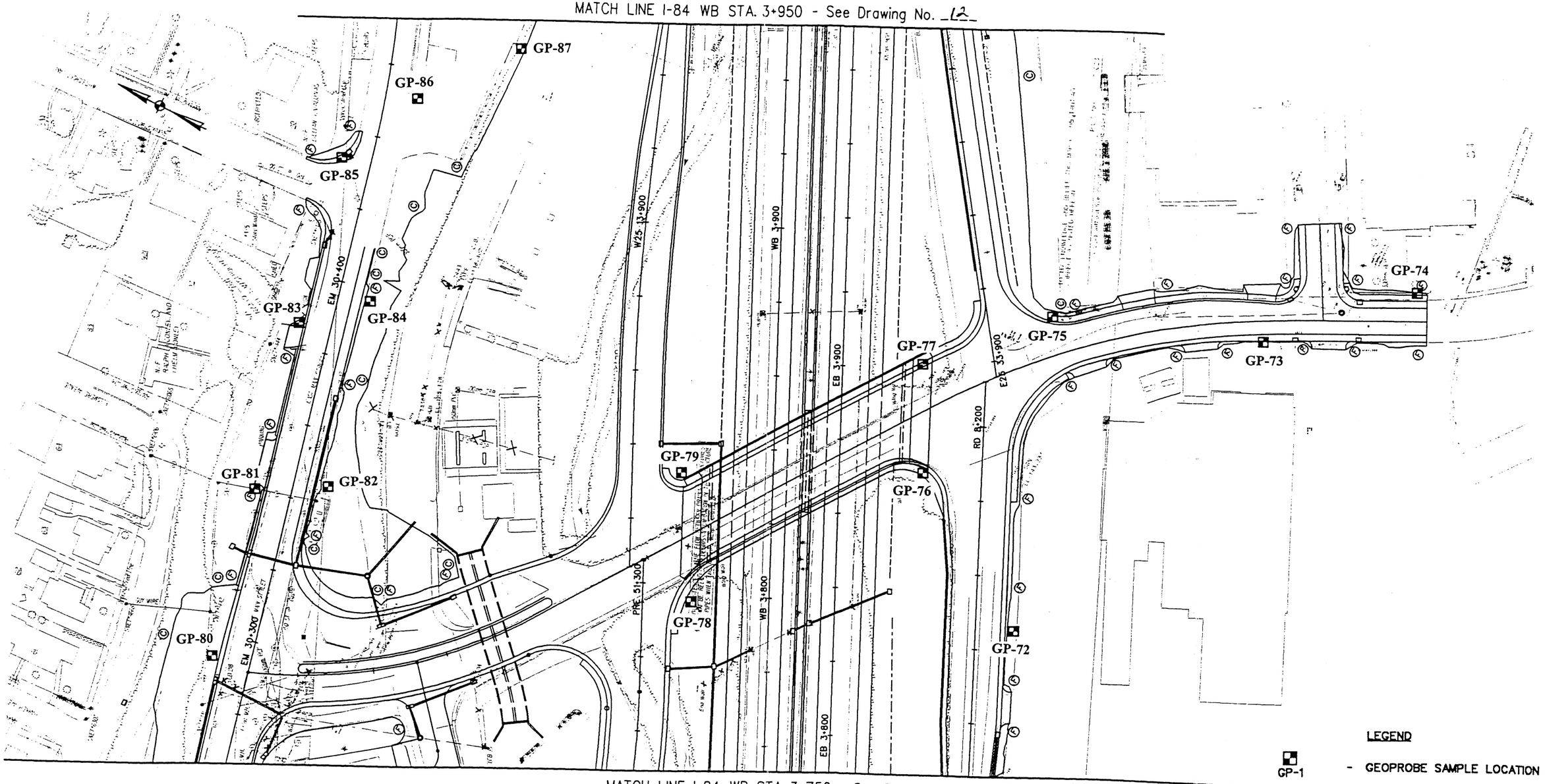

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Task 210 Project Corridor & Sampling Locations

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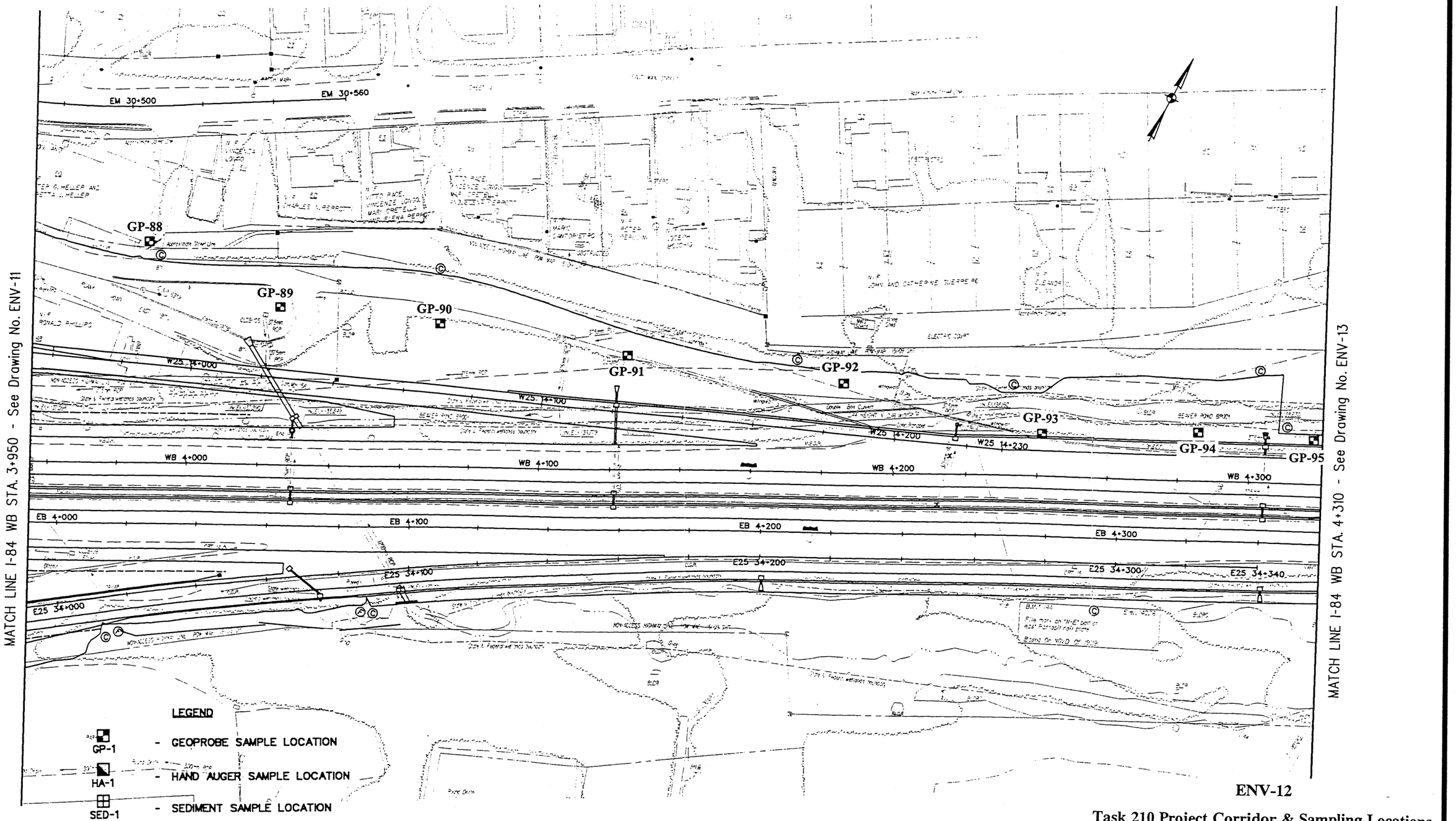

ENV-12

Task 210 Project Corridor & Sampling Locations

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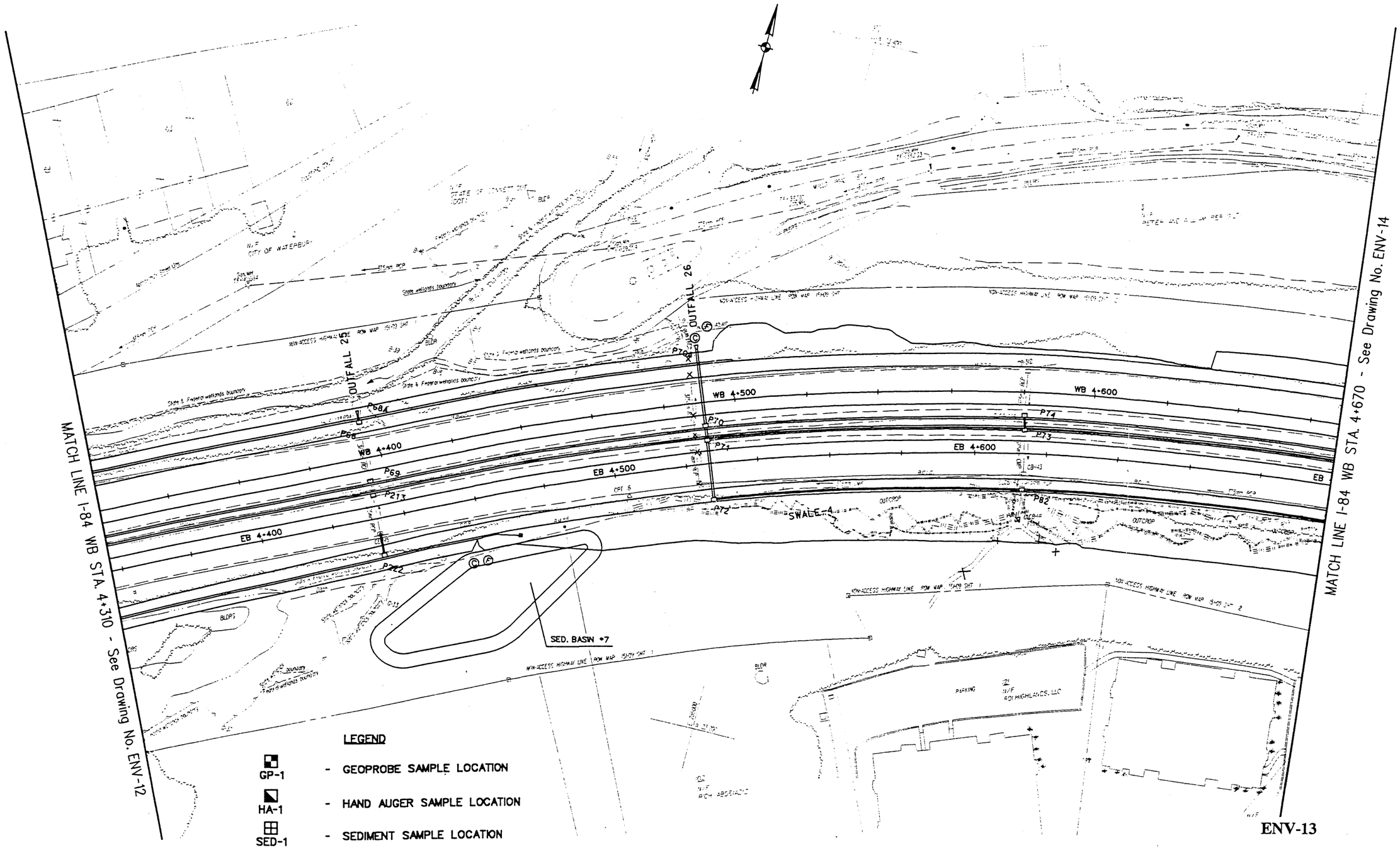

ENV-13

Task 210 Project Corridor & Sampling Locations

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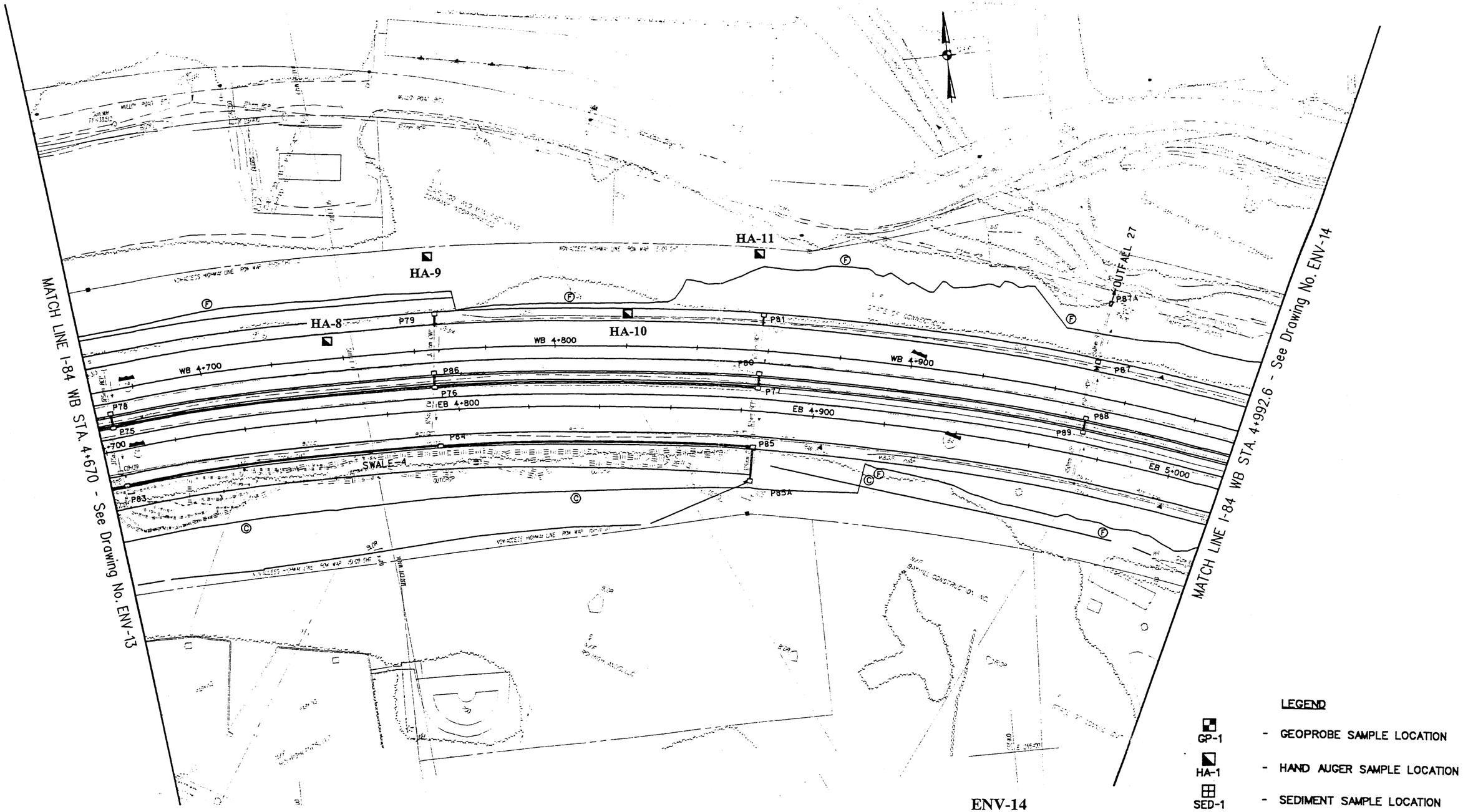

LEGEND

GP-1 - GEOPROBE SAMPLE LOCATION

HA-1 - HAND AUGER SAMPLE LOCATION

SED-1 - SEDIMENT SAMPLE LOCATION

ENV-14

Task 210 Project Corridor & Sampling Locations

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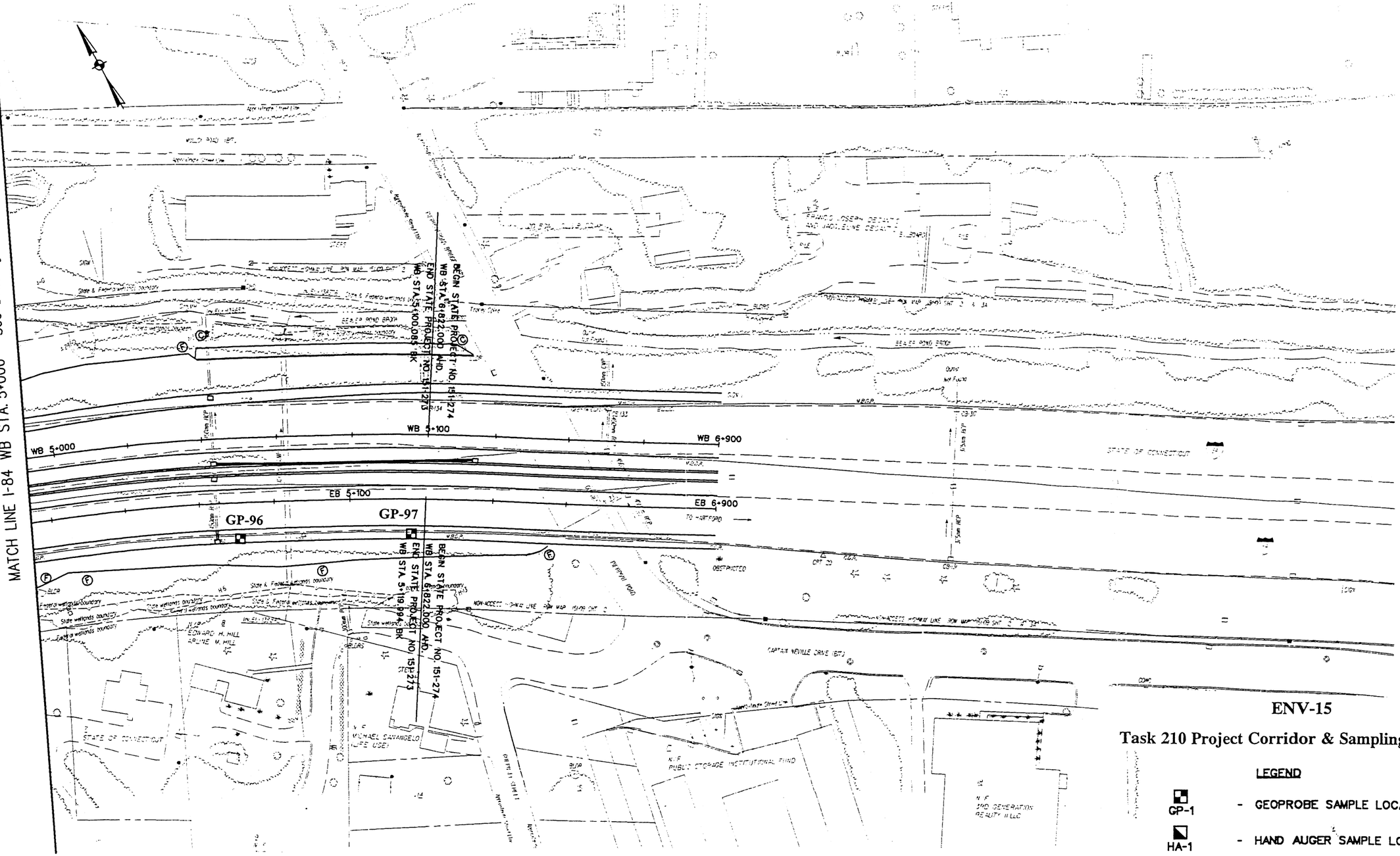


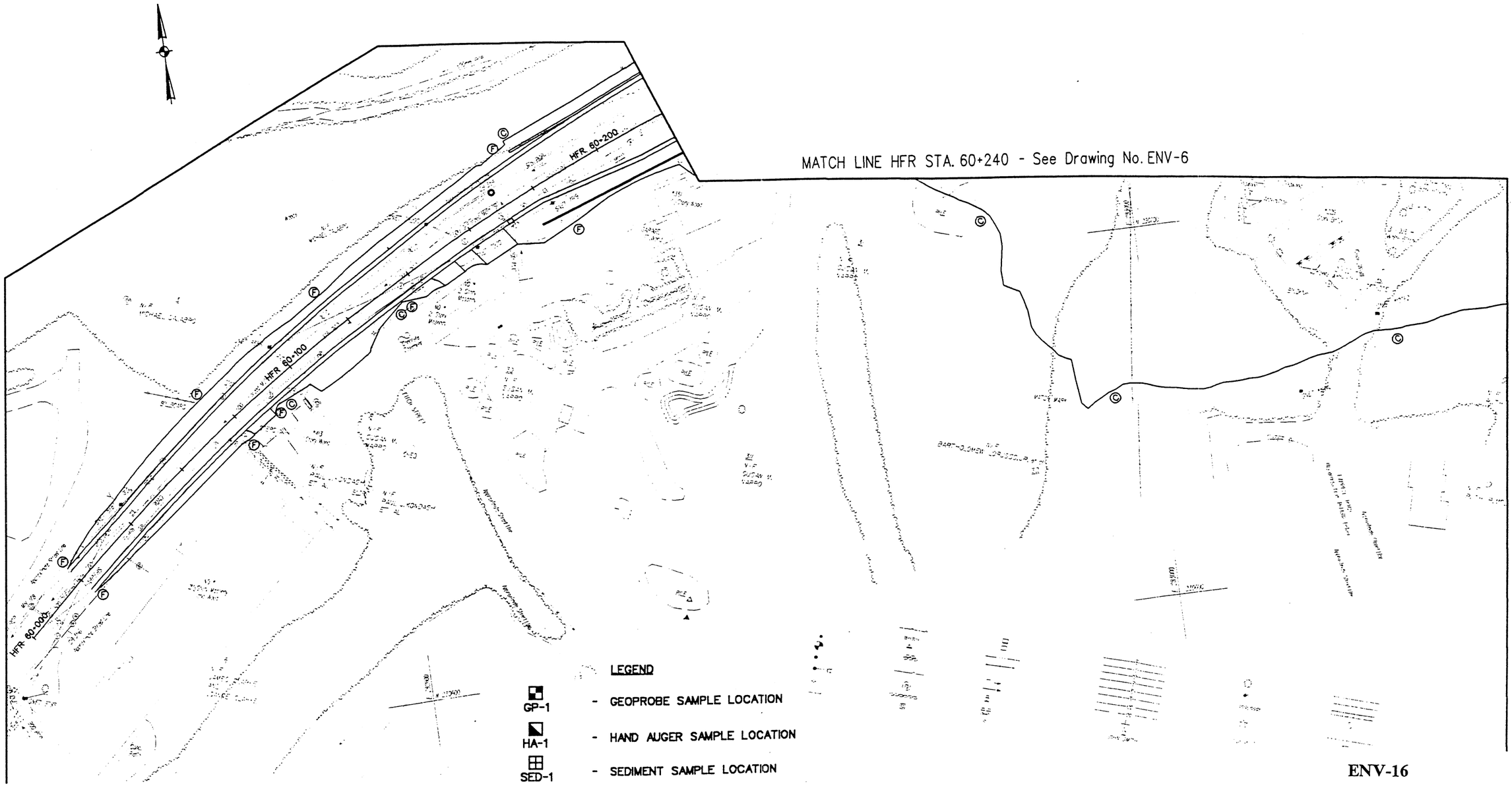
ENV-15

Task 210 Project Corridor & Sampling Locations

LEGEND

- GP-1 - GEOPROBE SAMPLE LOCATION
- HA-1 - HAND AUGER SAMPLE LOCATION
- SED-1 - SEDIMENT SAMPLE LOCATION

V	DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:500	DESIGNER MJS; DRAFTER MJH; CHECKED BY DTG; DATE CHECKED JULY 2001	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION; ENGINEER MAGUIRE GROUP INC; APPROVED BY DATE	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY; GRID 151273ENV; PLOTTED JULY 2001	TOWN: WATERBURY; DRAWING TITLE: ENVIRONMENTAL PLAN - 15	TRACT NO. 151-273; DRAWING NO. ENV-15; SHEET NO. XXX OF XXX



ENV-16

Task 210 Project Corridor & Sampling Locations

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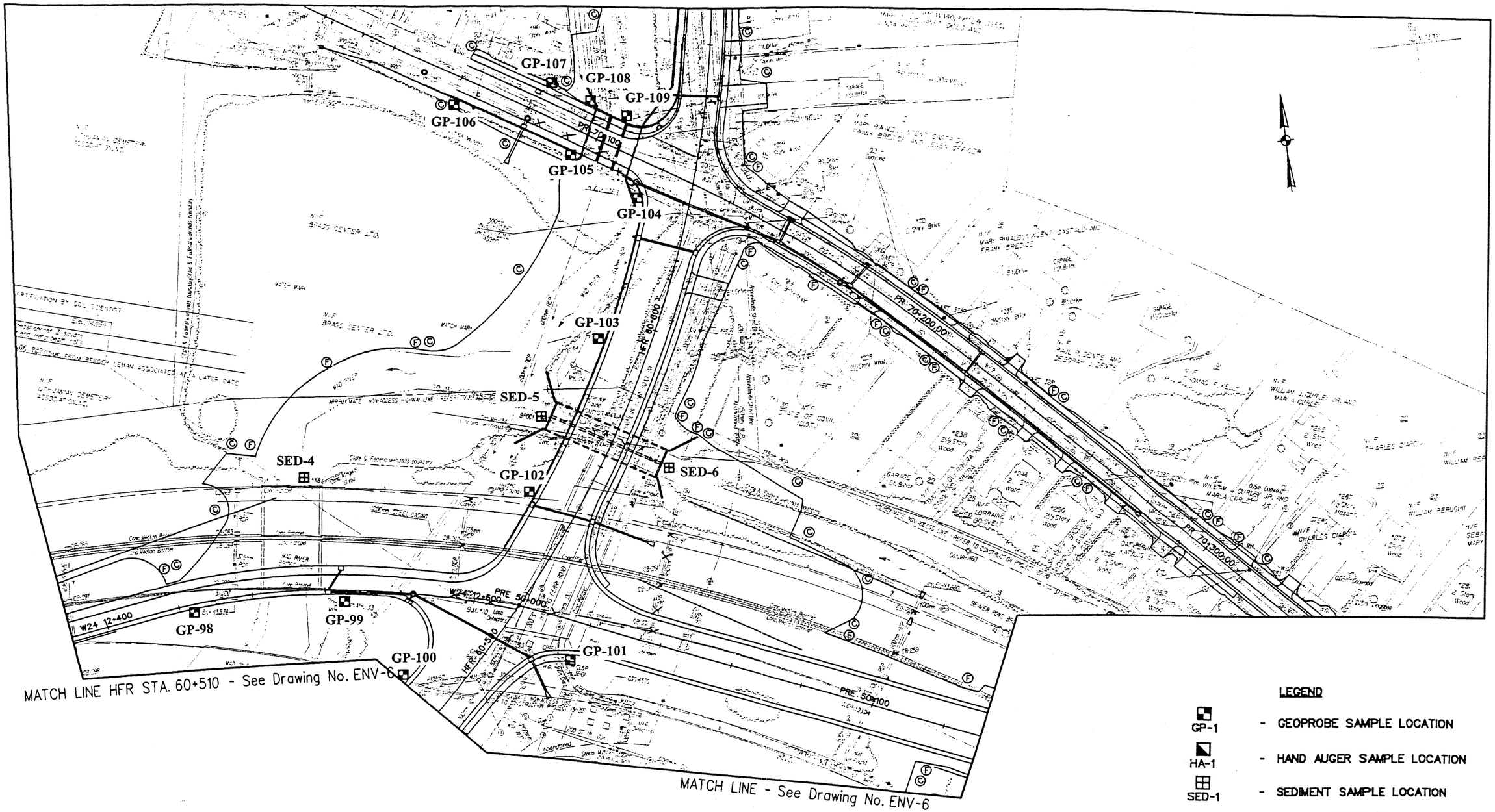
					CHECKED BY DRS	ENGINEER MACDIRE GROUP INC	
					DATE CHECKED JULY 2011	APPROVED BY DATE	CODE 151-273 ENV DATE JULY 2011

TOWN	WATERBURY
DRAWING TITLE	ENVIRONMENTAL PLAN - 16
PROJECT NO	151-273
DRAWING NO	ENV-16
SHEET NO	XXX OF XXX

MATCH LINE HFR STA. 60+690 - See Drawing No. ENV-18



LEGEND

GP-1 - GEOPROBE SAMPLE LOCATION

HA-1 - HAND AUGER SAMPLE LOCATION

SED-1 - SEDIMENT SAMPLE LOCATION

ENV-17

Task 210 Project Corridor & Sampling Locations

SCALE IN METERS 0 5 10 15 20 25 SCALE 1:500	DESIGNED MJS; DRAFTED MJH; CHECKED BY DEG; DATE CHECKED JULY 2001	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION; ENGINEER MAGUIRE GROUP INC.; APPROVED BY DATE	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY; DATE JULY 2001	TOWN: WATERBURY; DRAWING TITLE: ENVIRONMENTAL PLAN -17	PROJECT NO. 151-273; DRAWING NO. ENV-17; SHEET NO. XXX OF XXX

REVISIONS: NO. | DATE | DESCRIPTION | SHEET NO.

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- GP-1 - GEOPROBE SAMPLE LOCATION
- HA-1 - HAND AUGER SAMPLE LOCATION
- SED-1 - SEDIMENT SAMPLE LOCATION

MATCH LINE HFR STA. 60+690 - See Drawing No. ENV-17

ENV-18

Task 210 Project Corridor & Sampling Locations

DESIGNER: MJS	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY	TOWN: WATERBURY	PROJECT NO: 151-273
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DATE CHECKED: JULY 2001	APPROVED BY: DATE:		CADD: 11/27/2018 LNV	PLOTTED: JULY 2001	

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DIV	DATE	DESCRIPTION	SHEET NO
		REVISIONS	

All of the properties within the project corridor are connected to the public water supply system. In addition, there is one public water supply source located within a 1,609 meter (1 mile) radius of the project area, according to the CTDEP Bulletin 4, "The Atlas of the Public Water Supply Sources and Drainage Basins of Connecticut," June, 1982. The Waterbury Water Department's East Mountain Reservoir is located approximately 1,372 meters (0.85 miles) to the south of Interstate 84 near Interchange 24.

Several surface water bodies are located within the project corridor. Turkey Hill Brook and East Mountain Brook are both designated as Class A surface water bodies by the CTDEP. The designated uses of Class A inland surface waters include potential drinking water supply; fish and wildlife habitat; recreational use; agricultural, industrial supply and other legitimate uses including navigation. The Mad River is designated a Class B surface water body. Class B surface water uses are similar to Class A with the exception of the use as a potential drinking water supply. The Beaverpond Brook is designated as Class B/A, which indicates that the water quality is not currently meeting Class A water quality criteria.

3.2 Geology

The United States Department of Agriculture Soil Conservation Service's *1980 Soils of Connecticut (Bulletin 787)* indicate that the soil in the project corridor is classified as the Charlton-Hollis Formation, which is described as well drained soil with a friable loamy substratum, and shallow soils over bedrock. The Bedrock Geological Map of Connecticut, compiled by John Rodgers in 1985, indicates that the bedrock unit underlying the eastern portion of the project area is the Taine Mountain Formation, which is a well-layered, gray, granofels. The remainder of the project corridor is underlain by the Waterbury Gneiss, which is a gray to dark-gray, fine to medium-grained schist and gneiss. Soils encountered during this investigation consisted of brown to black silt and sand units with varying amounts of gravel and cobbles. A dark gray, to gray micaceous gneiss/schist unit was encountered in numerous boring locations at depths ranging from 1.2 to 3.7 meters (4 to 12 feet) below the ground surface.

4.0 SUBSURFACE INVESTIGATION

Based upon the industrial and commercial nature of the properties surrounding the Interstate 84 corridor, a comprehensive sampling program was conducted within the proposed construction and/or right-of way areas of the moderate or high risk properties. The following subsections detail the investigation.

4.1 Geoprobe® Soil Borings & Soil Sample Analyses

On October 22 & 28; November 6, 19, 26, 27, 28, 29 & 30; and December 1, 2, 3, & 4, 2001, one hundred nine (109) Geoprobe® soil borings (GP-1 to GP-109) were advanced within proposed areas of construction and/or right-of-way activities along selected areas of Interstate 84. The Geoprobe® borings were advanced by Logical Environmental Solutions, under the direction of MGI. The locations of the Geoprobe® soil borings are depicted on Figures ENV-1 to ENV-18 - Task 210 Project Area & Sampling Locations.

The Geoprobe® soil borings were advanced to a depth of 3.7 meters (12 feet) below grade or sampler refusal on suspected bedrock or cobbles. Continuous soil samples were collected utilizing a 1.2 meter (4-foot) long, 5 centimeter (2-inch) diameter Macro Core Sampler with dedicated acetate liners. The soil samples were visually inspected in the field for staining, and described as to physical characteristics and soil type. In addition, the soil samples were screened in the field for total volatile organic compounds utilizing a Photovac photoionization detector (PID). Soil boring logs were generated in the field by Maguire field personnel. The boring logs denote the types of soil encountered, the depth to groundwater and/or bedrock, the total depth reached in each boring, and the highest observed PID reading. Copies of the boring logs are included at the end of this report in Appendix A.

Based upon field screening results and visual observations, one soil sample from each boring was placed in glassware supplied by Spectrum Analytical Laboratory, and stored in an ice-filled cooler. The shallow soil sample (0 to 0.6 meter/0' to 2' below grade) was selected for laboratory analyses if field screening and visual observation did not indicate the presence of contaminants in the other sample intervals. The analyses for each soil sample included volatile organic compounds (VOCs) utilizing EPA Method 8260, total petroleum hydrocarbons (TPH) utilizing the Connecticut ETPH Method, polynuclear aromatic hydrocarbons (PAHs) utilizing EPA Method 8270, total RCRA 8 metals, and SPLP RCRA 8 metals.

All Geoprobe® soil borings were back-filled and patched upon completion utilizing clean sand and/or hydrated bentonite. All down-hole sampling equipment was decontaminated in accordance with Maguire's July 2001 Task 210 Surficial Site Investigation Work Plan.

4.2 Hand Auger Soil Sample Collection & Analyses

Eleven hand auger soil samples (HA-1 to HA-11) were collected on October 22, October 28, and November 26, 2001 from areas of limited access within selected areas of the Interstate 84 corridor. The hand auger borings were advanced to approximately 0.6 meters (2 feet) below grade using a decontaminated soil auger. The hand auger sample locations are depicted on Figures ENV-1 to ENV-18 – Task 210 Project Area & Sampling Locations. The hand auger soil samples were stored in an ice-filled cooler and analyzed at Spectrum Analytical for VOCs (EPA Method 8260), PAHs (EPA Method 8270), petroleum hydrocarbons (Connecticut ETPH), and total and SPLP RCRA 8 metals.

4.3 Sediment Sample Collection & Analyses

Six sediment grab samples (SED-1 to SED-6) were collected from the Mad River and the Beaverpond Brook areas adjacent to proposed construction activities and impacts. The sediment grab sample locations are depicted on Figures ENV-1 to ENV-18 – Task 210 Project Area & Sampling Locations. The sediment samples were stored in an ice-filled cooler and analyzed at Spectrum Analytical for VOCs utilizing EPA Method 8260, PAHs utilizing EPA Method 8270, petroleum hydrocarbons utilizing the Connecticut ETPH method, and total and SPLP RCRA 8 metals.

4.4 Groundwater Sample Collection & Groundwater Analyses

Three groundwater grab samples (GP-15, GP-53, and GP-99) were collected from the borings in which groundwater was encountered. The groundwater grab samples were collected by placing dedicated PVC screen and riser casing into the borehole. Dedicated polyethylene tubing was inserted into the casing and groundwater was drawn through the tubing using a low-flow peristaltic pump. The groundwater samples were placed in laboratory supplied glassware, and stored in an ice-filled cooler. The groundwater samples were analyzed at Spectrum Analytical for VOCs utilizing EPA Method 8260, TPH utilizing the Connecticut ETPH method, PAHs utilizing EPA Method 8270, and total RCRA 8 metals.

4.5 Project Quality Assurance/Quality Control Practices

To assess the collection of samples in the field in terms of the sampling techniques and decontamination procedures followed, quality control and quality assurance samples were collected on the day of sampling activities. Six trip blanks were prepared by Spectrum Analytical Laboratory, and twelve field blank water samples were collected during the field investigation. The field blank sample was prepared by pouring laboratory supplied de-ionized water through an acetate liner and macro core cutting shoe, and collecting the resulting rinsate

in appropriate sample containers. The trip blank and field blank samples were stored with the daily samples in the sample cooler until subsequent delivery to the laboratory for analysis. The field blanks were analyzed for the same parameters specified for the daily samples. The trip blanks were analyzed for VOCs.

All samples collected in the field were stored in a manner that preserved the integrity of the sample chemistry. Samples intended for organic analyses were stored in an ice-filled cooler until delivery to the laboratory. Chain-of-Custody (COC) forms were filled out and accompanied all samples collected as a legal record of possession of the sample. The COC was initiated in the field and accompanied the containers during sample collection, transportation to the lab, analysis, and final disposal of the sample. All sampling equipment was either dedicated to a specific sample or was decontaminated prior to and between each use. Sampling equipment was not placed near solvents, gasoline, or other materials that may have impacted the integrity of the samples.

5.0 DISCUSSION OF SAMPLE RESULTS

5.1 Regulatory Criteria

The CTDEP adopted Remediation Standard Regulations (Regulations of Connecticut State Agencies, Section 22a-133k-1 to 3 and 22a-133q-1) as of January 31, 1996. The Remediation Standard Regulations (RSRs) apply to any site undergoing voluntary remediation under Public Acts 95-183 or 95-190, a transfer of an "establishment" under Public Act 95-183, or any site as ordered by the CTDEP Commissioner. The Regulations also outline the processes for establishing alternative site-specific numerical standards for certain sites, upon approval by the CTDEP.

The RSRs criteria applicable to the soil and groundwater sampled during this investigation are summarized below. The application of these RSRs to the results of the laboratory analyses from this investigation is discussed in subsection 5.2, 5.3, 5.4 and 5.5 of this section.

Soils Criteria: The RSRs are organized into two sets of criteria: the Direct Exposure Criteria (DEC) and the Pollutant Mobility Criteria (PMC). The DEC and PMC are briefly explained in the following sub-sections, in relation to how they would be applicable to the types of analyses conducted on the soil samples collected for this investigation. Please refer to the RSRs for a complete explanation of the Regulations.

Direct Exposure Criteria

The purpose of the Direct Exposure Criteria (DEC) is to protect human health from risks associated with the direct contact with or ingestion of various common soil contaminants. The DEC are applicable to soil within approximately 4.6 meters (15 feet) of the ground surface. Concentrations of contaminants are evaluated based upon mass-based analyses and different criteria are established for residential and commercial/industrial properties. The use of the less stringent commercial/industrial standards requires the placement of a land use restriction on the property. The DEC is not applicable to inaccessible soils, including soil more than 1.2 meters (4 feet) below the ground surface, 0.6 meters (2 feet) below pavement greater than 7.6 centimeters (3 inches) thick, or below an existing building, provided that an Environmental Land Use Restriction (ELUR) is placed in effect for the property.

Pollutant Mobility Criteria

The purpose of the Pollutant Mobility Criteria (PMC) is to evaluate the potential for contaminants to leach from the soil in concentrations that may degrade groundwater quality. Different numerical criteria are established for GA and GAA groundwater areas, versus GB groundwater areas.

Groundwater Criteria. Contaminants in the groundwater are compared either to background quality or the Groundwater Protection Criteria (GWPC), the Volatilization Criteria, as well as the Surface Water Protection Criteria (SWPC). The GWPC, Volatilization Criteria, and SWPC are briefly explained in the following sub-sections, in relation to how they would be applicable to the types of analyses conducted on the soil samples collected for this investigation.

Groundwater Protection Criteria

The purpose of the Groundwater Protection Criteria is to protect the groundwater quality in areas that have the potential to use groundwater as a drinking water resource (GA & GAA groundwater classification areas).

Volatilization Criteria

The purpose of the Volatilization Criteria standard is to ensure that volatile organic compounds (VOCs) in groundwater do not pose an unacceptable risk to human health due to the inhalation of VOCs that may enter into a structure on the property. The Volatilization Criteria only apply when impacted groundwater is located within 4.6 meters (15 feet) of the ground surface or any structure. Different criteria exist for residential and commercial/industrial properties. The use of the less stringent commercial/industrial standards requires the placement of an ELUR on the property. Since groundwater was located within 4.6 meters (15 feet) of the ground surface, the Volatilization Criteria apply to this Site.

Surface Water Protection Criteria

The purpose of the Surface Water Protection Criteria (SWPC) standards are to ensure that groundwater discharging to a surface water body will not adversely effect surface water quality. Since several surface water bodies are situated within the project corridor, the SWPC apply to contaminants detected in the groundwater.

5.2 Results of Soil Sample Analyses

Soil samples collected during the advancement of the Geoprobe® borings were sent to Spectrum Analytical Laboratory for laboratory analyses. Summaries of the laboratory results from the Geoprobe® boring soil samples are presented in Tables 1(a) to 1(bb), which are located at the end of this report, and copies of the soil sample analytical results are included in Appendix B. The following summarizes the results of the analyses conducted on the Geoprobe® boring soil samples.

Varying concentrations of petroleum hydrocarbons (TPH) were detected in all of the borings from Below Detectable Limits (10 to 20 parts per million [ppm]) to 2,400 ppm. The soil samples from borings GP-9 (940 ppm), GP-10 (840 ppm), GP-11 (1,600 ppm), GP-12 (1,700 ppm), GP-13 (1,400 ppm), GP-14 (1,700 ppm), GP-15 (1,700 ppm), GP-16 (2,400 ppm), GP-17 (1,300 ppm), GP-18 (1,300 ppm), GP-19 (840 ppm), GP-32 (1,100 ppm), GP-33 (1,400 ppm), GP-34 (2,400 ppm), GP-35 (1,300 ppm), and GP-36 (2,000 ppm) contained TPH at concentrations that exceeded the CTDEP Residential DEC of 500 ppm. All sixteen of the sample locations are situated within a GB groundwater area and the TPH concentrations detected do not exceed the GB PMC or Commercial/Industrial DEC of 2,500 ppm.

Two of the soil samples contained detectable concentrations of VOCs. The GP-12 soil sample contained the compound 1,2,4-trimethylbenzene (0.017 ppm) and the GP-38 soil sample contained the compound 1,4-dichlorobenzene (0.0055 ppm). However, the concentrations detected do not exceed any applicable CTDEP RSR criteria. The compound 1,4-dichlorobenzene was detected in the field blank and trip blank samples, and its presence in the GP-38 soil sample may be due to laboratory contamination.

Several polynuclear aromatic hydrocarbon (PAH) compounds were detected at varying total concentrations ranging from Below Detectable Limits to 58.32 ppm. Twenty-six soil samples contained concentrations of PAHs that exceed applicable CTDEP RSR Criteria. The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-9 contained the compounds benzo(a)anthracene (1.1 ppm), benzo(a)pyrene (1.6 ppm), benzo(b)fluoranthene (2.3 ppm), chrysene (2.0 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-10 contained the compounds benzo(a)anthracene (1.1 ppm), benzo(a)pyrene (1.6 ppm), benzo(b)fluoranthene (2.2 ppm), chrysene (2.0 ppm), and indeno(1,2,3-cd)pyrene (1.1 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-11 contained the compounds benzo(a)anthracene (1.6 ppm), benzo(a)pyrene (1.9 ppm), benzo(b)fluoranthene (2.6 ppm), chrysene (2.4 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-12 contained the compounds benzo(a)anthracene (1.7 ppm), benzo(a)pyrene (1.9 ppm), benzo(b)fluoranthene (2.7 ppm), benzo(k)fluoranthene (1.1 ppm), chrysene (2.5 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-13 contained the compounds benzo(a)anthracene (1.5 ppm), benzo(a)pyrene (1.8 ppm), benzo(b)fluoranthene (2.5 ppm), chrysene (2.2 ppm), and indeno(1,2,3-cd)pyrene (1.1 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 1.2 to 2.4 meter (4 to 8 foot) soil sample from boring GP-14 contained the compounds benzo(a)anthracene (1.7 ppm), benzo(a)pyrene (2.1 ppm), benzo(b)fluoranthene (3.1 ppm), benzo(k)fluoranthene (1.3 ppm), chrysene (2.6 ppm), and indeno(1,2,3-cd)pyrene (1.4 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-15 contained the compounds benzo(a)anthracene (1.4 ppm), benzo(a)pyrene (1.7 ppm), benzo(b)fluoranthene (2.6 ppm), chrysene (2.2 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 2.4 to 3.7 meter (8 to 12 foot) soil sample from boring GP-16 contained the compounds benzo(a)anthracene (1.7 ppm), benzo(a)pyrene (2.1 ppm), benzo(b)fluoranthene (3.0 ppm), benzo(k)fluoranthene (1.3 ppm), chrysene (2.8 ppm), and indeno(1,2,3-cd)pyrene (1.3 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-17 contained the compounds benzo(a)anthracene (1.1 ppm), benzo(a)pyrene (1.4 ppm), benzo(b)fluoranthene (2.0 ppm), and chrysene (1.7 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-18 contained the compounds benzo(a)anthracene (1.5 ppm), benzo(a)pyrene (1.5 ppm), benzo(b)fluoranthene (2.2 ppm), and chrysene (2.0 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-19 contained the compounds benzo(b)fluoranthene (1.3 ppm) and chrysene (1.1 ppm) at concentrations that exceed their respective GB PMC. The compound benzo(b)fluoranthene was also detected at a concentration that exceeds its Residential DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-21 contained the compounds benzo(a)anthracene (1.3 ppm), benzo(a)pyrene (1.4 ppm), benzo(b)fluoranthene (1.6 ppm), and chrysene (1.3 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-32 contained the compounds benzo(a)pyrene (1.3 ppm), benzo(b)fluoranthene (2.0 ppm), and chrysene (1.7 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)pyrene and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-33 contained the compounds benzo(a)anthracene (1.4 ppm), benzo(a)pyrene (1.7 ppm), benzo(b)fluoranthene (2.4 ppm), benzo(k)fluoranthene (1.1 ppm), chrysene (2.2 ppm), and indeno(1,2,3-cd)pyrene (1.1 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 1.2 to 2.4 meter (4 to 8 foot) soil sample from boring GP-34 contained the compounds benzo(a)anthracene (1.9 ppm), benzo(a)pyrene (2.0 ppm), benzo(b)fluoranthene (3.2 ppm), benzo(k)fluoranthene (1.3 ppm), chrysene (2.9 ppm), and indeno(1,2,3-cd)pyrene (1.4 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-35 contained the compounds benzo(a)anthracene (1.2 ppm), benzo(a)pyrene (1.6 ppm), benzo(b)fluoranthene (2.2 ppm), chrysene (2.0 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 1.2 to 2.4 meter (4 to 8 foot) soil sample from boring GP-36 contained the compounds benzo(a)anthracene (1.5 ppm), benzo(a)pyrene (1.8 ppm), benzo(b)fluoranthene (2.4 ppm), benzo(k)fluoranthene (1.3 ppm), chrysene (2.5 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-61 contained the compound benzo(b)fluoranthene (1.1 ppm) at a concentration that exceeds its GB PMC and Residential DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-69 contained the compounds benzo(a)anthracene (3.6 ppm), benzo(a)pyrene (5.1 ppm), benzo(b)fluoranthene (6.7 ppm), benzo(k)fluoranthene (1.8 ppm), benzo(g,h,i)perylene (4.3 ppm), chrysene (5.9 ppm), fluoranthene (9.5 ppm), indeno(1,2,3-cd)pyrene (3.8 ppm), phenanthrene (5.8 ppm), and pyrene (9.9 ppm) at concentrations that exceed their respective GA PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-80 contained the compounds benzo(a)pyrene (1.3 ppm), benzo(b)fluoranthene (1.8 ppm), chrysene (1.8 ppm), and indeno(1,2,3-cd)pyrene (1.2 ppm) at concentrations that exceed their respective GA PMC. The compounds benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-81 contained the compounds benzo(a)anthracene (1.1 ppm), benzo(a)pyrene (1.8 ppm), benzo(b)fluoranthene (2.3 ppm), chrysene (2.2 ppm), and indeno(1,2,3-cd)pyrene (1.4 ppm) at concentrations that exceed their respective GA PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-83 contained the compounds benzo(a)pyrene (1.5 ppm), benzo(b)fluoranthene (2.0 ppm), chrysene (1.8 ppm), and indeno(1,2,3-cd)pyrene (1.1 ppm) at concentrations that exceed their respective GA PMC. The compounds benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0.6 to 1.2 meter (2 to 4 foot) soil sample from boring GP-85 contained the compounds benzo(a)anthracene (1.1 ppm), benzo(a)pyrene (1.1 ppm), benzo(b)fluoranthene (1.4 ppm), and chrysene (1.7 ppm) at concentrations that exceed their respective GA PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-90 contained the compounds benzo(a)anthracene (1.4 ppm), benzo(a)pyrene (1.5 ppm), benzo(b)fluoranthene (1.7 ppm), chrysene (1.7 ppm), and pyrene (4.7 ppm) at concentrations that exceed their respective GA PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-100 contained the compounds benzo(a)anthracene (1.4 ppm), benzo(a)pyrene (1.1 ppm), and chrysene (1.4 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene and benzo(a)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

The 0 to 0.6 meter (0 to 2 foot) soil sample from boring GP-107 contained the compounds benzo(a)anthracene (1.9 ppm), benzo(a)pyrene (2.8 ppm), benzo(b)fluoranthene (3.8 ppm), benzo(k)fluoranthene (1.5 ppm), chrysene (3.3 ppm), and indeno(1,2,3-cd)pyrene (2.0 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial/Industrial DEC.

Total concentrations of the metals barium, cadmium, chromium, and lead were detected in the soil samples throughout the project corridor. The soil sample from boring GP-33 (279 ppm) contained total chromium at a concentration that exceeds the Residential and Commercial/Industrial DEC of 100 ppm. In addition, the soil samples from borings GP-7 (851 ppm) and GP-8 (660 ppm) contained total lead at concentrations that exceed the Residential DEC of 500 ppm. No other metals were detected at concentrations that exceeded any applicable CTDEP RSR criteria.

Leachable barium, chromium, lead, and silver (via SPLP) were detected at varying concentrations throughout the project corridor. Leachable lead was detected at concentrations that exceeded the CTDEP GA PMC in the following four soil samples: GP-69 (0.021 ppm), GP-77 (0.0162 ppm), GP-79 (0.0173 ppm), and GP-40 (0.0153 ppm). No other leachable metals were detected at concentrations that exceeded any applicable CTDEP RSR Criteria.

5.3 Results of Hand Auger Soil Sample Analyses

Soil samples collected during the advancement of the hand auger borings were sent to Spectrum Analytical Laboratory for laboratory analyses. Summaries of the laboratory results from the hand auger soil samples are presented in Tables 2(a) to 2(c), which are located at the end of this report, and copies of the hand auger soil sample analytical results are included in Appendix C. The following summarizes the results of the analyses conducted on the soil samples.

Varying concentrations of petroleum hydrocarbons (TPH) were detected in all of the samples from Below Detectable Limits (10 to 20 parts per million [ppm]) to 6,100 ppm. The HA-6 (630 ppm) and HA-7 (6,100 ppm) soil samples contained TPH at concentrations that exceeded the CTDEP Residential DEC of 500 ppm. The HA-7 soil sample also contained TPH at a concentration that exceeds the GB PMC and Commercial/Industrial DEC of 2,500 ppm.

One soil sample contained detectable concentrations of VOCs. The HA-5 soil sample contained the compound 1,4-dichlorobenzene (0.016 ppm), however, the concentration detected does not exceed any applicable CTDEP RSR criteria. The compound 1,4-dichlorobenzene was detected in the field blank and trip blank samples, and its presence in the soil sample may be due to laboratory contamination.

Several polynuclear aromatic hydrocarbon (PAH) compounds were detected at varying total concentrations ranging from Below Detectable Limits to 110.5 ppm. Three soil samples contained concentrations of PAHs that exceed applicable CTDEP RSR Criteria. The HA-5 soil sample contained the compounds benzo(b)fluoranthene (1.1 ppm) and chrysene (1.1 ppm) at concentrations that exceed their respective GB PMC. The compound benzo(b)fluoranthene was also detected at a concentration that exceeds its Residential DEC.

The HA-6 soil sample contained the compounds benzo(a)anthracene (1.8 ppm), benzo(a)pyrene (1.5 ppm), benzo(b)fluoranthene (1.8 ppm), and chrysene (2.0 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was detected at a concentration that exceeds its Commercial and Industrial DEC.

The HA-7 soil sample contained the compounds benzo(a)anthracene (9.9 ppm), benzo(a)pyrene (8.8 ppm), benzo(b)fluoranthene (12.0 ppm), benzo(k)fluoranthene (6.3 ppm), chrysene (10.0 ppm), and indeno(1,2,3-cd)pyrene (7.3 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were detected at concentrations that exceed their respective Commercial and Industrial DEC.

Total concentrations of the metals barium, cadmium, chromium, lead, and mercury were detected in the soil samples throughout the project corridor. The HA-6 soil sample contained the metals cadmium (39.9 ppm) and lead (1,450 ppm) at total concentrations that exceed their respective Residential DEC. The total lead concentration also exceeds the Commercial and Industrial DEC. The HA-7 soil sample contained the metals cadmium (36.2 ppm), chromium (177 ppm), and lead (2,260 ppm) at total concentrations that exceed their respective Residential DEC. In addition, the total chromium and lead concentrations also exceed their respective Commercial and Industrial DEC.

Leachable barium and lead (via SPLP) were detected at varying concentrations throughout the project corridor. However, the concentrations detected do not exceed any applicable CTDEP RSR Criteria.

5.4 Results of Sediment Grab Sample Analyses

Sediment grab samples collected during the investigation were sent to Spectrum Analytical Laboratory for laboratory analyses. Summaries of the laboratory results from the sediment grab samples are presented in Tables 3(a) and 3(b), which are located at the end of this report, and copies of the sediment grab sample analytical results are included in Appendix D. The following summarizes the results of the analyses conducted on the soil samples. For the purpose of comparison, the results were compared to the CTDEP RSR soil criteria.

Varying concentrations of petroleum hydrocarbons (TPH) were detected in all of the samples from Below Detectable Limits (10 to 20 parts per million [ppm]) to 180 ppm. None of the sediment samples contained TPH concentrations that exceed any applicable CTDEP RSR criteria.

VOCs were not detected in any of the sediment grab samples. Several polynuclear aromatic hydrocarbon (PAH) compounds were detected at varying total concentrations ranging from Below Detectable Limits to 21.22 ppm. Four sediment samples contained concentrations of PAHs that exceed applicable CTDEP RSR Criteria. The SED-1 sample contained the compounds benzo(b)fluoranthene (1.5 ppm), benzo(a)pyrene (1.5 ppm), benzo(b)fluoranthene (2.0 ppm), and chrysene (2.0 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC. In addition, the compound benzo(a)pyrene was also detected at a concentration that exceeds its Commercial and Industrial DEC.

The SED-2 sample contained the compound chrysene (1.1 ppm) at a concentration that exceeds its GB PMC. The SED-4 sample contained the compounds benzo(b)fluoranthene (1.2 ppm) and chrysene (1.3 ppm) at concentrations that exceed their respective GB PMC. The compound benzo(b)fluoranthene was also detected at a concentration that exceeds its Residential DEC.

The SED-5 sample contained the compounds benzo(a)anthracene (1.2 ppm), benzo(b)fluoranthene (1.4 ppm) and chrysene (1.5 ppm) at concentrations that exceed their respective GB PMC. The compounds benzo(a)anthracene and benzo(b)fluoranthene were also detected at concentrations that exceed their respective Residential DEC.

Total and leachable concentrations of the metals barium, chromium, and lead were detected in all of the sediment samples. However, the concentrations detected did not exceed any applicable CTDEP RSR Criteria.

5.5 Results of Groundwater Grab Sample Analyses

The groundwater grab samples (GP-15, GP-53, GP-99) collected during the advancement of the Geoprobe® borings were sent to Spectrum Analytical for laboratory analyses. Summaries of the laboratory results from the groundwater grab samples are presented in Table 4, which is located at the end of this report, and copies of the groundwater analytical results are included in Appendix E. The following summarizes the results of the analyses conducted on the groundwater grab samples.

The three groundwater samples did not contain detectable concentrations of TPH and PAHs. However, the detection limits for the PAH compounds acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and phenanthrene exceeded their respective Surface Water Protection Criteria (SWPC). Therefore, the PAH compounds may be present in the groundwater samples at concentrations that exceed the SWPC.

The GP-99 groundwater sample contained the VOC methyl tertiary butyl ether (MTBE) at a concentration of 1.5 parts per billion (ppb). The concentration detected did not exceed any applicable CTDEP RSR criteria.

The GP-15 groundwater sample contained the metals cadmium (0.0279 ppm), chromium (0.181 ppm), lead (0.168 ppm), and mercury (0.002 ppm) at total concentrations that exceed their respective CTDEP SWPC.

5.6 Quality Assurance/Quality Control Samples

The field blank (FB) samples were collected on twelve of the sampling days. The field blank samples were analyzed for VOCs, TPH, PAHs, and total RCRA 8 metals. In addition, six trip blank samples (TB) provided by Spectrum Analytical Inc. were analyzed for VOCs. All twelve field blank samples and all six trip blank samples contained the compound 1,4-dichlorobenzene at concentrations ranging from 4.8 to 37 ppb. In addition, nearly all of the field blank samples (except FB-3) and two of the trip blank samples (TB-5 & TB-6) contained the compound toluene at concentrations ranging from 1.2 to 2.0 ppb. Also nearly all of the field blank samples (except FB-2) contained the compounds MTBE at concentrations ranging from 1.2 to 10 ppb. The FB-7 field blank also contained the VOC naphthalene at a concentration of 1.3 ppb.

Spectrum analytical did not provide a quality control package with the sample results that would indicate if the compounds detected in the blank samples were present in the laboratory method blanks. The presence of the small concentrations of the contaminants in the field and trip blank samples are not very significant and their widespread presence in both the field and trip blank samples may be due to laboratory contamination. The VOCs 1,4-dichlorobenzene, toluene, MTBE, and naphthalene were not present in nearly all of the soil, sediment, and groundwater samples analyzed during this investigation. Their presence in the QA/QC samples may also be due to inadequate field decontamination procedures, but this would not explain the presence of the contaminants in the laboratory-supplied trip blank samples. Copies of the analytical reports associated with the quality assurance/quality control samples are included in Appendix F.

6.0 DISCUSSION OF AFFECTED RESOURCES

6.1 Areas of Environmental Concern

Based upon the results of laboratory analyses performed on soil samples for this Task 210 investigation, seven (7) areas of environmental concern (AOEC) have been identified. The locations of the AOECs within the project corridor are discussed in the following section.

AOEC #1: I-84 West, Exit 23 (Hamilton Avenue) Area: Samples HA-5, HA-6, & HA-7:

Analytical results from the soil samples collected from hand auger borings HA-5, HA-6, and HA-7 indicate the presence of TPH and PAH contamination at slightly elevated concentrations in shallow soil ranging from 0 to 0.6 meters (0 to 2 feet) below grade. The contamination detected exceeds the GB PMC, and Residential & Commercial/Industrial DEC. In addition, the samples also contain total cadmium, chromium, and lead at concentrations that exceed the Residential DEC and Commercial/Industrial DEC.

AOEC #2: I-84 East & West, Between Exits 23 & 24 (Former City Mill Ponds Area): Samples GP-7 to GP-19, GP-21, GP-32 to GP-36, GP-100, SED-1, SED-2, SED-4 & SED-5:

Analytical results from the soil samples collected from sample borings GP-9 to GP-19, GP-21, GP-32 to GP-36, and GP-100 indicate the presence of PAH contamination at slightly elevated concentrations at depths ranging from 0 to 3.7 meters (0 to 12 feet) below grade. The contamination detected exceeds the GB PMC, Residential DEC, and Commercial/Industrial DEC. In addition, analytical results from the GP-9 to GP-19, and GP-32 to GP-36 soil samples indicate the presence of TPH contamination at slightly elevated concentrations at depths ranging from 0 to 3.7 meters (0 to 12 feet) below grade. The contamination detected

exceeds the Residential DEC. Also total lead was detected in the GP-7 and GP-8 soil samples, at concentrations that exceed the Residential DEC. The lead contamination was detected at depths ranging from 0 to 1.2 meters (0 to 4 feet) below grade. The GP-33 soil sample also contained total chromium at a concentration that exceeds the Residential and Commercial/Industrial DEC, at a depth ranging from 0.6 to 1.2 meters (2 to 4 feet) below grade. The groundwater sample collected from boring GP-15 contained total cadmium, chromium, lead, and mercury at concentrations that exceed the SWPC. The SED-1, SED-2, SED-4 and SED-5 sediment samples collected from the Mad River also indicated the presence of PAH contamination that exceeds the GB PMC, Residential DEC, and Commercial/Industrial DEC.

AOEC #3: Adjacent to 553 Plank Road East: Sample GP-61:

Analytical results from the soil sample collected from boring GP-61 indicates the presence of PAH contamination at slightly elevated concentrations in shallow soil ranging from 0.6 to 1.2 meters (2 to 4 feet) below grade. The contamination detected exceeds the GB PMC and Residential DEC.

AOEC #4: North Side of East Main Street Between #2547 and #2714 East Main Street: Samples GP-69, GP-80, GP-81, GP-83, & GP-85:

Analytical results from the soil samples collected from borings GP-69, GP-80, GP-81, GP-83 & GP-85 indicate the presence of PAH contamination at slightly elevated concentrations in shallow soil ranging from 0 to 1.2 meters (0 to 4 feet) below grade. The contamination detected exceeds the GA PMC, Residential DEC, and Commercial/Industrial DEC. In addition, the GP-69 and GP-83 soil samples indicate the presence of leachable lead at slightly elevated concentrations that exceed the GA PMC in soils ranging from 0 to 1.2 meters (0 to 4 feet) below grade.

AOEC #5: Eastern Side of I-84 and Scott Road Overpass: Samples GP-77 & GP-79:

Analytical results from the soil samples collected from borings GP-77 and GP-79 indicate the presence of leachable lead contamination at slightly elevated concentrations in shallow soil ranging from 0.6 to 1.2 meters (2 to 4 feet) below grade. The contamination detected exceeds the GB PMC.

AOEC #6: I-84 West, Exit 25 (Plank Road East) Area: Sample GP-90:

Analytical results from the soil sample collected from boring GP-90 indicates the presence of PAH contamination at slightly elevated concentrations in shallow soil ranging from 0 to 0.6 meters (0 to 2 feet) below grade. The contamination detected exceeds the GA PMC, and Residential & Commercial/Industrial DEC.

AOEC #7: Plank Road/Brookdale Lane Intersection Area: Sample GP-107:

Analytical results from the soil sample collected from boring GP-107 indicates the presence of PAH contamination at slightly elevated concentrations in shallow soil ranging from 0 to 0.6 meters (0 to 2 feet) below grade. The contamination detected exceeds the GB PMC, and Residential & Commercial/Industrial DEC.

7.0 RECOMMENDATIONS

The results of the Task 210 – Surficial Site Investigation for the Interstate 84 Improvements in Waterbury, Connecticut indicate the presence of petroleum hydrocarbon (TPH), leachable lead, total cadmium, total chromium, total lead, and semi-volatile (PAH) contamination in soil ranging from 0 to 3.7 meters (0 to 12 feet) below grade, at concentrations that exceed the applicable RSR criteria. Sediment samples collected from various points along the Mad River also indicate the presence of PAH contamination at concentrations that exceed applicable RSR criteria. In addition, results of groundwater samples collected indicate the presence of total cadmium, chromium, lead, and mercury contamination that exceeds the applicable RSRs. Seven Areas of Environmental Concern (AOEC) have been identified within the project corridor. Special considerations for treatment/disposal, dewatering activities, and worker health and safety must be given to these areas in order to ensure compliance with all local, State and Federal laws. Task 310 Plans and Specifications are therefore recommended for the areas of construction within the Areas of Environmental Concern described in Section 6.0 above.

8.0 LIMITATIONS

All work product and reports provided by Maguire Group Inc. (MGI) in connection with the performance of this Task 210 - Surficial Site Investigation are subject to the following limitations:

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services provided to ConnDOT.

2. In preparing this report, MGI has relied on certain information provided by State and local officials and information and representations made by other parties referenced therein, and on information contained in the files of State and/or local agencies made available to MGI at the time of this investigation. To the extent that such files are missing, incomplete or not provided to MGI, MGI is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, MGI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this investigation.

3. The conclusions and recommendations contained in this report are based in part upon the data from subsurface explorations. The nature and extent of variations between these explorations may not become evident until further explorations are completed. If variations or other latent conditions become evident, it will be necessary to re-evaluate the conclusions and recommendations of this report.

4. The water level readings made for this investigation were made at the times and conditions stated on the boring logs. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, passage of time and other factors.

Should additional data become available in the future, these data should be reviewed by MGI, and the conclusions and recommendations presented herein modified accordingly.

5. Where quantitative laboratory analyses have been conducted by an outside certified laboratory, MGI has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these tests.

6. If the conclusions and recommendations contained in this report are based, in part, upon various types of chemical data then the conclusions and recommendations are contingent upon the validity of such data. These data have been reviewed and interpretations made in the report. It should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by MGI and the conclusions and recommendations presented herein modified accordingly.

7. Chemical analyses were performed for specific parameters during the course of this investigation, as described in the text. However, it should be noted that testing for all known chemical constituents was not performed. The conclusions and recommendations contained in this report are based only upon the chemical constituents for which testing was accomplished.

The following qualifications apply to the undersigned's opinion:

The activities described and opinions included herein are based on information gathered during this exploratory site investigation which was limited in scope in adherence to the terms of our agreement. The professional opinion provided herein is based on the information described in this report.

The information contained herein was prepared for the use of ConnDOT solely in conjunction with the task descriptions for this assignment. The conclusions and recommendations set forth in this report are based on site conditions at the time of the investigation. Future studies and findings could change the contents of this report. The professional opinions presented in this report have been developed by using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental engineering consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional opinions included in this report.

Prepared by:	Approved by:	Reviewed by:
Cindy Knight	David R. Stock, P.E.	Jane Witherell, P.E., L.E.P.
Logical Env. Solutions	Program Manager	Project Engineer

TABLES

TABLE 1(a) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-1 0-0.6m 0'-2' (GB)	GP-2 1.2-2.4m 4'-8' (GB)	GP-3 0.6-1.2m 2'-4' (GB)	GP-4 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	200	BDL	BDL	BDL	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	0.22	BDL	BDL	BDL	1 ppm	1/7.8 ppm
Benzo(b)fluoranthene	0.21	BDL	BDL	BDL	1 ppm	1/7.8 ppm
Chrysene	0.21	BDL	BDL	BDL	1 ppm	84/780 ppm
Fluoranthene	0.35	BDL	BDL	BDL	56 ppm	1,000/2,500 ppm
Pyrene	0.49	BDL	BDL	BDL	40 ppm	1,000/2,500 ppm
Total PAHs	1.48	BDL	BDL	BDL		
Total RCRA 8 Metals (ppm)						
Barium	38.5	24.0	26.5	32.4		4,700/140,000 ppm
Cadmium	1.89	0.56	0.604	0.552		34/1,000 ppm
Chromium	13.2	7.08	6.69	9.29		100/100 ppm
Lead	30.6	2.0	3.5	3.62		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0073	BDL	0.0089	BDL	10.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(b) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-5 0-0.6m 0'-2' (GB)	GP-6 0.6-1.2m 2'-4' (GB)	GP-7 0-0.6m 0'-2' (GB)	GP-8 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	230	220	66	98	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	0.41	0.3	0.27	0.37	1 ppm	1/7.8 ppm
Benzo(a)pyrene	0.29	0.18	BDL	0.21	1 ppm	1/1 ppm
Benzo(b)fluoranthene	0.47	0.3	BDL	0.49	1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	0.28	0.19	BDL	0.28	1 ppm	8.4/78 ppm
Chrysene	0.46	0.3	0.28	0.53	1 ppm	84/780 ppm
Fluoranthene	0.81	0.52	0.43	0.76	56 ppm	1,000/2,500 ppm
Phenanthrene	0.42	0.35	0.24	0.49	40 ppm	1,000/2,500 ppm
Pyrene	1.1	0.75	0.63	1.2	40 ppm	1,000/2,500 ppm
Total PAHs	4.24	2.89	1.85	4.33		
Total RCRA 8 Metals (ppm)						
Barium	57.8	44.0	92.3	97.8		4,700/140,000 ppm
Cadmium	1.47	1.37	22.4	20.0		34/1,000 ppm
Chromium	22.5	20.3	18.0	15.5		100/100 ppm
Lead	157	162	***851***	***660***		**500**/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0067	0.008	0.0069	0.0099	10.0 ppm	
Lead	0.0178	0.0534	0.0728	0.0621	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(c) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-9 0.6-1.2m 2'-4' (GB)	GP-10 0-0.6m 0'-2' (GB)	GP-11 0-0.6m 0'-2' (GB)	GP-12 1.2-2.4m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	***940***	***840***	***1,600***	***1,700***	2,500 ppm	**500**/2,500 ppm
VOCs - EPA Method 8260 (ppm)						
1,2,4-Trimethylbenzene	BDL	BDL	BDL	0.017	70 ppm	500/1,000 ppm
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.31	0.25	0.35	0.34	84 ppm	1,000/2,500 ppm
Anthracene	BDL	0.26	0.36	0.34	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	***1.1***	***1.1***	***1.6***	***1.7***	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	***1.6***	***1.6***	***1.9***	***1.9***	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	***2.3***	***2.2***	***2.6***	***2.7***	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.97	0.81	1.0	***1.1***	**1 ppm**	8.4/78 ppm
Benzo(g,h,i)perylene	1.4	1.2	1.5	1.4	42 ppm	1,000/2,500 ppm
Chrysene	***2.0***	***2.0***	***2.4***	***2.5***	**1 ppm**	84/780 ppm
Fluoranthene	3.5	3.6	4.7	4.9	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	***1.2***	***1.1***	***1.2***	***1.2***	**1 ppm**	1/7.8 ppm
Phenanthrene	1.6	1.5	2.3	2.6	40 ppm	1,000/2,500 ppm
Pyrene	3.2	3.2	4.1	4.4	40 ppm	1,000/2,500 ppm
Total PAHs	19.18	18.82	24.01	25.08		
Total RCRA 8 Metals (ppm)						
Barium	88.8	93.7	71.9	70.3		4,700/140,000 ppm
Cadmium	5.32	5.56	5.12	3.92		34/1,000 ppm
Chromium	46.1	56.1	46.5	28.9		100/100 ppm
Lead	158	171	130	154		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	0.111	0.0254	0.0054	10.0 ppm	
Chromium	BDL	BDL	0.0067	0.0053	0.5 ppm	
Lead	BDL	BDL	0.015	0.0119	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(d) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-13 0.6-1.2m 2'-4' (GB)	GP-14 1.2-2.4m 4'-8' (GB)	GP-15 0.6-1.2m 2'-4' (GB)	GP-16 2.4-3.7m 8'-12' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	***1,400***	***1,700***	***1,700***	***2,400***	2,500 ppm	**500**/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.32	0.32	0.27	0.38	84 ppm	1,000/2,500 ppm
Anthracene	0.31	0.31	0.31	0.38	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	***1.5***	***1.7***	***1.4***	***1.7***	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	***1.8***	***2.1***	***1.7***	***2.1***	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	***2.5***	***3.1***	***2.6***	***3.0***	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.96	***1.3***	0.95	***1.3***	**1 ppm**	8.4/78 ppm
Benzo(g,h,i)perylene	1.2	1.6	1.3	1.5	42 ppm	1,000/2,500 ppm
Chrysene	***2.2***	***2.6***	***2.2***	***2.8***	**1 ppm**	84/780 ppm
Fluoranthene	4.5	4.9	4.1	5.6	56 ppm	1,000/2,500 ppm
Fluorene	0.21	BDL	BDL	BDL	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	***1.1***	***1.4***	***1.2***	***1.3***	**1 ppm**	1/7.8 ppm
Phenanthrene	2.2	2.6	2.3	3.0	40 ppm	1,000/2,500 ppm
Pyrene	3.6	4.2	3.4	5.1	40 ppm	1,000/2,500 ppm
Total PAHs	22.4	26.13	21.73	28.16		
Total RCRA 8 Metals (ppm)						
Barium	53.9	90.1	130	130		4,700/140,000 ppm
Cadmium	4.71	5.25	5.5	7.35		34/1,000 ppm
Chromium	29.5	49.9	38.1	76.4		100/100 ppm
Lead	111	199	381	146		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	BDL	0.013	0.0118	10.0 ppm	
Chromium	BDL	0.0069	BDL	0.0159	0.5 ppm	
Lead	BDL	0.0076	BDL	0.0205	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(e) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-17 0.6-1.2m 2'-4' (GB)	GP-18 0.6-1.2m 2'-4' (GB)	GP-19 0.6-1.2m 2'-4' (GB)	GP-20 0-0.6m 0'-2' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	*1,300*	*1,300*	*840*	230	2,500 ppm	**500**/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.27	0.36	0.16	BDL	84 ppm	1,000/2,500 ppm
Anthracene	0.22	0.56	BDL	BDL	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	*1.1*	*1.5*	0.66	0.5	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	*1.4*	*1.5*	0.82	0.51	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	*2.0*	*2.2*	*1.3*	0.77	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.91	0.84	0.48	0.29	**1 ppm**	8.4/78 ppm
Benzo(g,h,i)perylene	1.2	1.1	0.64	0.32	42 ppm	1,000/2,500 ppm
Chrysene	*1.7*	*2.0*	*1.1*	0.65	**1 ppm**	84/780 ppm
Fluoranthene	3.4	4.3	2.1	0.95	56 ppm	1,000/2,500 ppm
Fluorene	BDL	0.24	BDL	BDL	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	1.0	1.0	0.59	0.34	1 ppm	1/7.8 ppm
Phenanthrene	1.5	2.8	0.98	0.4	40 ppm	1,000/2,500 ppm
Pyrene	2.8	3.2	1.8	0.92	40 ppm	1,000/2,500 ppm
Total PAHs	17.5	21.6	10.63	5.65		
Total RCRA 8 Metals (ppm)						
Barium	55.5	52.6	85.6	27.5		4,700/140,000 ppm
Cadmium	2.68	2.19	10.3	0.714		34/1,000 ppm
Chromium	26.3	19.7	64.2	7.21		100/100 ppm
Lead	96.4	57.9	212	17.2		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.00645	0.0117	BDL	BDL	10.0 ppm	
Lead	0.0093	0.0201	BDL	BDL	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(f) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-21 0.6-1.2m 2'-4' (GB)	GP-22 0-0.6m 0'-2' (GA)	GP-23 0.6-1.2m 2'-4' (GA)	GP-24 0-0.6m 0'-2' (GA)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	350	BDL	270	240	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.3	BDL	BDL	BDL	8.4/84 ppm	1,000/2,500 ppm
Anthracene	0.26	BDL	BDL	BDL	40/400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	*1.3*	BDL	0.32	BDL	**1/1 ppm**	1/7.8 ppm
Benzo(a)pyrene	*1.4*	BDL	0.29	BDL	**1/1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	*1.6*	BDL	0.34	BDL	**1/1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.66	BDL	BDL	BDL	1/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	1.1	BDL	BDL	BDL	4.2/42 ppm	1,000/2,500 ppm
Chrysene	*1.3*	BDL	0.26	BDL	**1/1 ppm**	84/780 ppm
Fluoranthene	2.1	BDL	0.47	BDL	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.95	BDL	BDL	BDL	1/1 ppm	1,000/2,500 ppm
Phenanthrene	1.2	BDL	0.28	BDL	4/40 ppm	1,000/2,500 ppm
Pyrene	1.9	BDL	0.42	BDL	4/40 ppm	1,000/2,500 ppm
Total PAHs	14.07	BDL	2.38	BDL		
Total RCRA 8 Metals (ppm)						
Barium	62.3	28.2	61.6	69.2		4,700/140,000 ppm
Cadmium	1.11	0.763	0.967	1.01		34/1,000 ppm
Chromium	12.7	9.25	14.4	13.2		100/100 ppm
Lead	29.7	26.7	28.1	29.4		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.007	BDL	0.0075	0.007	1/10.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(g) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-25 1.2-2.4m 4'-8' (GA)	GP-26 0.6-1.2m 2'-4' (GB)	GP-27 1.2-2.1m 4'-7' (GA)	GP-28 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	160	190	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	BDL	BDL	BDL	0.24	1/1 ppm	1/7.8 ppm
Benzo(a)pyrene	BDL	BDL	BDL	0.31	1/1 ppm	1/1 ppm
Benzo(b)fluoranthene	BDL	BDL	0.23	0.36	1/1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	BDL	BDL	BDL	0.2	1/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	BDL	BDL	BDL	0.2	4.2/42 ppm	1,000/2,500 ppm
Chrysene	BDL	BDL	0.2	0.32	1/1 ppm	84/780 ppm
Fluoranthene	BDL	BDL	0.3	0.48	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	0.2	1/1 ppm	1,000/2,500 ppm
Phenanthrene	BDL	BDL	BDL	0.27	4/40 ppm	1,000/2,500 ppm
Pyrene	BDL	BDL	0.24	0.42	4/40 ppm	1,000/2,500 ppm
Total PAHs	BDL	BDL	0.97	3.0		
Total RCRA 8 Metals (ppm)						
Barium	34.0	16.2	35.5	26.7		4,700/140,000 ppm
Cadmium	0.75	BDL	0.733	0.624		34/1,000 ppm
Chromium	7.69	4.2	7.73	9.5		100/100 ppm
Lead	3.65	1.58	22.4	21.4		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.006	BDL	0.0069	BDL	1/10.0 ppm	
Lead	BDL	BDL	0.0077	BDL	0.015/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(h) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-29 0-0.6m 0'-2' (GB)	GP-30 0.6-1.2m 2'-4' (GB)	GP-31 0-0.6m 0'-2' (GB)	GP-32 0-0.6m 0'-2' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	160	120	230	***1,100***	2,500 ppm	**500**/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	BDL	BDL	BDL	0.21	84 ppm	1,000/2,500 ppm
Anthracene	BDL	BDL	BDL	0.18	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	0.16	0.22	0.31	0.99	1 ppm	1/7.8 ppm
Benzo(a)pyrene	BDL	0.23	0.34	***1.3***	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	0.21	0.31	0.35	***2.0***	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	BDL	BDL	0.22	0.75	1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	BDL	BDL	0.59	1.1	42 ppm	1,000/2,500 ppm
Chrysene	0.19	0.29	0.42	***1.7***	**1 ppm**	84/780 ppm
Fluoranthene	0.29	0.45	0.68	3.2	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	BDL	BDL	0.44	0.94	1 ppm	1/7.8 ppm
Phenanthrene	BDL	0.2	0.57	1.2	40 ppm	1,000/2,500 ppm
Pyrene	0.23	0.36	0.52	2.8	40 ppm	1,000/2,500 ppm
Total PAHs	1.08	2.06	4.44	16.37		
Total RCRA 8 Metals (ppm)						
Barium	35.2	28.5	40.6	113		4,700/140,000 ppm
Cadmium	0.751	0.651	1.17	6.67		34/1,000 ppm
Chromium	7.45	8.63	8.43	64.4		100/100 ppm
Lead	23.8	13.9	20.4	275		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0092	BDL	0.0069	BDL	10.0 ppm	
Chromium	BDL	BDL	BDL	0.00705	0.5 ppm	
Lead	0.0087	BDL	0.0078	0.0092	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(i) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-33 0.6-1.2m 2'-4' (GB)	GP-34 1.2-2.4m 4'-8' (GB)	GP-35 0.6-1.2m 2'-4' (GB)	GP-36 1.2-2.4m 4'-8' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	***1,400***	***2,400***	***1,300***	***2,000***	2,500 ppm	**500**/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.36	0.39	0.32	0.36	84 ppm	1,000/2,500 ppm
Anthracene	0.28	0.39	0.28	0.33	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	***1.4***	***1.9***	***1.2***	***1.5***	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	***1.7***	***2.0***	***1.6***	***1.8***	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	***2.4***	***3.2***	***2.2***	***2.4***	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	***1.1***	***1.3***	0.89	***1.3***	**1 ppm**	8.4/78 ppm
Benzo(g,h,i)perylene	1.4	1.6	1.3	1.4	42 ppm	1,000/2,500 ppm
Chrysene	***2.2***	***2.9***	***2.0***	***2.5***	**1 ppm**	84/780 ppm
Fluoranthene	4.0	5.6	3.6	4.8	56 ppm	1,000/2,500 ppm
Fluorene	BDL	0.3	BDL	BDL	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	***1.1***	***1.4***	***1.2***	***1.2***	**1 ppm**	1/7.8 ppm
Phenanthrene	2.0	3.2	1.8	2.7	40 ppm	1,000/2,500 ppm
Pyrene	3.7	5.1	3.2	4.3	40 ppm	1,000/2,500 ppm
Total PAHs	21.64	29.28	19.59	24.59		
Total RCRA 8 Metals (ppm)						
Barium	110	92.0	78.5	101		4,700/140,000 ppm
Cadmium	8.08	9.95	4.14	9.11		34/1,000 ppm
Chromium	***279***	56.2	50.4	68.5		**100/100 ppm**
Lead	225	223	128	156		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0137	0.00505	BDL	BDL	10.0 ppm	
Chromium	0.0075	0.00695	BDL	0.00985	0.5 ppm	
Lead	BDL	0.0149	0.017	0.0121	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(j) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-37 0.6-1.2m 2'-4' (GA)	GP-38 0-0.6m 0'-2' (GA)	GP-39 0.6-1.2m 2'-4' (GA)	GP-40 0-0.6m 0'-2' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	BDL	BDL	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)						
1,4-Dichlorobenzene	BDL	0.0055*	BDL	BDL	1.5 ppm	26/240 ppm
PAHs - EPA Method 8270 (ppm)	BDL	BDL	BDL	BDL		
Total RCRA 8 Metals (ppm)						
Barium	58.3	41.4	47.3	36.5		4,700/140,000 ppm
Cadmium	0.674	0.596	0.968	0.855		34/1,000 ppm
Chromium	8.13	8.8	10.0	10.4		100/100 ppm
Lead	2.68	6.38	8.24	2.59		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	0.0056	0.0116	0.0112	1.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

* The compound 1,4-dichlorobenzene was also detected in the laboratory field and trip blank samples

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(k) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-41 1.2-2.4m 4'-8' (GA)	GP-42 0.6-1.2m 2'-4' (GA)	GP-43 0-0.6m 0'-2' (GA)	GP-44 0-0.6m 0'-2' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	BDL	BDL	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)	BDL	BDL	BDL	BDL		
Total RCRA 8 Metals (ppm)						
Barium	30.9	44.1	57.3	62.3		4,700/140,000 ppm
Cadmium	BDL	0.515	0.96	0.67		34/1,000 ppm
Chromium	3.33	5.73	7.91	8.52		100/100 ppm
Lead	BDL	3.2	5.34	2.91		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)	BDL	BDL	BDL	BDL		

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(l) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-45 1.2-2.4m 4'-8' (GA)	GP-46 0.6-1.2m 2'-4' (GA)	GP-47 0-0.6m 0'-2' (GA)	GP-48 0.6-1.2m 2'-4' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	65	61	74	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	BDL	BDL	0.16	0.26	1 ppm	1/7.8 ppm
Benzo(b)fluoranthene	BDL	BDL	BDL	0.24	1 ppm	1/7.8 ppm
Chrysene	BDL	BDL	0.16	0.27	1 ppm	84/780 ppm
Fluoranthene	BDL	BDL	0.3	0.43	5.6 ppm	1,000/2,500 ppm
Phenanthrene	BDL	BDL	0.19	0.27	4.0 ppm	1,000/2,500 ppm
Pyrene	BDL	BDL	0.23	0.41	4.0 ppm	1,000/2,500 ppm
Total PAHs	BDL	BDL	1.04	1.88		
Total RCRA 8 Metals (ppm)						
Barium	72.5	51.5	67.6	40.9		4,700/140,000 ppm
Cadmium	1.58	1.27	0.9	0.582		34/1,000 ppm
Chromium	14.1	10.5	9.33	7.63		100/100 ppm
Lead	5.22	51.5	40.8	34.2		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Lead	BDL	0.0139	0.0117	0.0082	0.015 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(m) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-49 1.2-2.4m 4'-8' (GA)	GP-50 0.6-1.2m 2'-4' (GA)	GP-51 0-0.6m 0'-2' (GA)	GP-52 0.6-1.2m 2'-4' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	76	BDL	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)	BDL	BDL	BDL	BDL		
Total RCRA 8 Metals (ppm)						
Barium	78.4	38.0	32.1	28.4		4,700/140,000 ppm
Cadmium	0.982	0.664	0.569	0.979		34/1,000 ppm
Chromium	7.13	6.51	6.98	7.02		100/100 ppm
Lead	111	9.92	22.4	6.49		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	BDL	BDL	0.0054	1.0 ppm	
Chromium	0.0065	BDL	BDL	BDL	0.05 ppm	
Lead	0.0116	BDL	BDL	BDL	0.015 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(n) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-53 0-0.6m 0'-2' (GB)	GP-54 0-0.6m 0'-2' (GB)	GP-55 0.6-1.2m 2'-4' (GB)	GP-56 1.2-2.4m 4'-8' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	100	BDL	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Phenanthrene	BDL	0.185	BDL	BDL	40 ppm	1,000/2,500 ppm
Total PAHs	BDL	0.185	BDL	BDL		
Total RCRA 8 Metals (ppm)						
Barium	23.3	26.0	32.1	37.1		4,700/140,000 ppm
Cadmium	1.2	0.551	1.19	0.687		34/1,000 ppm
Chromium	7.06	2.88	8.53	5.76		100/100 ppm
Lead	4.82	BDL	72.3	BDL		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0064	BDL	BDL	BDL	10.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(o) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-57 0.6-1.2m 2'-4' (GB)	GP-58 1.2-2.4m 4'-8' (GB)	GP-59 0-0.6m 0'-2' (GB)	GP-60 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	96	BDL	120	BDL	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	BDL	BDL	0.26	0.38	1 ppm	1/7.8 ppm
Benzo(a)pyrene	BDL	BDL	0.22	0.29	1 ppm	1/1 ppm
Benzo(b)fluoranthene	BDL	BDL	0.38	0.35	1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	BDL	BDL	0.22	0.18	1 ppm	8.4/78 ppm
Chrysene	BDL	BDL	0.36	0.35	1 ppm	84/780 ppm
Fluoranthene	BDL	BDL	0.57	0.83	56 ppm	1,000/2,500 ppm
Phenanthrene	BDL	BDL	0.26	0.39	40 ppm	1,000/2,500 ppm
Pyrene	BDL	BDL	0.46	0.75	40 ppm	1,000/2,500 ppm
Total PAHs	BDL	BDL	2.73	3.52		
Total RCRA 8 Metals (ppm)						
Barium	28.5	18.1	3.41	60.0		4,700/140,000 ppm
Cadmium	0.942	0.517	18.9	1.13		34/1,000 ppm
Chromium	5.64	3.91	BDL	8.75		100/100 ppm
Lead	2.15	1.81	1.8	24.2		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0053	BDL	BDL	BDL	10.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(p) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-61 0.6-1.2m 2'-4' (GB)	GP-62 0.6-1.2m 2'-4' (GB)	GP-63 0.6-1.2m 2'-4' (GB)	GP-64 0-0.6m 0'-2' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	150	89	100	130	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Anthracene	BDL	BDL	0.16	BDL	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	0.64	0.21	0.5	0.29	1 ppm	1/7.8 ppm
Benzo(a)pyrene	0.89	0.21	0.52	0.27	1 ppm	1/1 ppm
Benzo(b)fluoranthene	*1.1*	0.24	0.55	0.3	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.44	BDL	BDL	0.18	1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	0.82	BDL	0.3	BDL	42 ppm	1,000/2,500 ppm
Chrysene	0.99	BDL	0.51	0.34	1 ppm	84/780 ppm
Fluoranthene	1.6	0.36	0.83	0.48	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.56	BDL	0.28	BDL	1 ppm	1/7.8 ppm
Phenanthrene	0.68	0.25	0.58	0.19	40 ppm	1,000/2,500 ppm
Pyrene	1.5	0.31	0.67	0.37	40 ppm	1,000/2,500 ppm
Total PAHs	9.22	1.58	4.9	2.42		
Total RCRA 8 Metals (ppm)						
Barium	38.0	33.3	34.3	26.8		4,700/140,000 ppm
Cadmium	0.979	0.659	0.878	1.05		34/1,000 ppm
Chromium	10.9	5.47	10.2	8.84		100/100 ppm
Lead	124	23.6	212	10.6		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0053	0.022	0.0392	BDL	10.0 ppm	
Lead	0.0207	0.0076	0.009	BDL	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(q) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-65 0.6-1.2m 2'-4' (GB)	GP-66 0-0.6m 0'-2' (GB)	GP-67 0.6-1.2m 2'-4' (GB)	GP-68 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	160	110	110	120	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	BDL	BDL	0.74	BDL	1 ppm	1/7.8 ppm
Benzo(a)pyrene	BDL	BDL	0.78	BDL	1 ppm	1/1 ppm
Benzo(b)fluoranthene	BDL	BDL	0.81	BDL	1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	BDL	BDL	0.46	BDL	1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	BDL	BDL	0.53	BDL	42 ppm	1,000/2,500 ppm
Chrysene	BDL	BDL	0.83	BDL	1 ppm	84/780 ppm
Fluoranthene	BDL	BDL	1.3	BDL	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	BDL	BDL	0.42	BDL	1 ppm	1/7.8 ppm
Phenanthrene	BDL	BDL	0.71	BDL	40 ppm	1,000/2,500 ppm
Pyrene	BDL	BDL	0.9	BDL	40 ppm	1,000/2,500 ppm
Total PAHs	BDL	BDL	7.48	BDL		
Total RCRA 8 Metals (ppm)						
Barium	55.1	65.9	28.1	120		4,700/140,000 ppm
Cadmium	1.46	1.37	1.07	1.63		34/1,000 ppm
Chromium	10.3	11.1	8.13	24.0		100/100 ppm
Lead	81.1	88.0	13.2	31.2		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0054	0.0077	BDL	0.0072	10.0 ppm	
Chromium	BDL	BDL	0.0171	BDL	0.5 ppm	
Lead	0.0132	0.0094	BDL	BDL	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(r) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-69 0.6-1.2m 2'-4' (GA)	GP-70 0-0.6m 0'-2' (GB)	GP-71 0.6-1.2m 2'-4' (GB)	GP-72 0-0.6m 0'-2' (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	480	160	250	310	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	1.4	BDL	BDL	BDL	8.4/84 ppm	1,000/2,500 ppm
Anthracene	0.52	BDL	BDL	BDL	40/400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	***3.6***	0.18	0.35	0.59	**1**/1 ppm	1/7.8 ppm
Benzo(a)pyrene	***5.1***	0.21	0.35	0.48	**1**/1 ppm	**1/1 ppm**
Benzo(b)fluoranthene	***6.7***	0.32	0.64	0.82	**1**/1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	***1.8***	BDL	0.38	0.49	**1**/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	***4.3***	BDL	0.27	0.4	**4.2**/42 ppm	1,000/2,500 ppm
Chrysene	***5.9***	0.22	0.67	1.0	**1**/1 ppm	84/780 ppm
Fluoranthene	***9.5***	0.27	1.9	2.8	**5.6**/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	***3.8***	BDL	0.2	0.31	**1**/1 ppm	1/7.8 ppm
Phenanthrene	***5.8***	BDL	1.3	1.1	**4.0**/40 ppm	1,000/2,500 ppm
Pyrene	***9.9***	0.34	1.1	1.5	**4.0**/40 ppm	1,000/2,500 ppm
Total PAHs	58.32	1.54	7.16	9.49		
Total RCRA 8 Metals (ppm)						
Barium	39.7	91.0	30.1	28.2		4,700/140,000 ppm
Cadmium	1.17	1.34	1.28	0.852		34/1,000 ppm
Chromium	10.9	19.3	13.8	11.9		100/100 ppm
Lead	124	37.1	296	350		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0077	0.0063	BDL	BDL	1/10.0 ppm	
Chromium	BDL	BDL	BDL	0.0071	0.05/0.5 ppm	
Lead	***0.021***	BDL	0.0767	0.0923	**0.015**/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(s) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-73 0.6-1.2m 2'-4' (GB)	GP-74 1.2-2.4m 4'-8' (GA)	GP-75 0.6-1.2m 2'-4' (GA)	GP-76 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	57	150	120	91	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	BDL	0.43	BDL	0.18	1/1 ppm	1/7.8 ppm
Benzo(a)pyrene	BDL	0.45	BDL	BDL	1/1 ppm	1/1 ppm
Benzo(b)fluoranthene	0.18	0.46	BDL	0.24	1/1 ppm	1/7.8 ppm
Benzo(g,h,i)perylene	BDL	0.28	BDL	BDL	4.2/42 ppm	1,000/2,500 ppm
Chrysene	BDL	0.55	BDL	0.2	1/1 ppm	84/780 ppm
Fluoranthene	BDL	0.74	BDL	0.31	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.17	0.26	BDL	BDL	1/1 ppm	1/7.8 ppm
Phenanthrene	BDL	0.53	BDL	BDL	4.0/40 ppm	1,000/2,500 ppm
Pyrene	BDL	0.76	BDL	0.34	4.0/40 ppm	1,000/2,500 ppm
Total PAHs	0.35	4.46	BDL	1.27		
Total RCRA 8 Metals (ppm)						
Barium	32.4	50.3	32.7	21.7		4,700/140,000 ppm
Cadmium	0.761	1.56	0.716	BDL		34/1,000 ppm
Chromium	7.68	13.9	8.74	5.46		100/100 ppm
Lead	6.15	62.5	52.6	104		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0148	BDL	0.0065	0.0064	1/10.0 ppm	
Lead	BDL	BDL	0.0144	0.0347	0.015/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(t) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-77 0.6-1.2m 2'-4' (GA)	GP-78 0-0.6m 0'-2' (GB)	GP-79 0.6-1.2m 2'-4' (GA)	GP-80 0.6-1.2m 2'-4' (GA)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	150	200	180	230	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	BDL	BDL	BDL	0.34	8.4/84 ppm	1,000/2,500 ppm
Anthracene	BDL	BDL	BDL	0.16	40/400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	0.24	0.23	0.17	0.88	1/1 ppm	1/7.8 ppm
Benzo(a)pyrene	0.24	0.22	BDL	***1.3***	**1**/1 ppm	**1/1 ppm**
Benzo(b)fluoranthene	0.33	0.35	0.24	***1.8***	**1**/1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	BDL	0.2	BDL	0.64	1/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	BDL	BDL	BDL	1.3	4.2/42 ppm	1,000/2,500 ppm
Chrysene	0.27	0.39	0.34	***1.8***	**1**/1 ppm	84/780 ppm
Dibenz(a,h)anthracene	BDL	BDL	BDL	0.33	1/1 ppm	1/1 ppm
Fluoranthene	0.41	0.57	0.36	2.7	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	***1.2***	**1**/1 ppm	**1**/7.8 ppm
Phenanthrene	0.3	0.3	0.17	1.9	4.0/40 ppm	1,000/2,500 ppm
Pyrene	0.47	0.36	0.24	3.2	4.0/40 ppm	1,000/2,500 ppm
Total PAHs	2.26	2.62	1.52	17.55		
Total RCRA 8 Metals (ppm)						
Barium	24.8	31.5	27.3	66.2		4,700/140,000 ppm
Cadmium	0.724	0.752	0.668	1.78		34/1,000 ppm
Chromium	7.62	8.0	6.17	20.1		100/100 ppm
Lead	129	166	134	163		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	0.0073	0.0053	BDL	1/10.0 ppm	
Lead	***0.0162***	0.0502	***0.0173***	0.0103	**0.015**/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(u) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-81 0.6-1.2m 2'-4' (GA)	GP-82 0.6-1.2m 2'-4' (GA)	GP-83 0-0.6m 0'-2' (GA)	GP-84 0-0.6m 0'-2' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	220	140	220	170	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.44	BDL	0.42	BDL	8.4 ppm	1,000/2,500 ppm
Anthracene	0.16	BDL	0.16	BDL	40 ppm	1,000/2,500 ppm
Benzo(a)anthracene	*1.1*	BDL	0.95	BDL	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	*1.8*	BDL	*1.5*	BDL	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	*2.3*	BDL	*2.0*	0.2	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.8	BDL	0.7	BDL	1/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	1.6	BDL	1.5	BDL	4.2/42 ppm	1,000/2,500 ppm
Chrysene	*2.2*	BDL	*1.8*	0.16	**1 ppm**	84/780 ppm
Fluoranthene	3.2	BDL	2.9	0.18	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	*1.4*	BDL	*1.1*	BDL	**1 ppm**	1/7.8 ppm
Phenanthrene	2.2	BDL	1.8	BDL	4.0 ppm	1,000/2,500 ppm
Pyrene	3.6	BDL	2.8	0.18	4.0 ppm	1,000/2,500 ppm
Total PAHs	20.8	BDL	17.63	0.72		
Total RCRA 8 Metals (ppm)						
Barium	58.4	29.0	61.2	16.8		4,700/140,000 ppm
Cadmium	1.7	0.786	1.65	0.632		34/1,000 ppm
Chromium	18.3	10.6	17.2	8.94		100/100 ppm
Lead	178	33.5	207	39.2		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0107	0.0057	0.0052	0.0091	1.0 ppm	
Lead	0.0138	BDL	***0.0153***	0.0097	**0.015 ppm**	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(v) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-85 0.6-1.2m 2'-4' (GA)	GP-86 0-0.6m 0'-2' (GA)	GP-87 0-0.6m 0'-2' (GA)	GP-88 1.2-1.8m 4'-6' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	270	160	91	71	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.22	BDL	BDL	BDL	8.4 ppm	1,000/2,500 ppm
Anthracene	0.21	BDL	BDL	BDL	40 ppm	1,000/2,500 ppm
Benzo(a)anthracene	*1.1*	0.2	0.19	BDL	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	*1.1*	0.22	0.19	BDL	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	*1.4*	0.32	0.29	BDL	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.92	BDL	BDL	BDL	1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	0.6	0.18	BDL	BDL	4.2 ppm	1,000/2,500 ppm
Chrysene	*1.7*	0.25	0.19	BDL	**1 ppm**	84/780 ppm
Fluoranthene	2.6	0.25	0.32	BDL	5.6 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.55	BDL	BDL	BDL	1 ppm	1/7.8 ppm
Phenanthrene	1.5	BDL	BDL	BDL	4.0 ppm	1,000/2,500 ppm
Pyrene	2.0	0.28	0.32	BDL	4.0 ppm	1,000/2,500 ppm
Total PAHs	13.9	1.7	1.5	BDL		
Total RCRA 8 Metals (ppm)						
Barium	39.2	25.4	33.6	48.6		4,700/140,000 ppm
Cadmium	1.26	BDL	BDL	0.792		34/1,000 ppm
Chromium	11.5	7.26	7.58	14.8		100/100 ppm
Lead	75.6	31.8	5.55	2.78		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	BDL	0.0064	BDL	1.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(w) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-89 0.6-1.2m 2'-4' (GA)	GP-90 0-0.6m 0'-2' (GA)	GP-91 0.6-1.2m 2'-4' (GA)	GP-92 0-0.6m 0'-2' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	110	100	77	66	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	BDL	0.26	BDL	0.16	8.4 ppm	1,000/2,500 ppm
Acenaphthene	BDL	BDL	BDL	0.15	8.4 ppm	1,000/2,500 ppm
Anthracene	BDL	0.58	BDL	0.21	40 ppm	1,000/2,500 ppm
Benzo(a)anthracene	0.44	*1.4*	0.3	0.48	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	0.47	*1.5*	0.4	0.51	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	0.47	*1.7*	0.48	0.64	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.22	0.71	0.21	0.27	1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	0.16	0.82	0.33	0.41	4.2 ppm	1,000/2,500 ppm
Chrysene	0.49	*1.7*	0.42	0.63	**1 ppm**	84/780 ppm
Fluoranthene	0.94	3.5	0.64	1.2	5.6 ppm	1,000/2,500 ppm
Fluorene	BDL	0.2	BDL	0.15	5.6 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.24	0.84	0.27	0.36	1 ppm	1/7.8 ppm
Phenanthrene	0.54	2.7	0.37	1.2	4.0 ppm	1,000/2,500 ppm
Pyrene	0.85	*4.7*	0.92	1.6	**4.0 ppm**	1,000/2,500 ppm
Total PAHs	4.82	20.61	4.34	7.97		
Total RCRA 8 Metals (ppm)						
Barium	42.6	43.0	39.3	41.9		4,700/140,000 ppm
Cadmium	1.08	0.868	0.712	0.78		34/1,000 ppm
Chromium	12.9	13.2	11.8	12.4		100/100 ppm
Lead	30.9	51.1	36.8	23.3		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0059	0.0078	BDL	BDL	1.0 ppm	
Lead	0.0081	BDL	0.0109	BDL	0.015 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(x) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-93 0.6-1.2m 2'-4' (GA)	GP-94 0-0.6m 0'-2' (GA)	GP-95 0-0.6m 0'-2' (GA)	GP-96 0-0.6m 0'-2' (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	57	68	68	53	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)pyrene	BDL	0.17	BDL	BDL	1 ppm	1/1 ppm
Benzo(b)fluoranthene	BDL	0.23	BDL	0.18	1 ppm	1/7.8 ppm
Chrysene	BDL	0.17	BDL	0.15	1 ppm	84/780 ppm
Fluoranthene	0.19	0.3	0.24	0.22	5.6 ppm	1,000/2,500 ppm
Phenanthrene	BDL	0.19	0.16	BDL	4.0 ppm	1,000/2,500 ppm
Pyrene	0.27	0.43	0.35	0.35	4.0 ppm	1,000/2,500 ppm
Total PAHs	0.46	1.49	0.75	0.9		
Total RCRA 8 Metals (ppm)						
Barium	42.1	27.1	44.5	39.7		4,700/140,000 ppm
Cadmium	0.804	0.433	0.754	0.616		34/1,000 ppm
Chromium	12.4	8.59	12.6	7.73		100/100 ppm
Lead	30.1	44.6	56.6	49.9		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	BDL	0.009	0.006	1.0 ppm	
Lead	BDL	0.0128	0.0111	BDL	0.015 ppm	
Silver	0.0313	BDL	BDL	BDL	0.036 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(y) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-97 0-0.6m 0'-2' (GA)	GP-98 0.6-1.2m 2'-4' (GB)	GP-99 0.6-1.2m 2'-4' (GB)	GP-100 0-0.6m 0'-2' (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	56	130	160	320	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	BDL	BDL	BDL	0.35	8.4/84 ppm	1,000/2,500 ppm
Anthracene	BDL	BDL	BDL	0.56	40/400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	BDL	0.38	BDL	***1.4***	**1/1 ppm**	1/7.8 ppm
Benzo(a)pyrene	BDL	0.49	BDL	***1.1***	**1/1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	BDL	0.64	BDL	0.96	1/1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	BDL	0.26	BDL	0.71	1/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	BDL	0.32	BDL	0.64	4.2/42 ppm	1,000/2,500 ppm
Chrysene	BDL	0.58	BDL	***1.4***	**1/1 ppm**	84/780 ppm
Fluoranthene	0.25	1.1	0.24	2.9	5.6/56 ppm	1,000/2,500 ppm
Fluorene	BDL	BDL	BDL	0.5	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	0.57	1/1 ppm	1/7.8 ppm
1-Methylnaphthalene	BDL	BDL	BDL	0.24	No Standard	No Standard
2-Methylnaphthalene	BDL	BDL	BDL	0.19	0.98/9.8 ppm	474/2,500 ppm
Phenanthrene	0.14	0.52	BDL	4.2	4.0/40 ppm	1,000/2,500 ppm
Pyrene	0.39	0.81	0.2	2.4	4.0/40 ppm	1,000/2,500 ppm
Total PAHs	0.78	5.1	0.44	18.12		
Total RCRA 8 Metals (ppm)						
Barium	35.8	21.0	22.9	49.0		4,700/140,000 ppm
Cadmium	0.525	BDL	0.491	1.26		34/1,000 ppm
Chromium	7.57	9.02	7.5	10.5		100/100 ppm
Lead	43.7	16.2	37.3	46.9		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	BDL	0.0098	0.0098	0.0092	1/10.0 ppm	
Lead	BDL	0.0294	0.0198	0.0122	0.015/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(z) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-101 0-0.6m 0'-2' (GA)	GP-102 0.6-1.2m 2'-4' (GB)	GP-103 0-0.6m 0'-2' (GB)	GP-104 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	97	BDL	BDL	350	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Benzo(a)anthracene	0.19	BDL	BDL	0.34	1/1 ppm	1/7.8 ppm
Benzo(a)pyrene	BDL	BDL	BDL	0.41	1/1 ppm	1/1 ppm
Benzo(b)fluoranthene	0.3	BDL	BDL	0.62	1/1 ppm	1/7.8 ppm
Benzo(k)fluoranthene	BDL	BDL	BDL	0.28	1/1 ppm	8.4/78 ppm
Chrysene	0.23	BDL	BDL	0.56	1/1 ppm	84/780 ppm
Fluoranthene	0.36	BDL	0.24	0.83	5.6/56 ppm	1,000/2,500 ppm
Phenanthrene	BDL	BDL	BDL	0.42	4.0/40 ppm	1,000/2,500 ppm
Pyrene	0.35	BDL	0.27	0.82	4.0/40 ppm	1,000/2,500 ppm
Total PAHs	1.43	BDL	0.51	4.28		
Total RCRA 8 Metals (ppm)						
Barium	75.8	46.9	48.4	63.5		4,700/140,000 ppm
Cadmium	0.963	BDL	0.568	2.49		34/1,000 ppm
Chromium	12.6	6.21	6.18	69.9		100/100 ppm
Lead	23.3	14.2	9.94	45.0		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)	BDL	BDL	BDL	BDL		

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(aa) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-105 0-0.6m 0'-2' (GB)	GP-106 0.6-1.2m 2'-4' (GB)	GP-107 0-0.6m 0'-2' (GB)	GP-108 0.6-1.2m 2'-4' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	200	65	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	BDL	BDL	0.7	BDL	84 ppm	1,000/2,500 ppm
Anthracene	BDL	BDL	0.27	BDL	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	0.24	BDL	***1.9***	0.27	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	BDL	BDL	***2.8***	0.3	**1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	0.28	BDL	***3.8***	0.42	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	BDL	BDL	***1.5***	BDL	**1 ppm**	8.4/78 ppm
Benzo(g,h,i)perylene	BDL	BDL	2.1	BDL	42 ppm	1,000/2,500 ppm
Chrysene	0.26	BDL	***3.3***	0.35	**1 ppm**	84/780 ppm
Fluoranthene	0.51	BDL	6.3	0.55	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	BDL	BDL	***2.0***	BDL	**1 ppm**	1/7.8 ppm
Phenanthrene	0.34	BDL	3.9	0.21	40 ppm	1,000/2,500 ppm
Pyrene	0.53	BDL	6.2	0.59	40 ppm	1,000/2,500 ppm
Total PAHs	2.16	BDL	34.77	2.69		
Total RCRA 8 Metals (ppm)						
Barium	89.3	41.3	82.3	85.1		4,700/140,000 ppm
Cadmium	1.13	0.543	1.79	1.24		34/1,000 ppm
Chromium	11.7	5.8	10.7	17.6		100/100 ppm
Lead	27.0	112	125	53.8		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Lead	BDL	0.01	BDL	BDL	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 1(bb) - Results of Geoprobe Boring Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Sample Depth: Groundwater Classification:	GP-109 1.2-2.4m 4'-8' (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	82	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL		
PAHs - EPA Method 8270 (ppm)	BDL		
Total RCRA 8 Metals (ppm)			
Barium	74.0		4,700/140,000 ppm
Cadmium	0.957		34/1,000 ppm
Chromium	8.0		100/100 ppm
Lead	22.0		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)	BDL		

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 2(a) - Results of Hand Auger Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Groundwater Classification:	HA-1 (GB)	HA-2 (GB)	HA-3 (GA)	HA-4 (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	BDL	76	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)	BDL	BDL	BDL	BDL		
Total RCRA 8 Metals (ppm)						
Barium	59.8	62.5	45.9	45.9		4,700/140,000 ppm
Cadmium	0.67	0.762	0.941	0.983		34/1,000 ppm
Chromium	14.1	12.5	11.7	11.0		100/100 ppm
Lead	19.3	24.7	27.9	24.6		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0071	0.0088	0.0066	0.0071	1/10.0 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 2(b) - Results of Hand Auger Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Groundwater Classification:	HA-5 (GB)	HA-6 (GB)	HA-7 (GB)	HA-8 (GA)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	61	***630***	***6,100***	BDL	500/**2,500 ppm**	**500/2,500 ppm**
VOCs - EPA Method 8260 (ppm)						
1,4-Dichlorobenzene	0.016*	BDL	BDL	BDL	1.5/15 ppm	26/240 ppm
PAHs - EPA Method 8270 (ppm)						
Acenaphthene	BDL	0.24	BDL	BDL	8.4/84 ppm	1,000/2,500 ppm
Anthracene	0.18	0.59	2.3	BDL	40/400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	0.98	***1.8***	***9.9***	BDL	**1/1 ppm**	**1/7.8 ppm**
Benzo(a)pyrene	0.73	***1.5***	***8.8***	BDL	**1/1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	***1.1***	***1.8***	***12.0***	BDL	**1/1 ppm**	**1/7.8 ppm**
Benzo(k)fluoranthene	0.51	0.98	***6.3***	BDL	**1/1 ppm**	8.4/78 ppm
Benzo(g,h,i)perylene	0.38	1.1	7.9	BDL	4.2/42 ppm	1,000/2,500 ppm
Chrysene	***1.1***	***2.0***	***10.0***	BDL	**1/1 ppm**	84/780 ppm
Fluoranthene	2.1	3.9	19.0	BDL	5.6/56 ppm	1,000/2,500 ppm
Fluorene	BDL	0.23	BDL	BDL	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.39	0.95	***7.3***	BDL	**1/1 ppm**	1/7.8 ppm
Phenanthrene	1.4	3.2	11.0	BDL	4/40 ppm	1,000/2,500 ppm
Pyrene	1.7	3.1	16.0	BDL	4/40 ppm	1,000/2,500 ppm
Total PAHs	10.57	21.39	110.5	BDL		
Total RCRA 8 Metals (ppm)						
Barium	47.9	241	233	7.67		4,700/140,000 ppm
Cadmium	0.746	***39.9***	***36.2***	BDL		**34**/1,000 ppm
Chromium	11.4	81.0	***177***	2.25		**100/100 ppm**
Lead	26.7	***1,450***	***2,260***	1.65		**500/1,000 ppm**
Mercury	BDL	1.6	0.819	BDL		20/610 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0082	0.0701	0.0303	BDL	1/10.0 ppm	
Lead	BDL	BDL	0.0243	BDL	0.015/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

* The compound 1,4-dichlorobenzene was also detected in the daily field and trip blank samples.

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 2(c) - Results of Hand Auger Soil Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Groundwater Classification:	HA-9 (GA)	HA-10 (GA)	HA-11 (GA)	CTDEP Pollutant Mobility Criteria GA Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	BDL	BDL	BDL	500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)					
Benzo(a)anthracene	BDL	0.18	BDL	1 ppm	1/7.8 ppm
Chrysene	BDL	0.2	BDL	1 ppm	84/780 ppm
Fluoranthene	0.26	0.3	BDL	5.6 ppm	1,000/2,500 ppm
Phenanthrene	0.22	0.15	BDL	4 ppm	1,000/2,500 ppm
Pyrene	0.37	0.44	BDL	4 ppm	1,000/2,500 ppm
Total PAHs	0.85	1.27	BDL		
Total RCRA 8 Metals (ppm)					
Barium	30.6	35.8	45.0		4,700/140,000 ppm
Cadmium	0.466	0.507	0.509		34/1,000 ppm
Chromium	8.47	8.92	8.82		100/100 ppm
Lead	7.46	5.06	5.18		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)	BDL	BDL	BDL		

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 3(a) - Results of Sediment Grab Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Groundwater Classification:	SED-1 (GB)	SED-2 (GB)	SED-3 (GA)	SED-4 (GB)	CTDEP Pollutant Mobility Criteria GA/GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	180	130	BDL	180	500/2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL	BDL	BDL		
PAHs - EPA Method 8270 (ppm)						
Acenaphthylene	0.21	BDL	BDL	BDL	8.4/84 ppm	1,000/2,500 ppm
Anthracene	0.4	0.23	BDL	BDL	40/400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	*1.5*	0.77	BDL	0.92	**1/1 ppm**	1/7.8 ppm
Benzo(a)pyrene	*1.5*	0.81	BDL	0.9	**1/1 ppm**	**1/1 ppm**
Benzo(b)fluoranthene	***2.0***	0.97	BDL	*1.2*	**1/1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	1.0	0.54	BDL	0.66	1/1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	0.98	0.49	BDL	0.58	4.2/42 ppm	1,000/2,500 ppm
Chrysene	***2.0***	*1.1*	BDL	*1.3*	**1/1 ppm**	84/780 ppm
Fluoranthene	4.3	2.3	BDL	2.7	5.6/56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.83	0.45	BDL	0.46	1/1 ppm	1/7.8 ppm
Phenanthrene	2.9	1.7	BDL	1.6	4/40 ppm	1,000/2,500 ppm
Pyrene	3.6	2.0	BDL	2.2	4/40 ppm	1,000/2,500 ppm
Total PAHs	21.22	11.36	BDL	12.52		
Total RCRA 8 Metals (ppm)						
Barium	10.3	12.8	47.7	10.5		4,700/140,000 ppm
Chromium	3.1	4.81	12.0	3.8		100/100 ppm
Lead	11.8	16.9	72.0	6.17		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)						
Barium	0.0096	0.0392	0.0109	0.0077	1.0/10.0 ppm	
Chromium	BDL	0.0069	BDL	BDL	0.05/0.5 ppm	
Lead	0.022	0.011	0.0121	0.0125	0.015/0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 3(b) - Results of Sediment Grab Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Boring I.D.: Groundwater Classification:	SED-5 (GB)	SED-6 (GB)	CTDEP Pollutant Mobility Criteria GB Groundwater Area	CTDEP Direct Exposure Criteria Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	170	110	2,500 ppm	500/2,500 ppm
VOCs - EPA Method 8260 (ppm)	BDL	BDL		
PAHs - EPA Method 8270 (ppm)				
Anthracene	0.37	BDL	400 ppm	1,000/2,500 ppm
Benzo(a)anthracene	*1.2*	0.56	**1 ppm**	1/7.8 ppm
Benzo(a)pyrene	1.0	0.43	1 ppm	1/1 ppm
Benzo(b)fluoranthene	*1.4*	0.59	**1 ppm**	1/7.8 ppm
Benzo(k)fluoranthene	0.75	0.29	1 ppm	8.4/78 ppm
Benzo(g,h,i)perylene	0.59	BDL	42 ppm	1,000/2,500 ppm
Chrysene	*1.5*	0.71	**1 ppm**	84/780 ppm
Fluoranthene	0.19	1.5	56 ppm	1,000/2,500 ppm
Fluorene	3.4	BDL	56 ppm	1,000/2,500 ppm
Indeno(1,2,3-cd)pyrene	0.49	BDL	1 ppm	1/7.8 ppm
Phenanthrene	2.6	1.2	40 ppm	1,000/2,500 ppm
Pyrene	3.0	1.4	40 ppm	1,000/2,500 ppm
Total PAHs	16.49	6.68		
Total RCRA 8 Metals (ppm)				
Barium	11.4	10.7		4,700/140,000 ppm
Chromium	4.43	45.7		100/100 ppm
Lead	4.39	23.5		500/1,000 ppm
SPLP RCRA 8 Metals (ppm)				
Barium	0.0159	0.0163	10.0 ppm	
Lead	0.014	0.0205	0.15 ppm	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

TABLE 4 - Results of Groundwater Grab Sample Analyses
Interstate 84 Improvements
Waterbury, Connecticut

Sample I.D.:	GP-15 GW (GB)	GP-53 GW (GB)	GP-99 GW (GB)	CTDEP Surface Water Protection Criteria	Volatilization Criteria – Residential/Commercial & Industrial
TPH – CT ETPH (ppm)	< 0.1	< 0.1	< 0.1	None Established	
VOCs – EPA Method 8260 (ppb)					
Methyl Tertiary Butyl Ether (MTBE)	BDL	BDL	1.5	None Established	50,000/50,000 ppb
PAHs – EPA Method 8270 (ppb)					
Acenaphthylene	*< 5**	*< 5**	*< 5**	**0.3 ppb**	
Benzo(a)anthracene	*< 5**	*< 5**	*< 5**	**0.3 ppb**	
Benzo(a)pyrene	*< 5**	*< 5**	*< 5**	**0.3 ppb**	
Benzo(b)fluoranthene	*< 5**	*< 5**	*< 5**	**0.3 ppb**	
Benzo(k)fluoranthene	*< 5**	*< 5**	*< 5**	**0.3 ppb**	
Phenanthrene	*< 5**	*< 5**	*< 5**	**0.077 ppb**	
Total RCRA 8 Metals - ppm					
Barium	0.834	0.0989	0.0148	None Established	
Cadmium	***0.0279***	BDL	BDL	0.006 ppm	
Chromium	***0.181***	BDL	BDL	**0.11 ppm**	
Lead	***0.168***	BDL	BDL	**0.013 ppm**	
Mercury	***0.002***	BDL	BDL	**0.0004 ppm**	

BDL – Below Detectable Limits (see laboratory reports for compound specific detection limits)

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.

* The laboratory detection limits exceeded applicable CTDEP RSR Criteria

APPENDIX A
Boring Logs

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-1
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 0.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown SILT, trace fine Sand & fine Gravel	PID = 0.1 ppm
1.2	4'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'	Light-Brown fine to fine - coarse SAND, trace fine Gravel & Silt	Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'		
2.4	8'	Refusal at 1.8m (6') on Granitic GNEISS	
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-2
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.1 ppm
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown SILT, trace fine Sand & fine Gravel	PID = 0.1 ppm
0.9	3'		
1.2	4'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.2 ppm
2.1	7'		
		Light-Brown fine to fine - coarse SAND, trace fine Gravel & Silt	
2.4	8'		
2.74	9'		
			Macro Core Sample 2.4 - 3.7m (8' - 12'):
3	10'		PID = 0 ppm
3.4	11'		
3.7	12'	End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-3
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.1 ppm
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown SILT, trace fine Sand & fine Gravel	PID = 0.1 ppm
0.9	3'		
1.2	4'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
		Brown fine to fine - coarse SAND, trace fine Gravel & Silt	
2.4	8'		
2.74	9'		
3	10'		Macro Core Sample 2.4 - 3.7m (8' - 12'):
			PID = 0 ppm
3.4	11'		
3.7	12'		
		End of Boring at 3.7m (12')	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-4
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown SILT, trace fine Sand & fine Gravel	PID = 0.3 ppm
0.9	3'		
1.2	4'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
2.4	8'	Brown fine to fine - coarse SAND, trace fine Gravel & Silt	
2.74	9'		
3	10'		Macro Core Sample 2.4 - 3.7m (8' - 12'):
			PID = 0 ppm
3.4	11'		
3.7	12'		
		End of Boring at 3.7m (12')	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-5
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 0.3 ppm
0.6	2'	Brown SILT, trace fine Sand & fine Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.1 ppm
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0 ppm
		Brown fine to coarse SAND, little to trace fine Gravel & Silt	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Granitic GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-6
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel (7.6 cm/3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 0.1 ppm
0.6	2'	Brown SILT, trace fine Sand & fine Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.1 ppm
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine Gravel, Cobble, & Silt	
			Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'		
2.4	8'	Refusal at 1.8m (6') on Granitic GNEISS	
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-7
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel (7.6 cm/3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 0.4 ppm
0.6	2'	Brown SILT, trace fine Sand & fine Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.3 ppm
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine Gravel, Cobble, & Silt	
			Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'		
2.4	8'	Refusal at 1.8m (6') on Granitic GNEISS	
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-8
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
		TOPSOIL - Brown SILT, little fine to medium Sand, trace fine to coarse Gravel (7.6 cm/3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 0.4 ppm
0.6	2'	Brown SILT, trace fine Sand & fine Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.4 ppm
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine Gravel, Cobble, & Silt	
			Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
2.4	8'	Refusal at 1.8m (6') on Granitic GNEISS	
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-9
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.5 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.9 ppm
0.9	3'		
1.2	4'		
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.5 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
3	10'		Macro Core Sample 2.4 - 3.7m (8' - 12'): PID = 0.3 ppm
3.4	11'		
3.7	12'	Moist	
		End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-10
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.9 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.7 ppm
0.9	3'		
1.2	4'		
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.8 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
3	10'		Macro Core Sample 2.4 - 3.7m (8' - 12'): PID = 0.6 ppm
3.4	11'		
3.7	12'	Moist	
		End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-11
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 1.8 ppm
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 1.4 ppm
0.9	3'		
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 1.8 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
			Macro Core Sample 2.4 - 3.7m (8' - 12'):
3	10'		PID = 1.6 ppm
3.4	11'	Groundwater at 3.4m (11')	
3.7	12'		
		End of Boring at 3.7m (12')	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-12
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 2.1 ppm
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 2.7 ppm
0.9	3'		
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 3.1 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
			Macro Core Sample 2.4 - 3.7m (8' - 12'):
3	10'		PID = 2.8 ppm
3.4	11'	Groundwater at 3.4m (11')	
3.7	12'		
		End of Boring at 3.7m (12')	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-13
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 1.5 ppm
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 2.8 ppm
0.9	3'		
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 2.8 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
3	10'	Groundwater at 3m (10')	Macro Core Sample 2.4 - 3.7m (8' - 12'):
			PID = 2.7 ppm
3.4	11'		
3.7	12'	End of Boring at 3.7m (12')	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-14
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	PID = 1.6 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 2.6 ppm
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 3.3 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
			Macro Core Sample 2.4 - 3.7m (8' - 12'):
3	10'		PID = 2.2 ppm
3.4	11'	Groundwater at 3.4m (11')	
3.7	12'		
		End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-15
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 1.7 ppm
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 2.9 ppm
0.9	3'		
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 2.9 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
3	10'	Groundwater at 3m (10')	Macro Core Sample 2.4 - 3.7m (8' - 12'):
			PID = 2.8 ppm
3.4	11'		
3.7	12'	End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-16
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 0.8 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.8 ppm
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 5.8 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
3	10'	Groundwater at 3m (10')	Macro Core Sample 2.4 - 3.7m (8' - 12'):
3.4	11'		PID = 5.9 ppm
3.7	12'		
		End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-17
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.3 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 1.8 ppm
0.9	3'		
1.2	4'		
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 1.7 ppm
2.1	7'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
2.4	8'		
2.74	9'		
3	10'	Groundwater at 3m (10')	Macro Core Sample 2.4 - 3.7m (8' - 12'): PID = 1.8 ppm
3.4	11'		
3.7	12'	End of Boring at 3.7m (12')	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-18
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown to Black fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 1.9 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-19
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.3 ppm
0.6	2'		
0.9	3'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 1.8 ppm
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-20
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.6 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.5 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-21
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Ash	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.8 ppm
0.6	2'		
0.9	3'	Light-Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 1.2 ppm
1.2	4'		
1.5	5'		
1.8	6'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.1 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.4m (8') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-22
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Ash	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.3 ppm
0.6	2'		
0.9	3'	Light-Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.1 ppm
1.2	4'		
1.5	5'		
1.8	6'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.4m (8') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-23
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-24
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.1 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-25
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Ash	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0 ppm
0.6	2'		
0.9	3'	Light-Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
1.2	4'		
1.5	5'		
1.8	6'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.2 ppm
2.1	7'		
2.4	8'		
2.74	9'	Gray fine to coarse GRAVEL & COBBLES, trace fine to coarse Sand	Macro Core Sample 2.4 - 2.74m (8' - 9'): PID = 0 ppm
3	10'		
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-26
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.3 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.5 ppm
0.9	3'		
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine to coarse Gravel, trace Silt & Cobble	
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.4m (8') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-27
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
0.3	1'	Brown to Dark-Brown fine to medium SAND, trace fine to coarse Gravel, Cobble & Asphalt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.2 ppm
1.2	4'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 2.1m (4' - 7'): PID = 0.5 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.1m (7') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-28
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.7 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 1.1 ppm
0.9	3'		
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine to coarse Gravel, trace Silt & Cobble	
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.1 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.4m (8') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-29
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
0.3	1'	Brown to Dark-Brown fine to medium SAND, trace fine to coarse Gravel, Cobble & Asphalt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
0.9	3'		
1.2	4'	Brown fine to coarse SAND, little to trace fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 2.1m (4' - 7'): PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.1m (7') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-30
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little fine to coarse Gravel & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.4 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.7 ppm
0.9	3'		
1.2	4'		
1.5	5'	Brown fine to coarse SAND, little to trace fine to coarse Gravel, trace Silt & Cobble	
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.1 ppm
2.1	7'		
2.4	8'		
2.74	9'	Refusal at 2.4m (8') on Gray GNEISS	
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-31
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.3 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt, Brick & Asphalt	PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-32
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.6 ppm
0.6	2'		
0.9	3'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 1.5 ppm
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-33
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 2.1 ppm
0.9	3'		
1.2	4'		
1.5	5'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 2.0 ppm
2.1	7'		
2.4	8'		
2.74	9'	Moist at 2.74m (9')	
3	10'		Macro Core Sample 2.4 - 2.74m (8' - 9'): PID = 1.8 ppm
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-34
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	PID = 1.6 ppm
0.6	2'		
			Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 2.4 ppm
1.2	4'		
1.5	5'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 2.7 ppm
2.1	7'		
2.4	8'		
2.74	9'	Moist at 2.74m (9')	
			Macro Core Sample 2.4 - 2.74m (8' - 9'):
3	10'		PID = 2.5 ppm
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-35
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.9 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 2.5 ppm
0.9	3'		
1.2	4'		
1.5	5'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 2.5 ppm
2.1	7'		
2.4	8'		
2.74	9'	Moist at 2.74m (9')	
3	10'		Macro Core Sample 2.4 - 2.74m (8' - 9'): PID = 2.4 ppm
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/3/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-36
Date Finished: 12/3/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth (m)	Depth (ft)	Description	Comments
0.3	1'	Brown fine to medium SAND, trace Silt & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 1.7 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 2.2 ppm
0.9	3'		
1.2	4'		
1.5	5'	Black SILT & fine to medium SAND, trace fine to coarse Gravel & Cobble (Petroleum Odor)	
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 2.3 ppm
2.1	7'		
2.4	8'		
2.74	9'	Moist at 2.74m (9')	
3	10'		Macro Core Sample 2.4 - 2.74m (8' - 9'): PID = 1.9 ppm
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-37
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'		Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0 ppm
0.6	2'	Brown to Brownish-Gray fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
0.9	3'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray Granitic GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-38
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown to Brownish-Gray fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0 ppm
0.6	2'		
0.9	3'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray Granitic GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-39
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0 ppm
0.6	2'	Brown to Brownish-Gray fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray Granitic GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/19/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-40
Date Finished: 11/19/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0 ppm
0.6	2'	Brown to Brownish-Gray fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray Granitic GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-41
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.4 ppm
0.3	1'	Brown fine to coarse SAND, trace Silt, fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.9 ppm
0.9	3'		
1.2	4'	Light-Brown fine to coarse SAND, trace Silt & fine to coarse Gravel	
1.5	5'		
		Light-Brown fine to medium SAND, trace Silt	Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.9 ppm
2.1	7'		
2.4	8'		
2.74	9'	Brown fine to coarse SAND, trace fine to coarse Gravel & Silt	
3	10'		Macro Core Sample 2.4 - 3.7m (8' - 12'):
			PID = 0.1 ppm
3.4	11'		
3.7	12'		
		End of Boring at 3.7m (12')	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-42
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.4 ppm
0.3	1'	Brown fine to coarse SAND, trace Silt, fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.3 ppm
0.9	3'		
1.2	4'	Light-Brown fine to coarse SAND, trace Silt & fine to coarse Gravel	
1.5	5'		
		Light-Brown fine to medium SAND, trace Silt	Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
2.4	8'	Brown fine to coarse SAND, trace fine to coarse Gravel & Silt	
2.74	9'		
3	10'		Macro Core Sample 2.4 - 3m (8' - 10'):
			PID = 0.1 ppm
3.4	11'		
3.7	12'	Refusal at 3m (10') on Gray GNEISS	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-43
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
0.3	1'		Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.6 ppm
0.6	2'	Brown fine to coarse SAND, little to trace Silt & fine to coarse Gravel	
0.9	3'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.6 ppm
1.2	4'		
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0 ppm
2.1	7'	Gray coarse GRAVEL, trace fine to coarse Sand	
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Dark Gray GNEISS	
3.4	11'		
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-44
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 1.1 ppm
		Brown fine to coarse SAND, trace Silt & fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.7 ppm
0.9	3'		
1.2	4'	Brown fine to medium SAND, trace Silt & Cobble	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.5 ppm
		Brown SILT, little fine to coarse Gravel & Cobble, trace fine to medium Sand	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Dark Gray GNEISS	
3.4	11'		
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-45
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 1.7 ppm
		Brown fine to coarse SAND, trace Silt & fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 1.3 ppm
1.2	4'	Brown fine to medium SAND, trace Silt & Cobble	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 1.8 ppm
2.1	7'	Brown SILT, little fine to coarse Gravel & Cobble, trace fine to medium Sand	
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Dark Gray GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-46
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.2 ppm
0.6	2'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.2 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.5m (5') on Dark Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-47
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.1 ppm
0.6	2'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.5m (5') on Dark Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-48
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	PID = 0.2 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.3 ppm
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
		Black fine to coarse SAND, little Ash, Cinders, trace fine to coarse Gravel, Cobble & Silt	
2.4	8'	Groundwater at 2.4m (8')	
		Gray-Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	
2.74	9'		
3	10'		Macro Core Sample 2.4 - 2.74m (8' - 9'):
			PID = 0.1 ppm
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-49
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	Macro Core Sample 0 - 0.6 m (0' - 2'):
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	PID = 0.2 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.2 ppm
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.2 ppm
2.1	7'		
		Black fine to coarse SAND, little Ash, Cinders, trace fine to coarse Gravel, Cobble & Silt	
2.4	8'	Groundwater at 2.4m (8')	
		Gray-Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	
2.74	9'		
			Macro Core Sample 2.4 - 2.74m (8' - 9'):
3	10'		PID = 0.1 ppm
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-50
Date Finished: 11/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 7.6 cm (3")	
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.1 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.2 ppm
0.9	3'		
1.2	4'		
		Brown fine to coarse SAND, little Silt, trace fine to coarse Gravel & Cobble	
1.5	5'		
			Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'		
		Refusal at 1.8m (6') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-51
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Asphalt	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.1 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0 ppm
1.2	4'	Brown fine to coarse SAND, little Silt, trace fine to coarse Gravel & Cobble	
1.5	5'		Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-52
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth (m)	Depth (ft)	Description	Comments
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Asphalt	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.1 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.3 ppm
1.2	4'		
1.5	5'		
1.8	6'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0 ppm
2.1	7'		
2.4	8'		Macro Core Sample 2.4 - 2.74m (8' - 9'):
2.74	9'	Groundwater at 2.74m (9')	PID = 0 ppm
3	10'		
3.4	11'	Refusal at 2.74m (9') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-53
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel & Asphalt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.1 ppm
0.9	3'		
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.1 ppm
1.8	6'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
2.1	7'		
2.4	8'		Macro Core Sample 2.4 - 3m (8' - 10'): PID = 0 ppm
2.74	9'	Groundwater at 2.74m (9')	
3	10'		
3.4	11'	Refusal at 3m (10') on Gray GNEISS	
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-54
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.1 ppm
0.9	3'		
1.2	4'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.6m (4' - 6'): PID = 0.1 ppm
2.1	7'		
2.4	8'	Refusal at 1.8m (6') on Gray GNEISS	
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-55
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.2 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.2 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	PID = 0.1 ppm
2.1	7'		
2.4	8'		Macro Core Sample 2.4 - 3m (8' - 10'):
2.74	9'		PID = 0 ppm
3	10'	Groundwater at 3m (10')	
3.4	11'	Refusal at 3m (10') on Gray GNEISS	
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-56
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth (m)	Depth (ft)	Description	Comments
		Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
0.9	3'		
1.2	4'		
1.5	5'		
1.8	6'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	Macro Core Sample 1.2 - 2.4m (4' - 8'): PID = 0.2 ppm
2.1	7'		
2.4	8'		Macro Core Sample 2.4 - 2.74m (8' - 9'): PID = 0 ppm
2.74	9'		
3	10'	Refusal at 2.74m (9') on Gray GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-57
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.1 ppm
0.3	1'		
0.6	2'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.2 ppm
1.2	4'		
1.5	5'	Brown fine to coarse SAND, trace Silt	
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Gray GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-58
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'		
0.6	2'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.2 ppm
1.2	4'		
1.5	5'	Brown fine to coarse SAND, trace Silt	
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.3 ppm
2.1	7'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Gray GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/26/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-59
Date Finished: 11/26/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.2 ppm
0.6	2'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0 ppm
1.2	4'		
1.5	5'	Brown fine to coarse SAND, trace Silt	
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0 ppm
2.1	7'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Gray GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-60
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth (m)	Depth (ft)	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.2 ppm
0.6	2'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.4 ppm
1.2	4'		
1.5	5'	Brown fine to coarse SAND, trace Silt	
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Gray GNEISS	
3.4	11'		
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-61
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth (m)	Depth (ft)	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.4 ppm
		Brown-Gray fine SAND, little Silt, trace fine Gravel	
0.6	2'		
			Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.6 ppm
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.2 ppm
2.1	7'		
2.4	8'		
		Brown fine to coarse SAND, little to trace Silt	Macro Core Sample 2.4 - 3.4m (8' - 11'):
2.74	9'		PID = 0 ppm
3	10'		
3.4	11'		
3.7	12'		
		Refusal at 3.4m (11') on Gray Granitic GNEISS	

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-62
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'	Brown-Gray fine SAND, little Silt, trace fine Gravel	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.3 ppm
0.9	3'		
1.2	4'	Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
2.4	8'	Brown fine to coarse SAND, little to trace Silt	Macro Core Sample 2.4 - 3.4m (8' - 11'):
2.74	9'		PID = 0 ppm
3	10'		
3.4	11'		
3.7	12'	Refusal at 3.4m (11') on Gray Granitic GNEISS	
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-63
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	PID = 0.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-64
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	PID = 0.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-65
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth (m)	Depth (ft)	Description	Comments
		ASPHALT - 10 cm (4")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	PID = 0.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-66
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	Macro Core Sample 0 - 0.6 m (0' - 2'):
		Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	PID = 0.1 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-67
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.1 ppm
0.6	2'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.1 ppm
0.9	3'		
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-68
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	PID = 0.3 ppm
0.9	3'		
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
			PID = 0 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-69
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
0.9	3'		PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'		
		Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-70
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
0.9	3'		PID = 0 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'		
		Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-71
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown to Red-Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.3 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-72
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown to Red-Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-73
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	Macro Core Sample 0 - 0.6 m (0' - 2'):
		Red-Brown fine to coarse SAND, trace Silt, fine to coarse Gravel	PID = 0.1 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.4 ppm
0.9	3'	Orange-Brown to Dark-Brown SILT, trace fine to coarse Gravel & fine Sand	
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
		Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-74
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 1.1 ppm
		Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.8 ppm
1.2	4'		
		Light Brown fine SAND	
1.5	5'		
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 1.2 ppm
		Orange-Brown SILT, trace fine to coarse Gravel & fine Sand	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Gray GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/29/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-75
Date Finished: 11/29/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0 ppm
		Red-Brown fine to coarse SAND, trace Silt, fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.1 ppm
0.9	3'	Dark-Brown SILT, trace fine to coarse Sand & Gravel	
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	PID = 0 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-76
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0 ppm
		Red-Brown fine to coarse SAND, trace Silt, fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.1 ppm
0.9	3'	Dark-Brown SILT, trace fine to coarse Sand & Gravel	
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-77
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.3 ppm
		Red-Brown fine to coarse SAND, trace Silt, fine to coarse Gravel & Cobble	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.4 ppm
0.9	3'	Dark-Brown SILT, trace fine to coarse Sand & Gravel	
1.2	4'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-78
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-79
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth (m)	Depth (ft)	Description	Comments
0.3	1'	Brown fine to medium SAND, little SIlt, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little fine to coarse Gravel & Cobble, trace Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.4 ppm
1.2	4'		Macro Core Sample 1.2 - 1.5 m (4' - 5'): PID = 0.1 ppm
1.5	5'		
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-80
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.2 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
0.9	3'		PID = 0.3 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-81
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.5 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
		Brown fine to medium SAND, little fine to coarse Gravel & Cobble, trace Silt	
0.9	3'		PID = 0.6 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0.1 ppm
2.1	7'		
		Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-82
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-83
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.5 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-84
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.1 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/1/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-85
Date Finished: 12/1/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.5 ppm
0.3	1'	Brown fine to medium SAND, trace fine to coarse Gravel & Silt	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.7 ppm
0.9	3'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
			PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-86
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
0.9	3'		
1.2	4'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.8m (4' - 6'): PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-87
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 5 cm (2")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.3 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to coarse SAND, trace Silt, fine Gravel & Cinders	PID = 0 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-88
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		ASPHALT - 5 cm (2")	Macro Core Sample 0 - 0.6 m (0' - 2'):
		Brown fine to coarse SAND, trace Silt, fine Gravel & Cinders	PID = 0.3 ppm
0.3	1'		
		Red-Brown fine to coarse SAND, trace Silt & fine Gravel	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.3 ppm
0.9	3'	Brown fine to coarse SAND, trace Silt, fine Gravel & Cinders	
1.2	4'		
		Gray fine to coarse GRAVEL, trace fine to coarse Sand	
1.5	5'		
		Brown SILT, little fine to coarse Gravel & Cobble, trace fine Sand	Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 2.6 ppm
2.1	7'		
		Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/30/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-89
Date Finished: 11/30/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0 ppm
0.6	2'		
0.9	3'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
1.2	4'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.8m (4' - 6'): PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-90
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.7 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	PID = 0.4 ppm
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-91
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	PID = 0.3 ppm
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'		
		Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-92
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0 ppm
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	
1.2	4'		
1.5	5'		
			Macro Core Sample 1.2 - 1.8m (4' - 6'):
1.8	6'		PID = 0 ppm
2.1	7'		
		Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-93
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	PID = 0 ppm
1.2	4'		
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.8m (4' - 6'):
			PID = 0 ppm
2.1	7'		
		Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-94
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
		Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.3	1'		
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	
1.2	4'		
1.5	5'		Macro Core Sample 1.2 - 1.8m (4' - 6'): PID = 0 ppm
1.8	6'		
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-95
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.1 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'	Brown fine to medium SAND, little Silt, trace fine to coarse Gravel & Cobble	PID = 0 ppm
1.2	4'		
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.8m (4' - 6'): PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-96
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
0.9	3'		
1.2	4'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.8m (4' - 6'): PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 10/28/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-97
Date Finished: 10/28/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown SILT, trace fine to medium Sand & fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.2 ppm
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0 ppm
0.9	3'		
1.2	4'	Brown fine to coarse SAND, little to trace Silt, fine to coarse Gravel & Cobble	
1.5	5'		
1.8	6'		Macro Core Sample 1.2 - 1.8m (4' - 6'): PID = 0 ppm
2.1	7'	Refusal at 1.8m (6') on Gray Granitic GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-98
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, trace fine to coarse Gravel & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.3 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little to trace fine to coarse Gravel, trace Silt & Cobble	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.6 ppm
1.2	4'	Groundwater at 1.2m (4')	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/4/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-99
Date Finished: 12/4/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, trace fine to coarse Gravel & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.3 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little to trace fine to coarse Gravel, trace Silt & Cobble	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.2 ppm
1.2	4'	Groundwater at 1.2m (4')	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 12/2/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-100
Date Finished: 12/2/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: Cindy Knight

Depth m	Depth ft	Description	Comments
0.3	1'	Brown fine to medium SAND, trace fine to coarse Gravel & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'): PID = 0.3 ppm
0.6	2'		
0.9	3'	Brown fine to coarse SAND, little to trace fine to coarse Gravel, trace Silt & Cobble	Macro Core Sample 0.6 - 1.2 m (2' - 4'): PID = 0.5 ppm
1.2	4'	Groundwater at 1.2m (4')	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'): PID = 0.1 ppm
1.8	6'		
2.1	7'	Refusal at 1.5m (5') on Gray GNEISS	
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-101
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.1 ppm
0.9	3'		
1.2	4'		
		COBBLES	
1.5	5'		
			Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
		Refusal at 1.5m (5') on Gray GNEISS	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-102
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
0.3	1'		Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	
			Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.3 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-103
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
			Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.2 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	
			Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.5 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-104
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.1 ppm
0.9	3'		
1.2	4'		
		COBBLES	
1.5	5'		Macro Core Sample 1.2 - 1.5m (4' - 5'):
			PID = 0 ppm
1.8	6'	Refusal at 1.5m (5') on Gray GNEISS	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-105
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	
		Black to Gray fine to coarse GRAVEL, trace fine t coarse Sand & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.1 ppm
1.2	4'		
		COBBLES	
1.5	5'		
			Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
		Refusal at 1.5m (5') on Gray GNEISS	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions** **Geoprobe Boring Log**	Boring No.: GP-106
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 10 cm (4")	
		Black to Gray fine to coarse GRAVEL, trace fine t coarse Sand & Silt	Macro Core Sample 0 - 0.6 m (0' - 2'):
			PID = 0.2 ppm
0.3	1'		
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
			PID = 0.4 ppm
0.9	3'		
1.2	4'		
		COBBLES	
1.5	5'		
			Macro Core Sample 1.2 - 1.5m (4' - 5'):
1.8	6'		PID = 0 ppm
		Refusal at 1.5m (5') on Gray GNEISS	
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-107
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.6 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.5 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-108
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'		PID = 0.3 ppm
0.6	2'	Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble & Silt	Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.4 ppm
1.2	4'		
1.5	5'	Refusal at 1.2m (4') on Gray GNEISS	
1.8	6'		
2.1	7'		
2.4	8'		
2.74	9'		
3	10'		
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%

Date Started: 11/27/01	**Logical Environmental Solutions Geoprobe Boring Log**	Boring No.: GP-109
Date Finished: 11/27/01		Client: Maguire Group Inc.
Driller: Wayne Lineberry	Project Location: Task 210 Surficial Site Investigation Interstate 84 - Waterbury, CT	Inspector: C. Criscuolo

Depth m	Depth ft	Description	Comments
		ASPHALT - 25.4 cm (10")	Macro Core Sample 0 - 0.6 m (0' - 2'):
0.3	1'	Dark-Brown SILT, little fine to medium Sand, trace fine to coarse Gravel	PID = 0.2 ppm
		Red-Brown fine to coarse SAND, trace fine to coarse Gravel & Cobble, Asphalt & Concrete	
0.6	2'		Macro Core Sample 0.6 - 1.2 m (2' - 4'):
0.9	3'		PID = 0.1 ppm
1.2	4'		
1.5	5'	Brown fine to coarse SAND, trace SIlt, fine to coarse Gravel, Cobble, Asphalt & Concrete	
			Macro Core Sample 1.2 - 2.4m (4' - 8'):
1.8	6'		PID = 0.2 ppm
2.1	7'		
2.4	8'		
2.74	9'		
3	10'	Refusal at 2.4m (8') on Gray Granitic GNEISS	
3.4	11'		
3.7	12'		
m	ft		

Soil Description Explanation Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%