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NYS Brownfield Cleanup Program Remedial Investigation Report

Hamilton Hill II - Target Area 1 Site
830 & 834 Albany Street Parcels
City of Schenectady
Schenectady County, New York
BCP Site No. C447052

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"I, Kirk Moline, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications."

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HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY**

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1.0 INTRODUCTION

Hamilton Hill II Limited Partnership submitted an application to the New York State (NYS) Department of Environmental Conservation (DEC) to participate in the NYS Brownfield Cleanup Program (BCP) for the property known as the Hamilton Hill II - Target Area 1 Site. The Site is addressed as 830 and 834 Albany Street in the City of Schenectady, Schenectady County, New York (herein “the Site”). A Site Location Map is presented in Appendix A as Figure 1.

DEC subsequently notified Hamilton Hill II Limited Partnership of its eligibility to participate in the BCP and Hamilton Hill II Limited Partnership executed a Brownfield Cleanup Agreement (BCA) which required the submission, review, approval and implementation of investigative work plans under the BCP. The Draft Remedial Investigation Work Plan (RIWP) was submitted to DEC for review and comment in December 2018. Regulatory comments to the RIWP were addressed and approved by DEC on March 1, 2019.

The BCP Remedial Investigation (RI) generally involved the collection of surface and sub-slab soil samples for laboratory analyses; the advancement of test borings to aid in the collection of subsurface fill and native soil samples for laboratory analyses to assess subsurface conditions, and to install monitoring wells and soil vapor probes to assess groundwater and soil vapor samples for laboratory analyses.

The data obtained from the RI was used to supplement data obtained from previous Phase II Environmental Site Assessment (ESA) investigations conducted on the Site in August 2016, October 2017, and August 2018. The data obtained from this RI and the previous investigations are incorporated into this report to provide an overall evaluation of the Site’s environmental quality related to fill, soil, groundwater and soil vapor.

1.1 Modifications to the Work Plan

There were no modifications to the DEC approved RIWP with the exception of the following.

-Soil boring RIMW6D was proposed to be completed on the northwestern portion of the 834 Albany Street Parcel. Due to utilities, the boring was unable to be advanced in this location and was instead relocated to the northeastern portion of the 834 Albany Street Parcel. To mitigate this data gap, during the supplemental field work, one soil boring (RIGP4) was advanced in this area of the site (see note below).

-During the utility clearance activities, an anomaly potentially representing an underground tank or drum was identified adjacent south of the former building addressed as 830 Albany Street. An additional soil sample was subsequently collected from the 8 to 10-foot sampling depth interval at RIMW3 to assess the soils representing the area beneath the anticipated bottom of the suspect UST.

-Due to the presence of concrete rubble, samples representative of fill/soil could not be collected from the 4 to 10-foot sampling depth interval at RISB11, located on the southeastern portion of the 830 Albany Street Parcel. It is noted that a building was recently razed on this portion of the Site and the concrete rubble is likely representative of the recent backfill in this portion of the Site.

-Soil samples were proposed to be collected from the 8 to 10-foot sampling depth intervals at RISB10 and RISB14 to be representative of soil conditions at the anticipated depth of the bottom of an underground storage tank located to the south of the former building addressed as 830 Albany Street. Due to poor recovery, the samples were instead collected from the 10 to 12-foot sampling depth interval at RISB10 and the 9 to 11-foot sampling depth interval at RISB14.

-A soil sample was proposed to be collected from the 8 to 10-foot sampling depth interval at RISB13 to be representative of soil conditions at the anticipated depth of the bottom of above ground storage tanks located in the basement of the former building addressed as 830 Albany Street. Due to poor recovery, the sample was instead collected from the 10 to 12-foot sampling depth interval.

-An anticipated confining layer/aquitard was not encountered at the depths explored during advancement of soil borings RIMW3D, RIMW4D and RIWM6D. The soil borings were advanced to depths that ranged from 54 to 58-feet below existing grades. Per discussion with the DEC Project Manager, the deep monitoring wells were installed at the depths explored and representative soil samples from within or just below the

screened interval of the monitoring wells were submitted for laboratory analysis from each location.

In its June 12, 2019 comment letter to the May 2019 Draft RIR, DEC indicated that supplemental remedial investigations were needed to further define the extent of contamination. These additional investigations included the advancement of five (5) soil borings to aid in the collection of subsurface fill and native soil samples, conversion of the five (5) soil borings into monitoring wells, and the collection of groundwater samples from the newly installed monitoring wells. The DEC Comment Letter and the DEC-approved July 18, 2019 Supplemental RI Work Plan developed to describe the additional investigations are presented as Exhibit 3.

1.2 Purpose

The purpose of this RI report is to describe the investigations conducted at the Site, and together with subsurface and environmental data obtained from previous investigations, evaluate the Site's subsurface conditions, and assess the nature and extent of contamination in soil/fill, groundwater and soil vapor. From this data, decisions regarding the need for remedial actions are developed and remedial options are evaluated for the Site.

The RI evaluated the Site characteristics in terms of historical use, geology, hydrogeology, known or suspected contaminants and contemplated future use. The target goals of this RI were to assess the Site's subsurface conditions; identify contaminants of concern; evaluate the nature and extent of such contamination; and produce data of sufficient quantity and quality to support the development of an acceptable Remedial Work Plan (RWP).

1.3 Site Background

1.3.1 Site Description

The Site is comprised of two (2) separate parcels located in the Hamilton Hill neighborhood in the City of Schenectady, Schenectady County, New York. The 830 Albany Street Parcel occupies the southwestern quadrant of the intersection of Craig and Albany Streets and the 834 Albany Street Parcel occupies the southeastern quadrant

of the intersection of Craig and Albany Streets. The parcels are transected by Craig Street.

The Site is approximately 0.81 acre in size and is identified on the City of Schenectady tax map as tax map numbers 49.33-2-33.1 (830 Albany Street Parcel) and 49.33-4-10.1 (834 Albany Street Parcel). See Figures 1 and 2: Site Location and Site Features Maps in Appendix A.

The Site currently consists of cleared, vacant land. Prior to the commencement of the RI field activities, the Site contained four (4) buildings and a detached garage. Three (3) of the buildings and the detached garage occupied the 830 Albany Street Parcel and one (1) building occupied the 834 Albany Street Parcel. The buildings occupying the 830 Albany Street Parcel were formerly addressed as 830 Albany Street and 306 and 308 Craig Street. The building occupying the 834 Albany Street Parcel was addressed as 834 Albany Street. The aboveground portions of the buildings have since been razed; the basements of the former 830 and 834 Albany Street buildings were left in place and will be removed during the remedial action phase of the project.

Electricity and natural gas are supplied to the Site by National Grid. Municipal water and sanitary sewer services are provided by the City of Schenectady. Site utilities were disconnected prior to demolition of the site structures.

1.3.2 Site History

Prior to the turn of the 20th Century, the Site and surrounding area were mainly vacant land. Beginning in the early 1900s, the Site and surrounding area began to be developed with residential apartments and homes, and various commercial establishments.

Past commercial uses at the Site have included two (2) dry cleaning operations, a bakery and retail store. The former dry cleaner entities occupied buildings on the Site's two (2) parcels addressed as 830 and 834 Albany Street. The bakery and retail store occupied the building on the 834 Albany Street Parcel.

1.3.3 Previous Investigations and Evaluation History

Previous investigations included Phase II ESA investigations conducted on the Site in August 2016, October 2017, and August 2018. The investigations included the collection of surface/shallow soil, subsurface soil and groundwater samples for laboratory analyses. The soil samples were analyzed for semi-volatile organic compounds (SVOCs) and metals. The groundwater samples were analyzed for volatile organic compounds (VOCs), SVOCs and metals.

In general, several metals were detected at concentrations exceeding regulatory criteria in 20 of 24 shallow soil samples and two (2) subsurface soil samples collected across the Site. Lead, mercury and zinc were detected at the highest frequency followed to a lesser degree by arsenic, barium and copper. Several SVOCs were detected above regulatory criteria in one (1) shallow soil sample and two (2) subsurface soil samples collected from the 834 Albany Street Parcel. Petroleum-type contaminants and solvents were detected at concentrations exceeding regulatory criteria in groundwater beneath the 830 Albany Street Parcel that contained the former dry-cleaning operation. SVOCs and metals were detected at concentrations exceeding regulatory criteria in groundwater beneath the 834 Albany Street Parcel.

1.3.4 Contaminants of Concern (Pre-Remedial Investigation)

Based on the results of the previous investigations, the contaminants of concern in the Site's soil/fill and groundwater are as follows.

Shallow Soil (0-2')

Twenty-four (24) shallow soil samples were collected from within the 830 and 834 Albany Street Parcels. The samples were collected from the depth interval of zero to 2 feet below existing grades and beneath any pavement surface, if present. Twenty (20) of these samples exhibited concentrations of metals (namely lead, mercury and zinc) above their respective Unrestricted Use SCOs. Therefore, the upper two-feet of the fill/soils over the entire Site were considered to be impacted above one (1) or more Unrestricted Use SCOs. More specifically, the contaminants of concern included the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene, and the metals arsenic, copper, lead, mercury and zinc.

Subsurface Soil (>2')

Other than the 0 to 2-foot interval soil samples discussed above, no other subsurface soil samples were collected or analyzed within the 830 Albany Street parcel. Two (2) subsurface soil samples were collected from the 834 Albany Street Parcel from the depth intervals of 2 to 4 and 4 to 6 feet, at two separate boring locations. Several SVOCs were detected above their respective Unrestricted Use SCOs in the 2 to 4-foot sample interval at GP-12, and lead and barium (no SVOCs) were detected above their SCOs in the 4 to 6-foot sample interval at GP-11. More specifically, the contaminants of concern included the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene, and the metals arsenic, barium, lead, mercury and zinc.

Groundwater

Groundwater samples were collected from five (5) monitoring wells (MW-1 through MW-5) installed within the 830 Albany Street parcel and one (1) monitoring well (GP8/MW2) installed within the 834 Albany Street parcel.

Four (4) VOCs were detected at concentrations that moderately exceeded regulatory standards and guidance values in all of the sampled wells at the 830 Albany Street Parcel. The VOCs included cis-1,2-dichloroethene, tetrachloroethene, toluene and acetone.

Six (6) SVOCs and four (4) metals (iron, lead, manganese and sodium) were detected at concentrations that moderately exceeded regulatory standards and guidance values in the sampled well at the 834 Albany Street parcel. The SVOCs included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene.

1.4 Report Organization

This RI Report consists of seven (7) sections. Section 1 of the RI Report is an introduction, which presents the purpose of the project and background information including the project work tasks and modifications to the work plan; Site description; Site history, and previous Site investigations and evaluations. Section 2 relates to the study area investigation and provides a description (i.e., dates of completion, number of

sampling locations, etc.) of the investigative tasks. Section 3 presents the physical characteristics of the study area as obtained during the Site investigation and includes Site conditions (i.e., soils, groundwater, regional geology, etc.) and surface features such as water bodies and storm water drainage patterns. Section 4 discusses the nature and extent of the contamination in which the analytical results of soil/fill, groundwater and soil vapor samples are compared to applicable regulatory standards and guidance values. Section 5 describes the contaminant fate and transport (routes of migration, and contaminant persistence and migration) for the remaining Site contamination. Section 6 presents the exposure assessment to evaluate the potential for human exposure and environmental impact from Site related contaminants. Section 7 presents the summary and conclusions of the remedial investigation.

2.0 STUDY AREA INVESTIGATION

2.1 Remedial Investigation

The RI was conducted within the property boundaries of the Site in accordance with the DEC-approved RIWP. The RI included the following investigative tasks:

- Surface Soil Sampling and Analyses;
- Sub-Slab Soil Sampling and Analyses;
- Advancement of Soil Borings;
- Subsurface Soil/Fill Sampling and Analysis;
- Installation of Monitoring Wells;
- Installation of Soil Vapor Probes;
- Groundwater Sampling and Analyses;
- Soil Vapor Sampling and Analyses;
- Survey of Sampling Locations;
- Well Search;
- Data Usability Summary Report (DUSR); and
- Disposition of Investigation Derived Wastes.

The above referenced tasks are further discussed in the following sections.

2.2 Surface Soil Sampling

Six (6) surface soil samples were collected within the Site from six (6) sampling locations identified as RISS1 to RISS6 on Figure 2. The samples were collected on March 27 and 28, 2019 employing a field decontaminated (alconox wash with tap water rinse) hand

spade. New, nitrile gloves were worn by sampling personnel at each surface soil sampling location.

The surface soil samples were subjectively assessed employing organoleptic perception, and scanned for organic vapors using a photoionization (PID) detector. The results are presented in the Organic Vapor Headspace Analysis logs in Appendix C.

At each sampling location, the surface soil sample was collected from the 0 to 2-inch and 0 to 6-inch depth intervals. The sample collected from the 0 to 2-inch sampling depth interval was submitted for laboratory analyses for the Target Compound List (TCL) of SVOCs, pesticides and PCBs, the Target Analyte List (TAL) of metals (including mercury and hexavalent chromium), and cyanide. The sample collected from the 0 to 6-inch sampling depth interval was submitted for laboratory analyses for the TCL of VOCs.

2.3 Sub-Slab Soil Sampling

Four (4) sub-slab soil samples were collected beneath the basement slabs of the former Site buildings addressed as 830 and 834 Albany Street. The sampling locations are identified as RIHA1 to RIHA4 on Figure 2. The samples were collected on March 26 and 28, 2019 utilizing a field decontaminated (alconox wash and potable water rinse) hand auger. New, nitrile gloves were worn by sampling personnel at each sampling location. As subjective evidence of impacts was not identified in the basement areas of the Site buildings and the specific locations of dry-cleaning equipment and/or former ASTs were unknown, the hand auger locations were selected to provide overall coverage of the basement areas.

Sub-slab soil samples RIHA1 to RIHA3 were each collected from the 0 to 1.5-foot depth interval beneath the basement slab of the former building addressed as 830 Albany Street, which was formerly used as a dry cleaner and contains above ground storage tanks in its basement, within a vault type structure. Sub-slab soil sample RIHA4 was collected from the 0 to 2-foot depth interval beneath the basement slab of the former building addressed as 834 Albany Street, which is also believed to have formerly been used in affiliation with dry cleaning activities.

The sub-slab soil samples were subjectively assessed employing organoleptic perception, and scanned for organic vapors using a photoionization (PID) detector. The results are presented in the Organic Vapor Headspace Analysis logs in Appendix C.

The samples were analyzed in the laboratory for the TCL of VOCs, SVOCs, pesticides and PCBs, the TAL of metals (including mercury and hexavalent chromium), and cyanide (TCL/TAL Parameters). The laboratory of record is a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory.

2.4 Advancement of Soil Borings

Thirty-two (32) soil borings were completed within the Site on March 12 to 15, March 18 to 22, and March 25, 2019. The drilling subcontractor was NYEG Drilling, LLC (NYEG). The soil borings are identified as RISB1 to RISB16, RIMW1 to RIMW6, RIMW3D, RIMW4D, RIMW6D and RISV1 to RISV7 on Figure 2.

Soil borings RISB1 to RISB16 were completed to aid in the collection of subsurface soil/fill samples for laboratory analyses and to assess subsurface conditions. Soil borings RIMW1 to RIMW6 were completed to aid in the collection of subsurface soil samples for laboratory analyses, to assess subsurface conditions and for installation of shallow groundwater monitoring wells. Soil borings RIMW3D, RIMW4D and RIMW6D were completed to aid in the collection of subsurface soil samples for laboratory analyses, to further assess subsurface conditions beneath the shallow boring/monitoring well locations, and for installation of deep monitoring wells. Soil borings RISV1 to RISV7 were completed to assess subsurface conditions and to aid in the installation of soil vapor sampling probes.

NYEG retained a private utility locator (New York Leak Detection, Inc. [NYLD]) to clear the proposed boring locations prior to advancement of the soil borings. NYLD conducted its utility survey on March 12 and 20, 2019. During the survey, NYLD detected a subsurface anomaly that may have been representative of a buried tank or drum. The anomaly was located adjacent to and west of the previously identified underground storage tank located at the rear of the former dry-cleaning building addressed as 830 Albany Street. The NYLD Field Reports are presented as Exhibit 1.

The borings were advanced employing hollow stem auger (HSA) drilling methods. 4.25-inch inner diameter HSAs were continuously advanced to the boring termination depths to prevent collapse of the borehole walls. Continuous sampling was conducted at all of the soil borings using a field decontaminated (alconox wash with tap water rinse) two (2) foot long split-spoon sampling barrel.

Soil borings RISB1 to RISB16 were advanced to depths ranging from eight (8) to 14 feet bgs. Soil borings RIMW1 to RIMW6 were advanced to depths ranging from 18 to 20 feet bgs. Soil borings RIMW3D, RIMW4D and RIMW6D were advanced to depths ranging from 54 to 58 feet bgs. Soil borings RISV1 to RISV7 were advanced to depths ranging from seven (7) to eight (8) feet bgs.

On July 19, 2019 five (5) additional soil borings (RIGP1 to RIGP5) were advanced within the site. The borings were installed utilizing direct push drilling techniques utilizing a 7822 DT track mount Geoprobe. Continuous sampling was conducted using a decontaminated (alconox wash with tap water rinse) macro-core sampler. Soil borings RIGP1 to RIGP4 were installed to 16 feet bgs and RIGP5 to 12 feet bgs. The soil boring logs are presented in Appendix D.

2.5 Subsurface Soil/Fill Sampling and Analyses

Forty-seven (47) discrete samples representative of historic fill material (HFM) and native soil were collected for laboratory analyses from the soil borings identified as RISB1 to RISB16, RIMW1 to RIMW6, RIMW3D, RIMW4D and RIMW6D on Figure 2. The samples were collected on March 12, 13, 15, 18, 19 and 20, 2019. Eleven (11) discrete samples representative of HFM and native soil were collected for laboratory analysis from RIGP1 to RIGP5 on July 19, 2019. HFM and native soil samples were not collected for laboratory analyses from soil borings RISV1 to RISV7, as these borings were completed for the installation of soil vapor points only.

The subsurface HFM/native soil samples from RISB1 to RISB16, RIMW1 to RIMW6, RIMW3D, RIMW4D and RIMW6D were collected by continuously advancing a field decontaminated (alconox wash and tap water rinse) two (2) foot long split-spoon sampling barrel to the desired depth intervals. The drilling inspector wore a new pair of nitrile gloves when handling the sampling barrel.

The subsurface HFM/native soil samples from RIGP1 to RIGP5 were collected continuously using a four (4) foot macro-core sampler containing a new, disposable acetate liner within its interior. Upon obtaining the sample, the acetate liner was removed from the macro-core sampler and provided to the drilling inspector. The drilling inspector wore a new pair of nitrile gloves for each acetate liner handled.

The subsurface HFM/native soil samples were subjectively assessed employing organoleptic perception, and scanned for organic vapors using a PID. The results are presented in the Organic Vapor Headspace Analysis logs in Appendix C.

The samples collected from RISB1 to RISB12, and RISB15 were collected at two (2) foot depth intervals beginning at the 2 to 4-foot sampling depth interval. The sample collected at the 2 to 4-foot sampling depth interval was analyzed in the laboratory for the TCL/TAL Parameters. The samples collected from the subsequent depth intervals were placed on hold at the laboratory. If compounds and analytes were detected above Unrestricted Use SCOs in the sample collected from the 2 to 4-foot sampling depth interval, additional soil samples from deeper soil sampling intervals (i.e. 4 to 6 feet, etc.) were taken off hold at the laboratory and analyzed for the compounds and/or analytes detected above Unrestricted Use SCOs in the sample interval from immediately above (i.e., if the sample collected from the 2 to 4-foot sampling depth interval detected one (1) or more SVOCs at concentrations exceeding Unrestricted Use SCOs, then the sample collected from the 4 to 6-foot sampling depth interval was analyzed for the TCL of SVOCs). This procedure continued until no compounds and/or analytes were detected above Unrestricted Use SCO in the lower soil sample interval.

The native soil sample collected from the 10 to 12-foot sampling depth interval at RISB13 was collected at the anticipated depth of the bottom of the former above ground tanks located in the basement of the former dry-cleaning building addressed as 830 Albany Street.

The native soil samples collected from the 10 to 12-foot sampling depth interval at RISB10 and the 9 to 11-foot sampling depth interval at RISB14 were collected at the anticipated depths of the bottom of a nearby existing underground storage tank located to the south of the former dry-cleaning building addressed as 830 Albany Street.

The HFM sample collected from the 8 to 10-foot sampling depth interval at RIMW3 was collected to assess the soils representing the area beneath the anticipated bottom of an existing suspect underground tank or drum identified adjacent south of the former building addressed as 830 Albany Street.

The HFM sample collected from the 6 to 8-foot sampling depth interval at RISB16 was collected to further assess contaminants in soil at boring locations GP-11 and GP-12, which were completed during previous investigations.

The samples collected from RIMW1 to RIMW6 were collected between the 8 to 14-foot sampling depth intervals to be representative of HFM and/or native soil immediately above the water table. Samples were collected from the 8 to 10-foot sampling depth interval at RIMW4, the 10 to 12-foot sampling depth intervals at RIMW1 to RIMW3, and the 12 to 14-foot sampling depth intervals at RIMW5 and RIMW6.

The samples collected from RIMW3D, RIMW4D and RIMW6D were collected between the 50 to 56-foot sampling depth intervals to be representative of native soil in and around the screened portions of deep monitoring wells installed during the RI to assess deeper portions of the aquifer. Samples were collected from the 50 to 52-foot depth interval at RIMW4D and the 54 to 56-foot depth intervals at RIMW3D and RIMW6D.

The samples collected from RIGP1 were collected at two (2) foot depth intervals beginning at the 0 to 2-foot sampling depth interval to the 8 to 10-foot sampling depth interval. The soil samples were analyzed for TCL VOCs plus TICs.

The samples collected from RIGP2 were collected from the 6 to 8-foot sample interval and 8 to 12-foot sampling depth interval. These samples were collected to assess the soils representing the area beneath the anticipated bottom of an existing suspect underground tank or drum identified adjacent south of the former building addressed as 830 Albany Street. Although the second sample was proposed to be collected from the 8 to 10-foot sampling depth interval there was poor recovery necessitating the collection of the sample to 12-feet. As the contents of the tank or drum are not known, these samples were submitted for laboratory analysis for TCL/TAL parameters plus 1,4-dioxane and the list of 21 per- and polyfluoroalkyl substances (PFAS).

The samples collected from RIGP3 were collected from the 6 to 8-foot sample interval and 8 to 10-foot sampling depth interval. These samples were collected to assess the

soils representing the area beneath the anticipated bottom of an existing suspect underground tank identified adjacent to and south of the former building addressed as 830 Albany Street. As RIGP3 was advanced at a suspect petroleum tank, the samples were analyzed for TCL VOCs plus TICs and TCL SVOCs plus TICs.

The samples collected from RIGP4 were collected at two (2) foot depth intervals beginning at the 2 to 4-foot sampling depth interval. The sample collected at the 2 to 4-foot sampling depth interval was analyzed in the laboratory for TCL SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide.

The samples collected from RIGP5 were collected at two (2) foot depth intervals beginning at the 0 to 2-foot depth interval. Although the approved Supplemental RIWP called for sampling beginning at the 2 to 4-foot sampling depth interval, the 0 to 2-foot interval was selected as RIGP-5 was advanced in the foundation of the former building addressed as 834 Albany Street and the starting depth was approximately four feet below existing grades of the area surrounding the foundation. The sample collected at the 0 to 2 sampling depth interval was analyzed in the laboratory for TCL SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide.

The samples collected from the subsequent depth intervals from RIGP4 and RIGP5 were placed on hold at the laboratory. If compounds and analytes were detected above Unrestricted Use SCOs in the sample collected from the upper sampling depth interval additional soil samples from deeper soil sampling intervals were taken off hold at the laboratory and analyzed for the compounds and/or analytes detected above Unrestricted Use SCOs in the sample interval from immediately above. This procedure continued until no compounds and/or analytes were detected above Unrestricted Use SCO in the lower soil sample intervals. As compounds and/or analytes were not detected above Unrestricted Use SCOs, the samples placed on hold were not analyzed in the laboratory.

Table 2.5 on the following page summarizes the RI soil boring identification numbers, boring depths, and the depths at which samples representative of HFM and native soil were collected for laboratory analysis.

Table 2.5: RI Soil Boring Summary				
Boring ID	Soil Boring Depth (feet bgs)	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
RISB1	14	NA	2-4 10-12	
RISB2	8	NA	2-4	
RISB3	8	NA	2-4	
RISB4	8	2-4	4-6 6-8	
RISB5	8	NA	2-4	
RISB6	8	NA	2-4	
RISB7	8	2-4 4-6	6-8	
RISB8	8	2-4 4-6 6-8	NA	
RISB9	8	2-4	4-6	
RISB10	12	2-4 4-6	6-8 10-12	-The native soil sample collected from the 10 to 12-foot depth interval was collected to assess the environmental quality of native soil at the assumed bottom of a nearby existing underground storage tank located to the south of the former dry-cleaning building addressed as 830 Albany Street.
RISB11	12	2-4 10-12	NA	-Samples could not be collected from the 4 to 10-foot depth intervals due to the presence of concrete rubble.
RISB12	8	2-4 4-6	6-8	
RISB13	12	NA	10-12	-The native soil sample was collected at the anticipated depth interval of the bottom of the former tanks located in the basement of the former dry-cleaning building addressed as 830 Albany Street.
RISB14	13	NA	9-11	-The sample was collected at the anticipated depth interval of the bottom of a nearby existing underground storage tank located to the south of the former dry-cleaning building addressed as 830 Albany Street.
RISB15	8	NA	2-4	
RISB16	8	6-8	NA	-The sample was collected at this depth interval to further assess the vertical extent of contaminants (SVOCs and metals) encountered in adjacent soil borings GP-11 and GP-12, which were completed during previous investigations in August 2018.

Table 2.5: RI Soil Boring Summary				
Boring ID	Soil Boring Depth (feet bgs)	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
RIMW1	20	NA	10-12	-The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW2	20	NA	10-12	-The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW3	20	8-10	10-12	-The HFM sample was collected to assess the soils representing the area beneath the anticipated bottom of an existing suspect underground storage tank identified adjacent south of the former building addressed as 830 Albany Street.
RIMW3D	58	NA	54-56	-The sample was collected of saturated soil within or below the proposed screened section of the deep monitoring well that was installed within this boring. A hydrostratigraphic confining layer of the unconfined aquifer was not encountered within the depths explored.
RIMW4	18	NA	8-10	-The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW4D	54	NA	50-52	-The sample was collected of saturated soil within or below the proposed screened section of the deep monitoring well that was installed within this boring. A hydrostratigraphic confining layer of the unconfined aquifer was not encountered within the depths explored.
RIMW5	20	NA	12-14	-The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW6	20	NA	12-14	-The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW6D	58	NA	54-56	-The sample was collected of saturated soil within or below the proposed screened section of the deep monitoring well that was installed within this boring. A hydrostratigraphic confining layer of the unconfined aquifer was not encountered within the depths explored.
Supplemental Remedial Investigation				
RIGP1	16	0-2 2-4	4-6 6-8 8-10	The HFM soil samples collected from 0 to 2-foot and 2 to 4-foot intervals and the native soil samples collected from 4 to 6-foot, 6 to 8-foot and 8 to 10-foot depth intervals were collected to assess the quality of soils relative to elevated

Table 2.5: RI Soil Boring Summary				
Boring ID	Soil Boring Depth (feet bgs)	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
				PID readings recorded at RISV1 and perchloroethene (PCE) detected in a soil vapor sample from RISV1.
RIGP2	16	NA	6-8 8-12	-The native soil samples collected from the 6 to 8-foot and 8 to 12-foot depth intervals were collected to assess the environmental quality of native soil at the assumed bottom of a suspect underground storage tank or drum located to the south of the former dry-cleaning building addressed as 830 Albany Street.
RIGP3	16	NA	6-8 8-10	-The native soil samples collected from the 6 to 8-foot and 8 to 10-foot depth intervals were collected to assess the environmental quality of native soil at the assumed bottom of an existing underground storage tank located to the south of the former dry-cleaning building addressed as 830 Albany Street.
RIGP4	16	NA	2-4	-The native soil sample collected from the 2 to 4-foot depth interval was collected to further assess the environmental quality of soils on this portion of the site as this portion of the site was unable to be accessed by the traditional drill rig.
RIGP5	12	NA	0-2	-The native soil sample collected from 0 to 2-foot depth interval as collected to assess the environmental quality beneath the slab of the former site building addressed as 834 Albany Street.

Notes: bgs denotes below ground surface
NA denotes Not Applicable

2.6 Installation of Monitoring Wells and Monitoring Well Development

Soil borings RIMW1 to RIMW6, RIMW3D, RIMW4D and RIMW6D were converted into monitoring wells to aid in the collection of groundwater samples for laboratory analyses. The monitoring wells were installed on March 12, 14, 19, 21, 22 and 25, 2019.

The monitoring wells were constructed of 2-inch diameter PVC slotted screens and risers. The screened portion of the shallow wells (RIMW1 to RIMW6) straddled the water table approximately five (5) feet above and five (5) feet below the water table. The screened portion of the deep wells (RIMW3D, RIMW4D and RIMW6D) were each

five (5) feet in length to be representative of deep groundwater. The monitoring wells were finished with a surface seal and protected with flush-mounted curb box enclosures. Monitoring well construction logs are presented in Appendix E.

Soil borings RIGP1 to RIGP5 were converted into monitoring wells to aid in the collection of groundwater samples for laboratory analyses. The monitoring wells were installed on July 19, 2019. The monitoring wells were constructed of 1-inch diameter PVC slotted screens and risers. The screened portion of the shallow wells straddled the water table approximately five (5) feet above and five (5) feet below the water table. The monitoring wells were finished with a surface seal and protected with flush-mounted curb box enclosures. Monitoring well construction logs are presented in Appendix E.

The RI monitoring wells were developed on March 26, 27 and 28, 2019. The Supplemental RI monitoring wells were developed on July 22, 2019. The wells were developed to remove any accumulated fine sediment within the wells and to establish a hydraulic connection with the surrounding aquifer. The following procedures were followed to develop each of the wells.

- Each well was surged for 10 to 15 minutes using a field decontaminated (alconox wash with tap water rinse) stainless steel bailer or water level meter.

- Three (3) well volumes of groundwater were then surged and purged from each well using a field decontaminated stainless steel bailer and/or a peristaltic pump with new tubing.

- A minimum of two (2) well volumes of groundwater were then purged from each well using a field decontaminated stainless steel bailer or peristaltic pump with new tubing.

- Field parameter readings were recorded for each well volume purged from the monitoring wells. The field parameters included pH, specific conductivity, temperature and turbidity.

2.7 Installation of Soil Vapor Probes

Soil borings RISV1 to RISV7 were converted into soil vapor probes on March 13, 15, 18, 19 and 20, 2019. At each boring location, a stainless steel perforated sampling point

attached to inert tubing was installed to a depth of approximately 6.5 feet bgs. The borehole was then backfilled with silica sand to create a soil vapor sampling zone of approximately two (2) to three (3) vertical feet. The remainder of the boring was backfilled with approximately one quarter of a foot of granular bentonite and then finished with a bentonite/cement mixture having a 20:1 ratio. The soil vapor probe borings were finished with a surface seal and protected with flush-mounted curb box enclosures. The Soil Vapor Probe Construction Logs are presented in Appendix F.

2.8 Groundwater Sampling and Analyses

Groundwater samples were collected from RI-installed monitoring wells RIMW1 to RIMW6, RIMW3D, RIMW4D and RIMW6D, and from existing monitoring wells 834 MW2, MW1, MW2 and MW5, which were installed during previous investigations. The monitoring well locations are depicted on Figure 2. The groundwater samples were collected on March 29, and April 1 and 2, 2019 employing low-flow sampling techniques with a peristaltic pump or bladder pump and new, dedicated tubing for each monitoring well.

These groundwater samples were analyzed for the TCL/TAL Parameters. Groundwater samples collected from RI-installed monitoring wells RIMW1, RIMW4 and RIMW6 were also analyzed for 1,4-dioxane and the list of 21 per- and PFAS.

Groundwater samples were collected from RI-installed monitoring wells RIGP1 to RIGP5 on July 23, 2019 employing low-flow sampling techniques with a peristaltic pump and new, dedicated tubing for each monitoring well. Groundwater from RIGP1 was analyzed for TCL VOCs plus TICs. Groundwater from RIGP2 was analyzed for TCL/TAL Parameters plus emerging contaminants 1,4-dioxane and PFAS. Groundwater from RIGP3 was analyzed for TCL VOCs plus TICs and TCL SVOCs plus TICs. Groundwater from RIGP4 and RIGP5 was analyzed for SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide.

2.9 Soil Vapor Sampling and Analyses

Soil vapor samples were collected from soil vapor probes RISV1 to RISV7 (see Figure 2) on April 3, 2019. One (1) ambient aboveground outdoor air sample was also collected to assess ambient background air levels in the vicinity of RISV5. The soil vapor was

collected in laboratory provided summa canisters and analyzed for organic vapors by EPA Method TO-15.

2.10 Survey of Sampling Locations

The horizontal coordinates and vertical elevations of the surface soil, sub-slab soil, soil boring, monitoring well and soil vapor probe locations were obtained by C.T. Male survey personnel on March 29, 2019 and July 23, 2019.

2.11 Fish and Wildlife Resources Impact Analysis

Due to the Site's location in a densely developed urban area within the City of Schenectady, a Fish and Wildlife Resources Impact Analysis (FWRIA) was not completed for the Site.

2.12 Well Search

The NYS Geographical Information Systems (GIS) was utilized to locate public and private water wells within 2,500 feet of the Site. There were no wells located within the radii. See the Wells Locations drawing in Appendix G.

The City of Schenectady Water Department reported that all properties located within the City of Schenectady are connected to public water supply and that the City of Schenectady wells are located on Rice Road which is greater than ½ mile from the site. The City of Schenectady Water Department also reported that private water wells are not allowed to exist.

The Schenectady County Department of Health reported that the Department of Health does not regulate residential or private wells and that there are no wells located within the site area.

2.13 Data Usability Summary Report

Data Usability Summary Reports (DUSRs) were prepared by Environmental Data Services, Inc. of the analytical data developed during the RI to confirm the data is of adequate quality for subsequent decision making purposes. The DUSRs are presented

in Appendix H. Data validation of the analytical data generated for the previous Site investigations was not performed.

2.14 Disposition of Investigation Derived Wastes

Wastes derived from the RI and Supplemental RI included soils generated from drill cuttings during advancement of the soil borings, monitoring well development and purge water, and water from decontamination of drilling equipment.

The wastes were transferred to NYSDOT approved 55-gallon drums (12 drums total; 5 water and 7 soil) and staged on the southern portion of the 830 Albany Street Parcel. The wastes will be characterized and properly disposed of as a function of the remedial action for the Site.

2.15 Community Dust Monitoring

Community Dust Monitoring was conducted in accordance with the Community Air Monitoring Program and included the measurement of airborne particulates and organic vapors during advancement of the soil borings employing HSA drilling or Geoprobe drilling methods.

Two (2) Dustrak 8530 dust monitors were used to measure airborne particulates during the advancement of the soil borings on March 12 to 15, March 18 to 22, March 25, and July 19, 2019. Dust monitoring was not conducted on March 22, 2019 due to snow. One (1) dust monitor was placed in an upwind location of the drilling activities and one (1) dust monitor was placed in a downwind location of the drilling activities. The particulate action level of 150 mcg/m³ was not exceeded in any of the dust monitors during each of the continuous one (1)-minute reading intervals during the drilling activities, with the exception of the following.

-The upwind dust monitor registered a single reading of 192 mcg/m³ on March 21, 2019. The previous/subsequent one (1) minute readings were 20 and 96 mcg/m³, respectively. The reason for the single exceedance is unknown.

Spreadsheets documenting dust monitoring readings at one (1) minute intervals during ground intrusive work are retained in C.T. Male's electronic project directory and are available upon request.

Organic vapors in ambient outdoor air were assessed using two (2) photoionization detectors (PID). Organic vapors upwind and downwind of the drilling activities were continuously monitored with designated stationary PID monitors. Elevated organic vapors were not identified during the drilling activities. None of the soils within the borings emitted petrochemical-type odors.

3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

3.1 Results of the Study Area Investigation

The results of the RI tasks are supplemented with data contained in previous investigations conducted in 2016, 2017 and 2018, the 2017 geotechnical evaluation report prepared by others, and published literature including soil, bedrock, and aquifer mapping to further assess the physical characteristics of the project Site. The physical characteristics of the Site are discussed in the following sections.

3.1.1 Surface Features

The 830 Albany Street Parcel portion of the Site consists primarily of vacant, cleared land except for the remains of a building foundation slab on the northeastern corner of the parcel that was formerly operated as a dry cleaner and two (2) multi-family buildings and detached garage on the central and southern portions of the parcel. Temporary chain link fencing runs along the northern boundary of the parcel along Albany Street and along the eastern boundary of the parcel along Craig Street. The parcel is mostly level with a slight downward slope from southwest to northeast towards the intersection of Albany Street and Craig Street.

The 834 Albany Street Parcel portion of the Site currently consists of vacant, cleared land except for the remains of a building foundation and floor slab located on the northwestern/western portion of the parcel at the corner of Craig Street and Albany Street. Temporary chain link fencing runs along the majority of the property boundary, excluding a small portion along Craig Street. The Site is mostly level, with a slight downward slope from south to north toward Albany Street

3.1.2 Surface Water Bodies and Wetlands

There are no water bodies or wetlands on the Site. The Mohawk River is located approximately one (1) mile north-northwest of the Site.

3.1.3 Surface Drainage Patterns

Precipitation generally infiltrates into vegetated or non-vegetated areas of the Site and/or sheet flows across impervious portions of the Site towards catch basins located along Craig Street and Albany Street.

3.1.4 Site Soils and Bedrock

Soils are mapped by the United States Department of Agriculture Web Soil Survey as Urban land-Colonie complex. These well drained soils are found on beach ridges and deltas and consist of loamy fine sand and fine sand. The Site's surficial geology is mapped as lacustrine delta. This soil classification is consistent with the findings of the subsurface investigations completed.

Site specific subsurface conditions were assessed via the installation of soil borings during the RI and previous investigations, and through review of a geotechnical evaluation report prepared by others. The geotechnical evaluation report is presented as Exhibit 2, and is entitled as follows.

-Geotechnical Report For Hamilton Hill 2 Buildings, Schenectady, New York; prepared by Daniel G Loucks, PE; dated November 27, 2017.

Fill soils are present at the Site from the surface to depths ranging from approximately one (1) to 12 feet below grade and in general consist of brown sands with varied amounts of silt and gravel and contain one (1) or more urban fill components including brick, ash, coal, concrete, rock fragments and asphalt. The majority of the fill extends to depths that range from two (2) to six (6) feet bgs with some locations extending down to the 12-foot depth interval. Areas where the fill extends to the deeper intervals are generally confined to portions of the Site boundary along Albany Street and Craig Street and areas adjacent south of the former building addressed as 830 Albany Street. Figure 3 depicts the approximate depths of HFM encountered at each of the RI boring locations.

The fill soils are underlain primarily by sandy soils with varied amounts of gravel, silt and clay. Beneath the primarily sandy soils, a soil layer containing an increased fraction of silt and/or clay was observed at varying depths, but generally between 14 and 18 feet below grade. The Geotechnical Report referenced above encountered similar soil

conditions in the two (2) borings (borings 5 and 6 in the report) advanced on Site which extended to 15 feet below grade. This silt and/or clay layer was relatively thin, less than 5 feet thick, and was underlain generally by fine silty sands to the termination of the borings. Bedrock was not encountered during advancement of the borings conducted during the RI which reached depths of up to 58 feet bgs.

3.1.5 Groundwater Characteristics

According to the map entitled “Unconsolidated Aquifers in Upstate New York, Hudson-Mohawk Sheet” (Edward F. Bugliosi and Ruth A. Trudell, 1988), the Site is located within the area defined as the Schenectady primary water-supply aquifer.

Groundwater levels were recorded on April 9 and 24, 2019 from RI-installed shallow monitoring wells RIMW1 to RIMW6, RI-installed deep monitoring wells RIMW3D, RIMW4D and RIMW6D, and existing shallow monitoring wells 834 MW2, MW1, MW2, and MW5. Groundwater levels were recorded on July 23, 2019 from all the RI-installed monitoring wells and existing monitoring wells as well as from Supplemental RI-installed shallow monitoring wells RIGP1 to RIGP5.

The water levels obtained from the shallow monitoring wells ranged from approximately nine (9) to 13 feet bgs. Based on the water levels measured in the shallow wells and the vertical elevation survey of the monitoring wells, the observed shallow groundwater flow direction beneath the Site is from west to east (see Figures 7, 9 and 11: Shallow Groundwater Contour Maps).

The water levels obtained from the deep monitoring wells (RIMW3D, RIMW4D and RIMW6D) were significantly deeper than in the shallow wells, and ranged from approximately 30 to 34 feet bgs. Based on the water levels measured in the deep wells and the vertical elevation survey of the monitoring wells, the observed deep groundwater flow direction beneath the Site is also from west to east (see Figures 8, 10 and 12: Deep Groundwater Contour Maps).

At the time of groundwater sampling, the field parameters of temperature, pH, specific conductivity and turbidity were measured in groundwater at each of the monitoring wells. Stabilized values of these parameters were achieved prior to collection of groundwater samples. Table 3.1.5 on the following page summarizes the field parameter measurements recorded at the monitoring wells at the time of sampling.

TABLE 3.1.5: Groundwater Field Parameters

Monitoring Well ID	Temperature (°C)	pH (Standard Units)	Conductivity (µS)	Turbidity (NTU)
RIMW1	9.1	7.2	597	2.28
RIMW2	9.5	6.6	817	3.69
RIMW3	8.2	7.4	636	8.94
RIMW3D	11.5	7.6	1,111	4.76
RIMW4	8.1	7.7	582	14.5
RIMW4D	12.8	7.4	1,313	3.83
RIMW5	9.5	7.8	1,310	6.77
RIMW6	9.8	7.4	1,628	3.18
RIMW6D	11.6	7.9	795	17.3
MW1	8.6	6.6	590	1.21
MW2	6.9	6.5	635	1.59
MW5	7.2	7.6	611	4.22
834 MW2	8.4	7.0	1,463	6.12
RIGP1	14.3	7.6	583	>100
RIGP2	14.4	7.5	476	0.97
RIGP3	15.1	7.7	676	1.27
RIGP4	18.4	7.8	1,066	0.92
RIGP5	17.0	7.8	1,279	1.14

Groundwater purged from each of the monitoring wells was generally clear, with no observed odors or sheens. No light non-aqueous phase liquids (LNAPL) or dense non-aqueous phase liquids (DNAPL) were noted during monitoring well development, purging and sampling.

4.0 NATURE AND EXTENT OF CONTAMINATION

4.1 Sources

Potential contaminant sources identified at the Site include underground tanks, tanks in the basement of the building addressed as 830 Albany Street, past dry-cleaning businesses in the buildings addressed as 830 and 834 Albany Street, and HFM mantling the Site. Based on the results of the RI and previous investigations, the primary source of Site contaminants is the HFM that mantles the Site. Analytical results of HFM collected during the previous investigations and this RI identified one (1) VOC, seven (7) SVOCs, four (4) pesticides and six (6) metals at concentrations exceeding SCOs for Unrestricted Use of the Site. The highest frequency of detections was for the SVOCs benzo(b)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene; the pesticides 4,4'-DDE and 4,4'-DDT; and the metals lead, mercury and zinc.

4.2 Determination of Project Standards, Criteria and Guidance (SCGs)

Project and/or Site specific SCGs were not established for evaluation of analytical results for media types that were sampled as a function of the RI and the previous investigations. Generic soil cleanup objectives and groundwater standards were used for comparison of analytical data, as discussed in the following paragraphs. The media types included surface soil, sub-slab soil, subsurface HFM and native soil, groundwater and soil vapor for the RI, and surface/shallow soil and subsurface HFM for the previous investigations.

Surface soil, sub-slab soil, subsurface HFM and subsurface native soil samples collected during the RI were analyzed for the full TCL/TAL Parameters, with select subsurface HFM/native soil delineation samples analyzed for TCL SVOCs and pesticides, and/or TAL metals only. Surface/shallow soil samples and subsurface HFM samples collected during the previous investigations were analyzed for the TCL of SVOCs and the TAL of metals. The analytical results are compared to Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375 Environmental Remediation Programs, Subpart 375-6.

Groundwater samples collected during the RI were analyzed for the full TCL/TAL Parameters, 1,4-dioxane and the list of 21 PFAS. Groundwater sampling analytical results are compared to groundwater standards and guidance values promulgated in the DEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) and addendums. 1,4-Dioxane is compared to the New York State generic Maximum Contaminant Level (MCL) of 50 ppb for unspecified organic contaminants. NYSDEC has not established a regulatory standard or guidance value for perfluorooctanoic acid (PFOA) or perfluorooctane sulfonic acid (PFOS), so the PFOA and PFOS chemical constituents of the PFAS list are compared to the November 2016 USEPA PFOA and PFOS Drinking Water Health Advisory of 70 part per trillion (ppt).

Soil vapor samples collected during the RI were analyzed for the TO-15 list of volatile organics in air. There are no SCGs for soil vapor.

4.3 Surface Soil

4.3.1 General

Remedial Investigation

Six (6) surface soil samples were collected from within the Site on March 27 and 28, 2019. The surface soil sampling locations are depicted as RISS1 to RISS6 on Figure 2. Surface soil samples RISS1 to RISS4 were collected from the 830 Albany Street Parcel. Surface soil samples RISS5 and RISS6 were collected from the 834 Albany Street Parcel. The samples were collected using a field decontaminated (alconox wash and potable water rinse) hand spade.

At each sampling location, one (1) surface soil sample each was collected from the 0 to 2-inch interval and the 0 to 6-inch depth interval. The sample collected from the 0 to 2-inch depth interval was analyzed for the TCL of SVOCs, pesticides and PCBs the TAL of metals (including mercury and hexavalent chromium), and cyanide. The sample collected from the 0 to 6-inch depth interval was analyzed for the TCL of VOCs. Samples collected from the 0 to 2-inch depth intervals at surface soil sampling locations RISS1, RISS3 and RISS6 were also analyzed for the list of 21 PFAS and 1,4-dioxane.

The Analytical Reports are presented in Appendix I. Analytical summary results for the surface soil samples are presented in Table 1 in Appendix B. Values on the tables which

are highlighted have exceeded their corresponding SCGs. The sampling locations where analytes exceeded SCGs are depicted on Figure 4 in Appendix A.

Previous Investigations

Twenty-two (22) surface soil samples were collected for laboratory analyses during previous investigations. The surface soil samples are depicted as Sample 1 to Sample 4, SS3 to SS19, and SS21 on Figure 2.

Surface soil samples Sample 1 to Sample 4 were collected from the 830 Albany Street Parcel on September 11, 2015. Surface soil samples SS3 to SS17 were collected from the 830 Albany Street Parcel on August 7, 2017. Surface soil samples SS18, SS19 and SS21 were collected from the 834 Albany Street Parcel on August 7, 2017. The surface soil samples were analyzed for SVOCs and metals.

The Analytical Reports are presented in the BCP Application, which was submitted under separate cover and is available for review in the document repositories. Analytical summary results for the surface soil samples are presented in Tables 2 and 3 in Appendix B. Values on the tables which are highlighted have exceeded their corresponding SCGs. The sampling locations where analytes exceeded SCGs are depicted on Figure 4 in Appendix A.

4.3.2 Volatile Organic Compounds in Surface Soil

Remedial Investigation

Two (2) VOCs were detected above the laboratory's method detection limits. None of the VOC detections exceeded SCGs.

Previous Investigations

The surface soil samples collected during the previous investigations were not analyzed for VOCs.

4.3.3 Semi-Volatile Organic Compounds in Surface Soil

Remedial Investigation

Twenty (20) SVOCs were detected above the laboratory's method detection limits. Two (2) SVOCs were detected above SCGs at a single sampling location (RISS5), as follows.

-The SVOCs benzo(b)fluoranthene (1.3 ppm vs. its SCG of 1 ppm) and indeno(1,2,3-cd)pyrene (0.56 ppm vs. its SCG of 0.5 ppm) exceeded their SCGs at surface soil sampling location RISS5.

Previous Investigations

Sixteen (16) SVOCs were detected above the laboratory's method detection limits. Six (6) SVOCs were detected above SCGs at a single sampling location (SS19), as follows.

-The SVOCs benzo(a)anthracene (2.2 ppm vs. its SCG of 1 ppm), benzo(a)pyrene (1.6 ppm vs. its SCG of 1 ppm), benzo(b)fluoranthene (1.1 ppm vs. its SCG of 1 ppm), benzo(k)fluoranthene (0.88 ppm vs. its SCG of 0.8 ppm), chrysene (2.4 ppm vs. its SCG of 1 ppm) and indeno(1,2,3-cd)pyrene (0.96 ppm vs. its SCG of 0.5 ppm) exceeded their SCGs at surface soil sampling location SS19.

4.3.4 Pesticides in Surface Soil

Remedial Investigation

Ten (10) pesticides were detected above the laboratory's method detection limits. Four (4) pesticides were detected above SCGs, as follows.

-4,4'-DDD exceeded its SCG of 0.0033 ppm in one (1) surface soil samples collected from RISS5 (0.0161 ppm).

-4,4'-DDE exceeded its SCG of 0.0033 ppm in three (3) surface soil samples collected from RISS1 (0.00348 ppm), RISS3 (0.00409 ppm) and RISS5 (0.0228 ppm).

-4,4'-DDT exceeded its SCG of 0.0033 ppm in three (3) surface soil samples collected from RISS3 (0.0138 ppm), RISS5 (0.128 ppm) and RISS6 (0.0073 ppm).

-Dieldrin exceeded its SCG of 0.005 ppm in one (1) surface soil sample collected from RISS5 (0.0236 ppm).

Previous Investigations

The surface soil samples collected during the previous investigations were not analyzed for pesticides.

4.3.5 PCBs in Surface Soil

Remedial Investigation

The PCB congeners Aroclor 1254, Aroclor 1260 and Aroclor 1268 were detected above the laboratory's method detection limits. The individual PCB congener concentrations and the sum of the PCB congener concentrations did not exceed SCGs.

Previous Investigations

The surface soil samples collected during the previous investigations were not analyzed for PCBs.

4.3.6 Metals and Cyanide in Surface Soil

Remedial Investigation

Twenty-one (21) metals were detected above the laboratory's method detection limits. Cyanide was not detected above the laboratory's method detection limits. Three (3) metals were detected above SCGs, as follows.

-Lead was detected above its SCG of 63 ppm in five (5) surface soil samples collected from RISS1 (365 ppm), RISS2 (119 ppm), RISS3 (124 ppm), RISS5 (75.7 ppm) and RISS6 (63.5 ppm).

-Mercury was detected above its SCG of 0.18 ppm in three (3) surface soil samples collected from RISS1 (0.361 ppm), RISS2 (0.359 ppm) and RISS3 (0.253 ppm).

-Zinc was detected above its SCG of 109 ppm in two (2) surface soil samples collected from RISS1 (204 ppm) and RISS3 (112 ppm).

Previous Investigations

Twenty (20) metals were detected above the laboratory's method detection limits. The surface soil samples were not analyzed for cyanide. Five (5) metals were detected above SCGs, as follows.

-Arsenic was detected above its SCG of 13 ppm in one (1) surface soil sample collected from SS18 (13.4 ppm).

-Copper was detected above its SCG of 50 ppm in one (1) surface soil sample collected from SS15 (59.6 ppm).

-Lead was detected above its SCG of 63 ppm in 17 surface soil samples collected from Sample 1 (360 ppm), Sample 3 (244 ppm), Sample 4 (167 ppm), SS3 (95.7 ppm), SS4 (145 ppm), SS5 (274 ppm), SS6 (485 ppm), SS7 (105 ppm), SS10 (154 ppm), SS12 (144 ppm), SS13 (115 ppm), SS15 (328 ppm), SS16 (79.7 ppm), SS17 (103 ppm), SS18 (640 ppm), SS19 (187 ppm) and SS21 (257 ppm).

-Mercury was detected above its SCG of 0.18 ppm in 12 surface soil samples collected from Sample 3 (0.64 ppm), Sample 4 (0.62 ppm), SS3 (0.24 ppm), SS4 (0.49 ppm), SS5 (0.85 ppm), SS6 (1.17 ppm), SS10 (0.65 ppm), SS12 (0.69 ppm), SS13 (0.8 ppm), SS15 (1.25 ppm), SS18 (0.41 ppm) and SS19 (0.48 ppm).

-Zinc was detected above its SCG of 109 ppm in 11 surface soil samples collected from SS4 (120 ppm), SS5 (238 ppm), SS6 (294 ppm), SS7 (121 ppm), SS10 (110 ppm), SS13 (151 ppm), SS15 (185 ppm), SS16 (123 ppm), SS17 (172 ppm), SS18 (300 ppm) and SS19 (128 ppm).

4.3.7 Emerging Contaminants in Surface Soils

Remedial Investigation

Surface soil samples RISS1, RISS3 and RISS6 were analyzed for the emerging contaminants list of 21 PFAS and 1,4-dioxane.

Twelve of the 21 PFAS were detected above the laboratory's method detection limits, inclusive of PFOS and PFOA. The range of detection limits for PFAS was from 0.066 ppb to 2.85 ppb. The range of detection limits for PFOA was from 0.273 ppb to 0.516 ppb.

ppb. The range of detection limits for PFOS was from 1.12 ppb to 2.85 ppb. There are currently no SCGs for PFAS.

1,4-dioxane was not detected above the laboratory's method detection limits.

Previous Investigations

The surface soil samples collected during the previous investigations were not analyzed for the emerging contaminants.

4.3.8 Subjective Impacts in Surface Soils

Surface soil samples were subjectively assessed employing PID headspace analysis and visual and organoleptic perception.

The assessed samples did not exhibit elevated PID readings, did not emit petrochemical-type odors, and did not appear stained.

4.4 Sub-Slab Soil Beneath Building Slabs

4.4.1 General

Remedial Investigation

Four (4) sub-slab soil samples were collected beneath the basement slabs of the former Site buildings addressed as 830 and 834 Albany Street. The sampling locations are depicted as RIHA1 to RIHA4 on Figure 2. The samples were collected on March 26 and 28, 2019 utilizing a field decontaminated (alconox wash and potable water rinse) hand auger. The samples were analyzed for the TCL/TAL Parameters.

Sub-slab soil samples RIHA1 to RIHA3 were each collected from the 0 to 1.5-foot depth interval beneath the basement slab of the former building addressed as 830 Albany Street, which was formerly used as a dry cleaner and contains two above ground storage tanks within its basement. Sub-slab soil sample RIHA4 was collected from the 0 to 2-foot depth interval beneath the basement slab of the former building addressed as 834 Albany Street, which may have formerly been used in affiliation with dry cleaning activities.

The Analytical Reports are presented in Appendix J. Analytical summary results for the sub-slab soil samples are presented in Table 4 in Appendix B. All analyzed parameters were at concentrations below SCGs.

Previous Investigations

Sub-slab soil samples were not collected beneath the buildings' basement slabs during the previous investigations.

4.4.2 Volatile Organic Compounds in Sub-Slab Soil

Two (2) VOCs (acetone and tetrachloroethene) were detected above the laboratory's method detection limits. The VOC detections did not exceed SCGs.

4.4.3 Semi-Volatile Organic Compounds in Sub-Slab Soil

SVOCs were not detected above the laboratory's method detection limits.

4.4.4 Pesticides in Sub-Slab Soil

One (1) pesticide (4,4'-DDE) was detected above the laboratory's detection limits. The pesticide detection did not exceed its SCG.

4.4.5 PCBs in Sub-Slab Soil

PCBs were not detected above the laboratory's method detection limits.

4.4.6 Metals and Cyanide in Sub-Slab Soil

Twenty (20) metals were detected above the laboratory's method detection limits. The metal detections did not exceed SCGs.

Cyanide was not detected above the laboratory's method detection limits.

4.4.7 Subjective Impacts in Sub-Slab Soils

The sub-slab soil samples were subjectively assessed employing PID headspace analysis and visual and organoleptic perception.

The assessed samples did not exhibit elevated PID readings, did not emit petrochemical-type odors, and did not appear stained.

4.5 Subsurface HFM and Native Soil

4.5.1 General

Remedial Investigation

Forty-seven (47) discrete samples representative of historic fill material (HFM) and native soil were collected for laboratory analyses from the soil borings identified as RISB1 to RISB16, RIMW1 to RIMW6, RIMW3D, RIMW4D and RIMW6D on Figure 2. The samples were collected on March 12, 13, 15, 18, 19 and 20, 2019.

The samples were analyzed for the full TCL/TAL Parameters, with select delineation samples analyzed for the TCL of SVOCs and pesticides and/or the TAL of metals.

The following Table 4.5.1 below summarizes the RI soil boring identification numbers, depths at which samples representative of HFM and native soil were collected for laboratory analysis and the sequence of laboratory analyses to vertically delineate the extent of analytes that exceeded SCGs in shallower sampling depth intervals.

Table 4.5.1: RI Subsurface Fill/Native Soil Sampling Summary			
Boring ID	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
RISB1	NA	2-4 10-12	Both native soil samples were analyzed for the TCL/TAL Parameters (all below SCGs).
RISB2	NA	2-4	The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs).
RISB3	NA	2-4	The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs).
RISB4	2-4	4-6 6-8	-The HFM sample collected from the 2 to 4-foot depth interval was analyzed for the TCL/TAL Parameters (pesticides exceeded SCGs). -The native soil sample collected from the 4 to 6-foot depth interval was analyzed for pesticides (pesticides exceeded SCGs). -The native soil sample collected from the 6 to 8-foot depth interval was analyzed for pesticides (pesticides below SCGs).
RISB5	NA	2-4	The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs).
RISB6	NA	2-4	The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs).
RISB7	2-4	6-8	-The HFM sample collected from the 2 to 4-foot depth interval

Table 4.5.1: RI Subsurface Fill/Native Soil Sampling Summary			
Boring ID	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
	4-6		was analyzed for the TCL/TAL Parameters (pesticides and metals exceeded SCGs). -The HFM sample collected from the 4 to 6-foot depth interval was analyzed for pesticides and metals (pesticides below SCGs, metals exceeded SCGs). -The native soil sample collected from the 6 to 8-foot depth interval was analyzed for metals (metals below SCGs).
RISB8	2-4 4-6 6-8	NA	-The HFM sample collected from the 2 to 4-foot depth interval was analyzed for the TCL/TAL Parameters (SVOCs and metals exceeded SCGs). -The HFM sample collected from the 4 to 6-foot depth interval was analyzed for SVOCs and metals (SVOCs below SCGs, metals exceeded SCGs). -The HFM sample collected from the 6 to 8-foot depth interval was analyzed for metals (metals below SCGs).
RISB9	2-4	4-6	-The HFM sample collected from the 2 to 4-foot depth interval was analyzed for the TCL/TAL Parameters (metals exceeded SCGs). -The native soil sample collected from the 4 to 6-foot depth interval was analyzed for metals (metals below SCGs).
RISB10	2-4 4-6	6-8 10-12	-The HFM sample collected from the 2 to 4-foot depth interval was analyzed for the TCL/TAL Parameters (SVOCs and pesticides exceeded SCGs). -The HFM sample collected from the 4 to 6-foot depth interval was analyzed for SVOCs and pesticides (SVOCs and pesticides exceed SCGs). -The native soil sample collected from the 6 to 8-foot depth interval was analyzed for SVOCs and pesticides (SVOCs and pesticides below SCGs). -The native soil sample collected from the 10 to 12-foot depth interval was analyzed for the TCL/TAL Parameters. The sample was collected to assess the environmental quality of native soil at the assumed bottom of a nearby existing underground storage tank located to the south of the former dry-cleaning building addressed as 830 Albany Street. All parameters below SCGs.
RISB11	2-4 10-12	NA	-The HFM sample collected from the 2 to 4-foot depth interval was analyzed for the TCL/TAL Parameters (pesticides and metals exceeded SCGs). -The HFM sample collected from the 10 to 12-foot depth interval was analyzed for pesticides and metals (pesticides and metals below SCGs). -Samples could not be collected from the 4 to 10-foot depth intervals due to the presence of concrete rubble.
RISB12	2-4	6-8	-The HFM sample collected from the 2 to 4-foot depth interval

Table 4.5.1: RI Subsurface Fill/Native Soil Sampling Summary			
Boring ID	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
	4-6		was analyzed for the TCL/TAL Parameters (pesticides and metals exceeded SCGs). -The HFM sample collected from the 4 to 6-foot depth interval was analyzed for pesticides and metals (pesticides and metals exceeded SCGs). -The native soil sample collected from the 6 to 8-foot depth interval was analyzed for pesticides and metals (pesticides and metals below SCGs).
RISB13	NA	10-12	-The native soil sample collected from the 10 to 12-foot depth interval was analyzed for the TCL/TAL Parameters (one (1) pesticide slightly exceeded its SCG). -The pesticide detection above its SCG is anomalous and is attributed to the carry-down of overlying HFM during advancement of the boring. The approximate depth of HFM at this boring is five (5) feet bgs. -The native soil sample was collected at the anticipated depth interval of the bottom of the existing tanks located in the basement of the former dry-cleaning building addressed as 830 Albany Street.
RISB14	NA	9-11	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample was collected at the anticipated depth interval of the bottom of a nearby existing underground storage tank located to the south of the former dry-cleaning building addressed as 830 Albany Street.
RISB15	NA	2-4	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs).
RISB16	6-8	NA	-The HFM sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample was collected at this depth interval to further assess the vertical extent of contaminants (SVOCs and metals) encountered in adjacent soil borings GP-11 and GP-12, which were completed during previous investigations in August 2018.
RIMW1	NA	10-12	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW2	NA	10-12	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW3	8-10	10-12	-The HFM sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The native soil sample was analyzed for the TCL/TAL

Table 4.5.1: RI Subsurface Fill/Native Soil Sampling Summary			
Boring ID	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
			Parameters (all below SCGs). -The samples are representative of HFM and native soil immediately above the shallow groundwater water table. -The HFM sample was also collected to assess the soils representing the area beneath the anticipated bottom of a suspect underground storage tank identified adjacent south of the former building addressed as 830 Albany Street.
RIMW3D	NA	54-56	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample was collected of saturated soil within or below the proposed screened section of the deep monitoring well that was installed within this boring. A hydrostratigraphic confining layer of the unconfined aquifer was not encountered within the depths explored.
RIMW4	NA	8-10	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW4D	NA	50-52	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample was collected of saturated soil within or below the proposed screened section of the deep monitoring well that was installed within this boring. A hydrostratigraphic confining layer of the unconfined aquifer was not encountered within the depths explored.
RIMW5	NA	12-14	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW6	NA	12-14	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample is representative of native soil immediately above the shallow groundwater water table.
RIMW6D	NA	54-56	-The native soil sample was analyzed for the TCL/TAL Parameters (all below SCGs). -The sample was collected of saturated soil within or below the proposed screened section of the deep monitoring well that was installed within this boring. A hydrostratigraphic confining layer of the unconfined aquifer was not encountered within the depths explored.
RIGP1	0-2 2-4	4-6 6-8 8-10	-The HFM and native soil samples were analyzed for TCL VOCs plus TICs (all below SCGs). -The samples were collected in proximity to RISV1 where an elevated PID reading was recorded and perchloroethene (PCE) was detected in a soil vapor sample.

Table 4.5.1: RI Subsurface Fill/Native Soil Sampling Summary			
Boring ID	HFM Sampling Depth (feet bgs)	Native Soil Sampling Depth (feet bgs)	Comments
RIGP2	NA	6-8 8-12	-The native soil samples were analyzed for the TCL/TAL Parameters (all below SCGs) plus ECs. -The samples were collected at the anticipated depth of the bottom of a suspect drum or tank.
RIGP3	NA	6-8 8-10	-The native soil samples were analyzed for TCL VOCs plus TICs and TCL SVOCs plus TICs (all below SCGs). -The samples were collected at the anticipated depth of the bottom of the suspect tank.
RIGP4	NA	2-4	-The native soil sample was analyzed for TCL SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium) and cyanide (all below SCGs).
RIGP5	NA	0-2	-The native soil sample was analyzed for TCL SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium) and cyanide (all below SCGs).

Notes: bgs denotes below ground surface
NA denotes Not Applicable

The Analytical Reports are presented in Appendix K. Analytical summary results for the HFM/native soil samples are presented in Tables 5, 5A, 5B and 6 in Appendix B. Values on the tables which are highlighted and bolded have exceeded their corresponding SCGs. The sampling locations where analytes exceeded SCGs are depicted on Figure 5 in Appendix A.

Phase II ESA Investigations

Four (4) subsurface samples representative of HFM were collected from four (4) soil borings completed within the Site in 2018. The soil borings are identified on Figure 2 as GP-8, GP-9, GP-11 and GP-12. One (1) sample of HFM was collected from each soil boring to assess the environmental quality of HFM mantling the Site. The HFM samples were analyzed for the TCL of SVOCs and the TAL of metals.

Analytical summary results for the HFM samples are presented in Table 7 in Appendix B. Values on the tables which are highlighted and bolded have exceeded their corresponding SCGs. The sampling locations where analytes exceeded SCGs are depicted on Figure 5.

4.5.2 Volatile Organic Compounds in Subsurface HFM and Native Soil

Remedial Investigation

Nine (9) VOCs were detected above the laboratory's method detection limits. One VOC was detected above its SCG, as follows.

-Acetone was detected above its SCG of 0.05 ppm in a native soil sample collected from the 2 to 4-foot sampling depth interval at RISB3 (0.086 ppm) and in an HFM sample collected from the 2 to 4-foot sampling depth interval at RISB9 (0.1 ppm). Acetone is a common laboratory artifact.

Previous Investigations

The subsurface fill/soil samples collected during the previous investigations were not analyzed for VOCs.

4.5.3 Semi-Volatile Organic Compounds in Subsurface HFM and Native Soil

Remedial Investigation

Twenty-five (25) SVOCs were detected above the laboratory's method detection limits. Seven (7) SVOCs were detected above SCGs, as follows.

-Benzo(a)anthracene (1.9 ppm vs. its SCG of 1 ppm), benzo(a)pyrene (1.5 ppm vs. its SCG of 1 ppm), benzo(b)fluoranthene (1.8 ppm vs. its SCG of 1 ppm), chrysene (1.8 ppm vs. its SCG of 1 ppm) and indeno(1,2,3-cd)pyrene (0.81 ppm vs. its SCG of 0.5 ppm) were detected above SCGs in one (1) HFM sample collected from the 2 to 4-foot sampling depth interval at RISB8.

-Benzo(a)anthracene (3.7 ppm vs. its SCG of 1 ppm), benzo(a)pyrene (3.2 ppm vs. its SCG of 1 ppm), benzo(b)fluoranthene (4.8 ppm vs. its SCG of 1 ppm), benzo(k)fluoranthene (1.6 ppm vs. its SCG of 0.8 ppm), chrysene (3.9 ppm vs. its SCG of 1 ppm), dibenzo(a,h)anthracene (0.55 ppm vs. its SCG of 0.33 ppm) and indeno(1,2,3-cd)pyrene (2.1 ppm vs. its SCG of 0.5 ppm) were detected above SCGs in one (1) HFM sample collected from the 2 to 4-foot sampling depth interval at RISB10.

-Benzo(a)anthracene (1.1 ppm vs. its SCG of 1 ppm), benzo(b)fluoranthene (1.4 ppm vs. its SCG of 1 ppm), chrysene (1.1 ppm vs. its SCG of 1 ppm) and indeno(1,2,3-cd)pyrene (0.65 ppm vs. its SCG of 0.5 ppm) were detected above SCGs in one (1) HFM sample collected from the 4 to 6-foot sampling depth interval at RISB10.

Previous Investigations

Twenty-four (24) SVOCs were detected above the laboratory's method detection limits. Seven (7) SVOCs were detected above SCGs, as follows.

-Benzo(a)anthracene (24 ppm vs. its SCG of 1 ppm), benzo(a)pyrene (20 ppm vs. its SCG of 1 ppm), benzo(b)fluoranthene (27 ppm vs. its SCG of 1 ppm), benzo(k)fluoranthene (2.7 ppm vs. its SCG of 0.8 ppm), chrysene (25 ppm vs. its SCG of 1 ppm), dibenzo(a,h)anthracene (2.4 ppm vs. its SCG of 0.33 ppm) and indeno(1,2,3-cd)pyrene (13 ppm vs. its SCG of 0.5 ppm) were detected above SCGs in one (1) HFM sample collected from the 0 to 2-foot sampling depth interval at GP-8.

-Benzo(a)anthracene (3.1 ppm vs. its SCG of 1 ppm), benzo(a)pyrene (2.8 ppm vs. its SCG of 1 ppm), benzo(b)fluoranthene (4.2 ppm vs. its SCG of 1 ppm), benzo(k)fluoranthene (1.2 ppm vs. its SCG of 0.8 ppm), chrysene (3.5 ppm vs. its SCG of 1 ppm), dibenzo(a,h)anthracene (0.5 ppm vs. its SCG of 0.33 ppm) and indeno(1,2,3-cd)pyrene (2.2 ppm vs. its SCG of 0.5 ppm) were detected above SCGs in one (1) HFM sample collected from the 2 to 4-foot sampling depth interval at GP-12.

4.5.4 Pesticides in Subsurface HFM and Native Soil

Remedial Investigation

Four (4) pesticides were detected above the laboratory's method detection limits. Three pesticides (3) were detected above SCGs, as follows.

-4,4'-DDD exceeded its SCG of 0.0033 ppm in one (1) sample of HFM collected from the 2 to 4-foot sampling depth interval at RISB11 (0.0352 ppm).

-4,4'-DDE exceeded its SCG of 0.0033 ppm in five (5) samples of HFM collected from the 2 to 4-foot and 4 to 6-foot sampling depth intervals at RISB10 (0.00696 and 0.00552 ppm, respectively) and RISB12 (0.00458 and 0.00748 ppm, respectively), and the 2 to 4-foot sampling depth interval at RISB11 (0.0379 ppm).

-4,4'-DDT exceeded its SCG of 0.0033 ppm in two (2) samples of HFM collected from the 2 to 4-foot and 4 to 6-foot sampling depth intervals at RISB10 (0.0602 and 0.0355 ppm, respectively) and RISB12 (0.0251 and 0.0569 ppm, respectively); in three (3) samples of HFM collected from the 2 to 4-foot sampling depth interval at RISB4 (0.00334 ppm), RISB7 (0.00507 ppm) and RISB11 (0.0917 ppm); and in two (2) samples of native soil collected from the 4 to 6-foot sampling depth interval at RISB4 (0.00534 ppm) and from the 10 to 12-foot sampling depth interval at RISB13 (0.00376 ppm).

-Dieldrin exceeded its SCG of 0.005 ppm in one (1) sample of HFM collected from the 2 to 4-foot sampling depth interval at RISB11 (0.00982 ppm).

Previous Investigations

The subsurface fill/soil samples collected during the previous investigations were not analyzed for pesticides.

4.5.5 PCBs in Subsurface HFM and Native Soil

Remedial Investigation

The PCB congeners Aroclor 1242, Aroclor 1254, Aroclor 1260 and Aroclor 1268 were detected above the laboratory's method detection limits. The individual PCB congener concentrations and the sum of the PCB congener concentrations did not exceed SCGs. The PCB detections were confined to HFM.

Previous Investigations

The subsurface fill/soil samples collected during the previous investigations were not analyzed for PCBs.

4.5.6 Metals and Cyanide in Subsurface HFM and Native Soil

Remedial Investigation

Twenty-four (24) metals were detected above the laboratory's method detection limits. Cyanide was not detected above the laboratory's method detection limits. Three (3) metals were detected above SCGs, as follows.

-Lead exceeded its SCG of 63 ppm in six (6) samples of HFM collected from the 2 to 4-foot and 4 to 6-foot sampling depth intervals at RISB7 (127 and 240 ppm, respectively), RISB8 (171 and 343 ppm, respectively) and RISB12 (124 and 129 ppm, respectively); and in two (2) samples of HFM collected from the 2 to 4-foot sampling depth interval at RISB9 (84.1 ppm) and RISB11 (93.3 ppm).

-Mercury exceeded its SCG of 0.18 ppm in six (6) samples of HFM collected from the 2 to 4-foot and 4 to 6-foot sampling depth intervals at RISB7 (0.842 and 1.19 ppm, respectively), RISB8 (0.457 and 0.95 ppm, respectively) and RISB12 (0.679 and 0.427 ppm, respectively).

-Zinc exceeded its SCG of 109 ppm in three (3) samples of HFM collected from the 2 to 4-foot and 4 to 6-foot sampling depth intervals at RISB7 (142 and 294 ppm, respectively), and in one (1) sample of HFM collected from the 4 to 6-foot sampling depth interval at RISB12 (111 ppm).

Previous Investigations

Twenty-one (21) metals were detected above the laboratory's method detection limits. The HFM samples were not analyzed for cyanide. Five (5) metals were detected above SCGs, as follows.

-Arsenic exceeded its SCG of 13 ppm in one (1) fill/soil sample collected from the 0 to 2-foot sampling depth interval at GP-8 (31.7 ppm).

-Barium exceeded its SCG of 350 ppm in one (1) fill/soil sample collected from the 4 to 6-foot sampling depth interval at GP-11 (450 ppm).

-Lead exceeded its SCG of 63 ppm in three (3) fill/soil samples collected from the 0 to 2-foot sampling depth intervals at GP-8 (566 ppm) and GP-9 (122 ppm), and the 4 to 6-foot sampling depth interval at GP-11 (486 ppm).

-Mercury exceeded its SCG of 0.18 ppm in two (2) fill/soil samples collected from the 0 to 2-foot sampling depth intervals at GP-8 (0.217 ppm) and GP-9 (0.219 ppm).

-Zinc exceeded its SCG of 109 ppm in one (1) fill/soil sample collected from the 0 to 2-foot sampling depth interval at GP-8 (811 ppm).

4.5.7 Subjective Impacts in Subsurface HFM and Native Soil

Subsurface HFM and native soil samples were subjectively assessed employing PID headspace analysis and visual and organoleptic perception during the RI and Phase II ESA investigations. The samples were collected at continuous depth intervals from the ground surface to the termination point of the soil borings.

Remedial Investigation

All of the assessed samples exhibited PID readings of less than 10 ppm, did not appear stained and/or discolored, and did not exhibit petrochemical-type odors with the exception of the following.

-One (1) HFM sample collected from the 0 to 2-foot sampling depth interval at RIMW6D exhibited a PID reading of 32 ppm. The sample did not appear stained and/or discolored, and did not exhibit petrochemical-type odors.

-Two (2) HFM samples collected from the 4 to 6-foot and 6 to 8-foot depth intervals at RISB8 exhibited PID readings of 15.8 and 12.5 ppm, respectively. The samples did not appear stained and/or discolored, and did not exhibit petrochemical-type odors.

-One (1) HFM sample collected from the 0 to 2-foot sampling depth interval at RISV1 exhibited a PID reading of 33.9 ppm. The sample did not appear stained and/or discolored, and did not exhibit petrochemical-type odors.

The samples above did not appear impacted via organoleptic perception and the PID readings were relatively low (less than 34 ppm). Each of the soil samples were moist (see Subsurface Exploration Logs in Appendix D) and the elevated PID readings are likely attributed to high humidity/moisture conditions within the Ziploc bag that the soils were contained in when they were assessed.

Phase II ESA Investigations

All of the assessed samples exhibited PID readings of less than 2 ppm, did not appear stained and/or discolored, and did not exhibit petrochemical-type odors.

4.6 Groundwater

4.6.1 General

Eighteen (18) groundwater samples were retained for laboratory analysis. Thirteen (13) of the groundwater samples were retained for laboratory analysis from RI-installed monitoring wells RIMW1 to RIMW6, RIMW3D, RIMW4D and RIMW6D and existing monitoring wells 834 MW2, MW1, MW2 and MW5 installed during previous investigations (see Figure 2) on March 29, and April 1 and 2, 2019 employing low-flow sampling techniques. These groundwater samples were analyzed for the TCL/TAL Parameters. Groundwater samples collected from monitoring wells RIMW1, RIMW4 and RIMW6 were also analyzed for 1,4-dioxane and the list of 21 PFAS. Five (5) of the groundwater samples were retained for laboratory analysis from RI-installed monitoring wells RIGP1 to RIGP5 on July 23, 2019 employing low-flow sampling techniques. The sample from RIGP1 was analyzed for TCL VOCs plus TICs. The sample from RIGP2 was sampled for TCL/TAL Parameters plus 1,4-dioxane and the list of 21 PFAS. The sample from RIGP3 was analyzed for TCL VOCs plus TICs and TCL SVOCs plus TICs. The samples from RIGP4 and RIGP5 were analyzed for SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium) and cyanide.

The Analytical Reports are presented in Appendix L. The analytical summary results for the groundwater samples are presented in Table 8 in Appendix B. The location and concentration range for analytes which have exceeded SCGs are depicted on Figure 6 in Appendix A.

4.6.2 Volatile Organic Compounds in Groundwater

Ten (10) VOCs were detected above the laboratory's method detection limits. Two (2) VOCs were detected above SCGs, as follows.

-Chloroform was detected slightly above its SCG of 7 ppb in seven (7) groundwater samples collected from shallow monitoring wells MW1 (10 ppb), MW2 (9.8 ppb), MW5 (11 ppb), RIMW2 (8 ppb), RIMW4 (8.9 ppb), RIGP1 (9.4 ppb) and RIGP2 (9.4 ppb).

-Tetrachloroethene was detected slightly above its SCG of 5 ppb in four (4) groundwater samples collected from shallow monitoring wells RIMW2 (6.1 ppb), RIMW3 (7.2 ppb), RIGP2 (6.9 ppb) and RIGP3 (8.6 ppb).

4.6.3 Semi-volatile Organic Compounds in Groundwater

Twenty-one (21) SVOCs were detected above the laboratory's method detection limits. Seven (7) SVOCs were detected above SCGs, as follows.

-Benzo(k)fluoranthene (0.01 ppb) was detected above its SCG of 0.002 ppb in a groundwater sample collected from shallow monitoring well 834 MW2, which is along the northwestern boundary of the 834 Albany Street Parcel.

-Benzo(a)anthracene (0.03 ppb vs. its SCG of 0.002 ppb), benzo(a)pyrene (0.04 ppb vs. its SCG of Non-Detect), benzo(b)fluoranthene (0.04 ppb vs. its SCG of 0.002 ppb), benzo(k)fluoranthene (0.04 ppb vs. its SCG of 0.002 ppb), chrysene (0.06 ppb vs. its SCG of 0.002 ppb), hexachlorobenzene (0.11 ppb vs. its SCG of 0.04 ppb) and indeno(1,2,3-cd)pyrene (0.04 ppb vs. its SCG of 0.002 ppb) were detected above SCGs in a groundwater sample collected from shallow monitoring well MW2.

-Benzo(b)fluoranthene (0.02 ppb vs. its SCG of 0.002 ppb), benzo(k)fluoranthene (0.02 ppb vs. its SCG of 0.002 ppb) and indeno(1,2,3-cd)pyrene (0.06 ppb vs. its SCG of 0.002 ppb) were detected above SCGs in a groundwater sample collected from shallow monitoring well RIMW5.

-Benzo(a)anthracene (0.04 ppb vs. its SCG of 0.002 ppb), benzo(a)pyrene (0.03 ppb vs. its SCG of Non-Detect), benzo(b)fluoranthene (0.04 ppb vs. its SCG of 0.002 ppb), benzo(k)fluoranthene (0.02 vs. its SCG of 0.002 ppb), chrysene (0.02 ppb vs. its SCG of 0.002 ppb), were detected above SCGs in a groundwater sample collected from monitoring well RIGP5.

4.6.4 Pesticides in Groundwater

Four (4) pesticides were detected above the laboratory's method detection limits. The pesticide detections did not exceed its SCG.

4.6.5 PCBs in Groundwater

The PCB congener Aroclor 1260 was detected above the laboratory's method detection limits. Aroclor 1260 did not exceed its SCG.

4.6.6 Metals and Cyanide in Groundwater

Eighteen (18) metals and cyanide were detected above the laboratory's method detection limits. Four (4) metals were detected above SCGs, as follows.

- Sodium was detected above its SCG of 20,000 ppb in groundwater samples collected from all monitoring wells. The sodium concentrations ranged from 28,600 ppb (RIMW1) to 207,000 ppm (834 MW2).

- Manganese was detected above its SCG of 300 ppb in four (4) groundwater samples collected from shallow monitoring wells MW1 (933.8 ppb) and MW2 (735.3 ppb), and deep monitoring wells RIMW3D (414 ppb) and RIMW6D (362.9 ppb).

- Iron was detected above its SCG of 300 ppb in two (2) groundwater samples collected from deep monitoring wells RIMW4D (1,390 ppb) and RIMW6D (490 ppb).

- Antimony was detected above its SCG of 3 ppb in one (1) groundwater sample collected from shallow monitoring well RIMW4 (4.24 ppb).

4.6.7 Emerging Contaminants in Groundwater

1,4-Dioxane was not detected at concentrations exceeding the laboratory's method detection limits.

Twelve (12) PFAS were detected above the laboratory's method detection limit. The PFAS PFOS and PFOA did not exceed their respective SCGs. The remaining PFAS do not have SCGs for comparison.

The four (4) monitoring wells sampled for PFAS analyses are depicted as RIMW1, RIMW4, RIMW6 and RIGP2 on Figure 2. Based on the observed groundwater flow direction (see Figures 7 to 10), RIMW1, RIMW4 and RIGP2 are up-gradient monitoring wells and RIMW6 is a down-gradient monitoring well.

The concentration range for Total PFAS ranged from 19.16 ppt to 72.73 ppt, with the highest concentration in down-gradient monitoring well RIMW6.

The concentration range for Total PFOS/PFOA ranged from 8.14 ppt to 48.14 ppt, with the highest concentration in up-gradient monitoring well RIMW4.

The concentration range for PFOS ranged from 1.59 ppt to 45.2 ppt, with the highest concentration in up-gradient monitoring well RIMW4.

The concentration range for PFOA ranged from 2.94 ppt to 11.2 ppt, with the highest concentration in down-gradient monitoring well RIMW6.

4.6.8 Subjective Impacts in Groundwater

Groundwater purged from each of the monitoring wells was generally clear, with no observed odors or sheens. No light non-aqueous phase liquids (LNAPL) or dense non-aqueous phase liquids (DNAPL) were observed during monitoring well development, purging and sampling.

4.7 Soil Vapor

Soil vapor samples were retained for laboratory analysis from soil vapor samples collected from seven (7) subsurface vapor probes located in the approximate footprint of the Site's proposed buildings and the Site's perimeter, and from one (1) aboveground outdoor ambient air sampling location. The sampling locations are depicted on Figure 2 as RISV1 to RISV7. The aboveground outdoor ambient air sample (RIOA1) was collected in the vicinity of RISV5. The soil vapor samples were collected on April 3, 2019. The samples were analyzed for organic vapors by EPA Method TO-15.

The Analytical Reports are presented in Appendix M. The full analytical results for the soil vapor samples are presented in Table 9 in Appendix B.

As shown on Table 4.7, 26 analytes were detected in the soil vapor samples at concentrations exceeding the laboratory's reporting limits. Of the detected analytes, acetone, cyclohexane, dichlorodifluoromethane and trichlorofluoromethane were also detected in the outdoor ambient air sample. There are no SCGs or guidance values for the soil vapor sampling results.

Of note, tetrachloroethene was detected at a concentration of 426 ug/m³ at RISV1. The closest monitoring wells to RISV1 are RIMW4 and RIMW4D, which are located approximately 25 feet to the north of RISV1 and are hydraulically cross-gradient to RISV1 with respect to observed groundwater flow direction. Tetrachloroethene was detected at a concentration of 0.6 ppb versus its SCG of 5 ppm in a groundwater sample

collected from monitoring well RIMW4 and was non-detect in a groundwater sample collected from monitoring well RIMW4D.

TABLE 4.7: SOIL VAPOR SAMPLING ANALYTICAL RESULTS SUMMARY								
ANALYTE	RIOA1 (ug/m ³)	RISV1 (ug/m ³)	RISV2 (ug/m ³)	RISV3 (ug/m ³)	RISV4 (ug/m ³)	RISV5 (ug/m ³)	RISV6 (ug/m ³)	RISV7 (ug/m ³)
1,2,4-Trimethylbenzene	ND	1.1	1.91	5.65	2.27	1.71	2.79	3.94
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	2.42
1,3,5-Trimethylbenzene	ND	ND	ND	2.81	1.04	ND	ND	1.13
1,3-Dichlorobenzene	ND	13.5	ND	ND	1.29	ND	ND	3.31
2-Butanone	ND	7.52	6.37	2.44	2.26	2.04	5.46	2.58
4-Ethyltoluene	ND	ND	ND	1.52	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	3.11	ND
Acetone	6.06	10.5	33	11.1	7.36	5.63	17.3	12.9
Benzene	ND	ND	0.818	ND	ND	ND	ND	0.863
Bromodichloromethane	ND	ND	ND	ND	ND	ND	11.3	ND
Carbon disulfide	ND	3.71	9.84	6.57	4.11	3.18	3.24	12.7
Chloroform	ND	34.3	1.22	ND	ND	11.2	129	4
Chloromethane	1.38	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	0.74	1.17	2.93	1.61	0.781	ND	3.37	1.77
Dichlorodifluoromethane	2.73	3.34	2.55	3.15	2.72	2.69	2.81	18.3
Ethanol	ND	67.8	71.4	10.2	9.44	ND	19.6	15.6
Ethylbenzene	ND	ND	1.22	2.08	ND	ND	0.899	4.11
Isopropanol	ND	147	164	ND	3.2	2	6.15	4.23
Methylene chloride	ND	ND	3.4	ND	ND	ND	ND	ND
n-Hexane	ND	0.98	0.804	ND	ND	ND	ND	1.29
o-Xylene	ND	ND	1.53	4.18	2.74	0.912	1.43	2.99
p/m-Xylene	ND	1.78	4.78	7.12	2.96	ND	3.74	20.9
Tetrachloroethene	-	426	ND	3.53	5.28	130	23.3	15.9
Tetrahydrofuran	ND	2.92	ND	ND	ND	ND	ND	ND
Toluene	ND	7.31	4.9	3.14	1.21	0.961	2.86	4.64
Trichloroethene	-	2.34	ND	ND	ND	ND	1.16	ND
Trichlorofluoromethane	1.33	10.3	1.66	5.46	1.37	34.7	13.7	248
Carbon tetrachloride	0.465	-	-	-	-	-	-	-
Tetrachloroethene	7.87	-	-	-	-	-	-	-

4.8 Data Usability Summary Report

The laboratory data packages have been independently validated. The RI analytical data is deemed usable in accordance with DEC DUSR requirements. There were no rejections of data, with the exception of the following.

-2,4-Dinitrophenol was rejected in one (1) HFM sample collected at the 2 to 4-foot sampling depth interval at soil boring RISB9 due to severely low MS/MSD recoveries. 2,4-Dinitrophenol was Non-Detect in the sample analyzed.

-1,4-Dioxane was rejected in one (1) groundwater sample collected from RI-installed monitoring well RIMW1 due to severely low MS/MSD recovery. 1,4-dioxane was Non-Detect in the sample analyzed.

-Perfluorooctanesulfonamide (FOSA) was rejected in one (1) soil sample collected from the 6 to 8-foot sampling depth interval at soil boring RIGP2 due to severely low surrogate recovery.

Laboratory data from the previous Phase II ESA investigation reports were not validated. The DUSRs for the RI are presented in Appendix H.

4.9 Summary of Extent of Contamination

Analytical results for sampled surface soil, sub-slab soil, subsurface HFM and native soils, and groundwater were compared to SCGs identified in Section 4.2. The following Table 4.9 lists those compounds and analytes that exceeded SCGs along with the frequency that the applicable SCG was exceeded per analyzed media. As there are no current SCGs or guidance values for soil vapor related to volatile organic compounds, they are not included in Table 4.9. Further discussion regarding the soil vapor results are provided in Sections 5 and 6.

TABLE 4.9: ANALYTES EXCEEDING SCGs PER MEDIA TYPE					
Media	Class	Contaminant of Concern	Detected Concentration Range	Frequency of Exceeding Standard	Applicable SCG ⁽¹⁾
Surface Soil ⁽¹⁾ (mg/kg)	Remedial Investigation				
	VOCs	None Detected Above SCGs			
	SVOCs	Benzo(b)fluoranthene	1.3	1 of 6	1
		Indeno(1,2,3-cd)pyrene	0.56	1 of 6	0.5
	Pesticides	4,4'-DDD	0.0161	1 of 6	0.0033
		4,4'-DDE	0.00348 to 0.0228	3 of 6	0.0033
		4,4'-DDT	0.00773 to 0.128	3 of 6	0.0033
		Dieldrin	0.0236	1 of 6	0.005
	PCBs	None Detected Above SCGs			
	Metals	Lead (Total)	63.5 to 365	5 of 6	63
		Mercury (Total)	0.253 to 0.361	3 of 6	0.18
		Zinc (Total)	110 to 204	2 of 6	109
	Cyanide	None Detected Above SCGs			

TABLE 4.9: ANALYTES EXCEEDING SCGs PER MEDIA TYPE

Media	Class	Contaminant of Concern	Detected Concentration Range	Frequency of Exceeding Standard	Applicable SCG ⁽¹⁾
Surface Soil ⁽¹⁾ (mg/kg)	Previous Investigations (mg/kg)				
	VOCs	Samples were not analyzed for VOCs			
	SVOCs	Benzo(a)anthracene	2.2	1 of 22	1
		Benzo(a)pyrene	1.6	1 of 22	1
		Benzo(b)fluoranthene	1.1	1 of 22	1
		Benzo(k)fluoranthene	0.88	1 of 22	0.8
		Chrysene	2.4	1 of 22	1
		Indeno(1,2,3-cd)pyrene	0.96	1 of 22	0.5
	Pesticides	Samples were not analyzed for pesticides			
	PCBs	Samples were not analyzed for PCBs			
	Metals	Arsenic	13.4	1 of 22	13
		Copper	59.6	1 of 22	50
		Lead	79.7 to 640	17 of 22	63
		Mercury	0.24 to 1.25	12 of 22	0.18
		Zinc	110 to 300	11 of 22	109
Subsurface HFM and Native Soil ⁽⁴⁾ (mg/kg)	Remedial Investigation				
	VOCs	Acetone	0.086 to 0.1	2 of 41	0.05
	SVOCs	Benzo(a)anthracene	1.1 to 3.7	3 of 41	1
		Benzo(a)pyrene	1.5 to 3.2	2 of 41	1
		Benzo(b)fluoranthene	1.4 to 4.8	3 of 41	1
		Benzo(k)fluoranthene	1.6	1 of 41	0.8
	SVOCs	Chrysene	1.1 to 3.9	3 of 41	1
		Dibenzo(a,h)anthracene	0.55	1 of 41	0.33
		Indeno(1,2,3-cd)pyrene	0.65 to 2.1	3 of 41	0.5
	Pesticides	4,4'-DDD	0.0352	1 of 40	0.0033
		4,4'-DDE	0.0045 to 0.00748	5 of 40	0.0033
		4,4'-DDT	0.00334 to 0.0917	9 of 40	0.0033
		Dieldrin	0.00517 to 0.00982	2 of 40	0.005
	PCBs	None Detected Above SCGs			
	Metals	Lead	84.1 to 343	8 of 46	63
		Mercury	0.427 to 1.19	6 of 46	0.18
		Zinc	111 to 294	4 of 46	109
	Cyanide	None Detected Above SCGs			

TABLE 4.9: ANALYTES EXCEEDING SCGs PER MEDIA TYPE					
Media	Class	Contaminant of Concern	Detected Concentration Range	Frequency of Exceeding Standard	Applicable SCG ⁽¹⁾
Subsurface HFM and Native Soil ⁽⁴⁾ (mg/kg)	Previous Investigations ⁽²⁾				
	VOCs	Samples were not analyzed for VOCs			
	SVOCs	Benzo(a)anthracene	3.1 to 24	2 of 4	1
		Benzo(a)pyrene	2.8 to 20	2 of 4	1
		Benzo(b)fluoranthene	4.2 to 27	2 of 4	1
		Benzo(k)fluoranthene	1.2 to 2.7	2 of 4	0.8
		Chrysene	3.5 to 25	2 of 4	1
		Dibenzo(a,h)anthracene	0.5 to 2.4	2 of 4	0.33
		Indeno(1,2,3-cd)pyrene	2.2 to 13	2 of 4	0.5
	Pesticides	Samples were not analyzed for pesticides			
	PCBs	Samples were not analyzed for PCBs			
	Metals	Arsenic	31.7	1 of 4	13
		Barium	450	1 of 4	350
		Lead	122 to 566	3 of 4	63
Mercury		0.217 to 0.219	2 of 4	0.18	
Zinc		811	1 of 4	109	
Cyanide	Samples were not analyzed for Cyanide				
Groundwater (ug/l) ⁽³⁾	Remedial Investigation				
	VOCs	Chloroform	8 to 11	5 of 16	7
		Tetrachloroethene	6.1 to 8.6	2 of 16	5
	SVOCs	Benzo(a)anthracene	0.03 to 0.04	2 of 17	0.002
		Benzo(a)pyrene	0.03 to 0.04	2 of 17	Non Detect
		Benzo(b)fluoranthene	0.02 to 0.04	3 of 17	0.002
		Benzo(k)fluoranthene	0.01 to 0.04	4 of 17	0.002
		Chrysene	0.02 to 0.06	2 of 17	0.002
		Hexachlorobenzene	0.11	1 of 17	0.04
		Indeno(1,2,3-cd)pyrene	0.04 to 0.06	2 of 17	0.002
	Pesticides	None Detected Above SCGs			
	PCBs	None Detected Above SCGs			
	Metals	Antimony (Total)	4.24	1 of 16	3
		Iron (Total)	490 to 1390	2 of 16	300
		Manganese (Total)	362.9 to 933.8	4 of 16	300
		Sodium (Total)	28,600 to 207,000	16 of 16	20,000
	Cyanide	None Detected Above SCGs			

Table Notes:

- (1) DEC 6 NYCRR Part 375 Environmental Remediation Programs, Subpart 375-6 Unrestricted Use Soil Cleanup Objectives for soils.

DEC Division of Water Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Effluent Limitations, June 1998 for groundwater and surface water with addendums April 2001 and June 2004.

- (2) Samples collected during previous investigations were analyzed for the TCL of SVOCs and the TAL of metals only. The frequency of exceeding SCGs will only apply to those samples that were analyzed for the specified analytes.
- (3) Groundwater sampling results from the previous investigations are not included within this table but are presented under the groundwater heading in Section 1.3.4 of this report. Analytical results from groundwater samples collected during the RI will provide the most current groundwater quality conditions.
- (4) All of the analytes exceeding SCGs were confined to HFM with the exception of the VOC acetone and the pesticide 4,4-DDT. Acetone was detected above its SCG in one (1) sample of native soil collected from the 2 to 4-foot sampling depth interval at soil boring RISB3. 4,4-DDT was detected above its SCG in one (1) sample of native soil collected from the 10 to 12-foot sampling depth interval at soil boring RISB13.

4.10 Remedial Work Plan

The nature and extent of Site contaminants discussed in the preceding Sections 4.3 to 4.9 will be used for the development of a draft Remedial Work Plan (RWP) for the Site. The RWP will be submitted under separate cover.

5.0 CONTAMINANT FATE AND TRANSPORT

5.1 General Overview

Analytes detected above SCGs in surface soil, subsurface HFM and native soil, and groundwater is presented in Table 4.9 in Section 4.9. Analytes which were detected at concentrations below SCGs are not included in the table. There are no promulgated SCGs to compare the soil vapor sampling results; however, they will be addressed as a function of the remedial action for the Site and subsequent redevelopment building construction.

The fate and transport of the contaminants are based on the physical and chemical properties of the analytes and the Site characteristics. This section defines and discusses the general characteristics of the contaminants which affect fate and transport, the specific characteristics of the contaminants identified at the Site, the Site conditions which impact fate and transport, the transport off-Site of the contaminants in the groundwater, and the fate of the contaminants in terms of transformation and degradation.

5.2 Definition of Relevant Properties

Due to their composition, the Site contaminants have some common general characteristics and behavior. Characteristics which affect fate and transport include density, organic carbon/water partition coefficient, solubility in water, volatility, and degradability as presented in Table 5.2.

TABLE 5.2: Physical and Chemical Properties of Site Contaminants					
Compound	Density	Kow ⁽¹⁾	Koc ⁽²⁾	Water Solubility ⁽³⁾	Henry's Law Constant ⁽⁴⁾
Volatile Organic Compounds:					
Acetone	0.79	-0.24	0.73	Miscible	4.26E-05
Chloroform	1.485	1.97	1.65	7.22E+03	3.0E-03
Tetrachloroethene	1.62	3.4	2.2-2.54	206	1.8E-02
Semi-Volatile Organic Compounds:					
Benzo(a)anthracene	1.274	5.76	5.30	9.4E-03	5.73E-06
Benzo(a)pyrene	1.351	6.13	5.98	1.62E-03	4.69E-09

TABLE 5.2: Physical and Chemical Properties of Site Contaminants

Compound	Density	Kow⁽¹⁾	Koc⁽²⁾	Water Solubility⁽³⁾	Henry's Law Constant⁽⁴⁾
Benzo(b)fluoranthene	1.286	6.57	5.74	1.40E-02	1.20E-05
Benzo(k)fluoranthene	1.286	6.1	6.09	5.5E-04	4.45E-07
Chrysene	1.2740	5.61	5.39	1.80E-03	7.26E-20
Dibenzo(a,h)anthracene	1.282	6.50	6.28	2.49E-03	4.65E-07
Hexachlorobenzene	2.04	5.73	6.08	4.7E-03	5.8E-04
Indeno(1,2,3-cd)pyrene	1.351	6.7	6.74	6.9E-04	4.54E-07
Pesticides					
4,4'-DDD	1.476	6.02	5.18	0.09	8.3E-06
4,4'-DDE	NDA	6.51	4.70	0.12	2.1E-05
4,4'-DDT	1.385	6.02	5.18	0.090	4.0E-06
Dieldrin	1.75	6.50	6.67	0.110	5.2E-06
Metals⁽⁵⁾:					
Antimony	6.684	NDA	NDA	Insoluble	NDA
Arsenic	5.778	NDA	NDA	Insoluble	NDA
Barium	3.6	NDA	1.70E+01	Reacts With	NDA
Copper	8.96	NDA	4.30E+02	Insoluble	NDA
Iron	7.87	NDA	NDA	Insoluble	NDA
Lead	11.34	NDA	9.00E+02	Insoluble	NDA
Manganese	7.2	NDA	6.50E+01	Decomposes	NDA
Mercury	13.53	5.95	2.00E-01	Insoluble	NDA
Sodium	0.97	NDA	NDA	Soluble	NDA
Zinc	7.14	NDA	2.30E+01	Insoluble	NDA

References:

Online National Institute of Health PubChem Open Chemistry Database.

Online Center for Disease Control Agency For Toxic Substances And Disease Registry.

NDA denotes no data available in cited references.

(1) Log octanol/water partition coefficient.

(2) Log organic carbon partition coefficient.

(3) mg/l at 25 degrees C.

(4) Henry's Law constant, atm-m³ / mole.

(5) The solubility of metals is highly dependent on the form of the metal compound present.

5.3 Contaminant Persistence

The organic carbon/water partition coefficient (Koc) indicates the tendency of an organic contaminant to sorb onto soil particles. Where the Koc is not experimentally available, it can be calculated based on the log octanol/water partition coefficient (Kow). The Koc multiplied by the organic carbon content of a given soil or sediment

gives the estimated absorption partition coefficient (K_d) for that soil or sediment. Some absorption may occur between contaminants and inorganic soil particles, particularly clay. However, experimental data indicates that the absorption of nonionic, undisassociated chemicals to inorganic soil is low. Once the sorption sites in soil are used up, mobility in the water column and groundwater may increase to some extent.

Mobility is expected to be lowest in shallow soils, which tend to have some organic carbon. In deeper soils, the organic carbon content of soils is likely to be low, and even a compound with a high K_{oc} will be moderately mobile. The VOCs, SVOCs and pesticides in soil have a range of organic carbon partition coefficients, from 0.73 for acetone (VOC) indicating low sorption and high mobility to 6.74 for indeno(1,2,3-cd)pyrene (SVOC) indicating higher sorption and lower mobility in soil.

The mobility of metals is affected by geologic conditions, and is often gauged by the environment's oxidation/reduction (redox) potential. As the pH and dissolved oxygen vary, the solubility of metals can change substantially. Generally, but not always, reductive conditions favor the dissolved form of the metal, thus a change toward reducing conditions would make the metals more soluble and possibly more mobile.

Water solubility indicates the tendency of a compound to dissolve in and travel in water. The Site contaminants (except for nine (9) of the 10 metals, which either decompose in water or are insoluble or reactive in water) have a wide range of solubilities, but are generally soluble.

The water solubility values for VOCs and SVOCs in groundwater ranges from miscible for acetone to 0.00069 mg/l for indeno(1,2,3-cd)pyrene. The metals of concern, with the exception of sodium, are nearly insoluble in water with the exception of manganese (which decomposes in water) and barium (which reacts with water).

Volatility in diffuse aqueous conditions, such as in groundwater at the subject Site is quantified by Henry's constant (K_h). The rate of volatilization increases as K_h increases. Volatility increases with decreases in atmospheric pressure, increase in temperature and when the compound vapor pressure is low relative to saturation. The contaminants of concern (except for metals (excluding mercury), which are not volatile) consist of: six (6) SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene) and four (4) pesticides

(4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin) in surface soil; one (1) VOC (acetone), seven (7) SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene) and four (4) pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin) in subsurface HFM/native soil; and two (2) VOCs (chloroform and tetrachloroethene) and (7) SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, hexachlorobenzene and indeno(1,2,3-cd)pyrene) in groundwater. The VOC constituents (and to a lesser degree the SVOC and pesticide constituents) have the highest potential to volatilize to some degree when unsaturated vapor, such as soil gas or the open atmosphere, are present.

The specific gravity (density) of a contaminant describes the weight of the contaminant relative to water, where one (1) is the weight of water. Volatile organic compounds, with the exception of select solvent based compounds, generally have a specific gravity value less than 1 and would therefore tend to be located in the upper portions of the aquifer. The VOC and SVOC contaminants in groundwater have densities that are greater than one (1) indicating that these contaminants will typically migrate vertically downward within the aquifer and have a lower potential to diffuse into unsaturated vapor above the water table.

Due to the chemical composition of pesticides and metals, they do not typically biodegrade and are persistent. Non-chlorinated VOCs can biodegrade at an accelerated rate, primarily under aerobic conditions. Chlorinated VOCs and SVOCs biodegrade at a decelerated rate, primarily under anaerobic conditions. Biodegradation of VOCs and SVOCs in HFM, native soil and groundwater has been found to occur under anaerobic and to a lesser extent aerobic conditions, such as occurs in groundwater. The presence of acclimatized microbes enhances biodegradation of the VOCs and SVOCs. Acclimatized microbes are soil micro-organisms which have adapted themselves to the contaminants by producing enzymes to withstand toxic effects and to allow metabolism of the contaminants. Addition of nutrients would be expected to increase the rate of biotic degradation.

5.4 Contaminant Migration

The potential routes of contaminant migration are through groundwater and the atmosphere. Depending on their solubility, contaminants could dissolve in

groundwater and be transported in the direction of groundwater flow. The VOC, SVOC, pesticide and metal contaminants present in surface soil, HFM and native soils could be transported to the atmosphere as dust should this media be disturbed.

5.4.1 Groundwater Migration

Groundwater within the Site contains two (2) VOCs (chloroform and tetrachloroethene), (7) SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, hexachlorobenzene and indeno(1,2,3-cd)pyrene) and four (4) metals (antimony, iron, manganese and sodium). With the exception of sodium, all of the contaminants have densities greater than one (1). The solubilities for the contaminants in groundwater range from insoluble or decomposes for three (3) of the four (4) metals to 7,220 mg/l for chloroform and soluble for the metal sodium. Because they are soluble, it is expected that the VOCs, SVOCs and the metal sodium will migrate in the direction of groundwater flow. For the most part, the insoluble metals may adsorb and absorb to soil particles, thus making it difficult for the metals to migrate with groundwater. Groundwater at the Site appears to be flowing in an overall easterly direction.

5.4.2 Atmospheric Migration

The three (3) VOCs (acetone, chloroform and tetrachloroethene) and eight (8) SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, hexachlorobenzene and indeno(1,2,3-cd)pyrene) in surface soil, subsurface HFM and native soils, and groundwater may diffuse slowly upward and horizontally to unsaturated soil vapor. The rate of diffusion into the atmosphere depends on the differential in vapor saturation and on the atmospheric pressure. Under natural soil conditions, the differential is expected to be low within the soil and vadose zone. At the soil/atmosphere interface, the differential can change frequently, with great increases in differential causing contaminants to transport readily from surface soil to the atmosphere. Site contaminants which may volatilize from the Site soils to the atmosphere will disperse or abiotically degrade, with rates dependent on wind speed and levels of atmospheric radicals, respectively. Since the concentration of contaminants in surface soil, subsurface HFM and native soils, and groundwater are relatively low, VOC and SVOC contaminants in the atmosphere are not expected to accumulate at detectable levels under existing conditions. Pesticides and metals do not

exhibit volatility and therefore would not likely enter the atmosphere unless Site soils were disturbed in an uncontrolled manner such that dust particles with pesticides and metals adhered to them enter the atmosphere.

6.0 EXPOSURE ASSESSMENT

6.1 Qualitative Human Health Exposure Assessment

Exposure pathways are means by which contaminants move through the environment from a source to a point of contact with humans. A complete exposure pathway must meet five (5) criteria: 1) a source of contamination; 2) a mechanism for transport of a substance from the source to the air, groundwater and/or soil; 3) a point where people come in contact with contaminated air, groundwater or soil (point of exposure); 4) a route of entry (exposure) into the body; and 5) a receptor population. Routes of entry include ingesting contaminated materials, breathing contaminated air, or absorbing contaminants through the skin. If any part of an exposure pathway is absent, the pathway is said to be incomplete and no exposure or risk is possible. In some cases, although a pathway is complete, the likelihood that significant exposure will occur is small.

The potential Site related contaminants were identified as those contaminants detected in various media at the Site above SCGs, and soil vapor. The potential Site related contaminants that have been identified in various media at the Site are presented in Table 6.1.

TABLE 6.1: PARAMETERS DETECTED ABOVE SCGs					
Compound	Surface Soil	Soil Vapor	Sub-Slab Soil	Subsurface HFM/Native Soil	Groundwater
<i>Volatile Organic Compounds</i>					
1,2,4-Trimethylbenzene		X			
1,2-Dichlorobenzene		X			
1,3,5-Trimethylbenzene		X			
1,3-Dichlorobenzene		X			
2-Butanone		X			
4-Ethyltoluene		X			
4-Methyl-2-pentanone		X			
Acetone		X		X	
Benzene		X			
Bromodichloromethane		X			
Carbon disulfide		X			
Chloroform		X			X
Chloromethane		X			
Cyclohexane		X			
Dichlorodifluoromethane		X			

TABLE 6.1: PARAMETERS DETECTED ABOVE SCGs					
Compound	Surface Soil	Soil Vapor	Sub-Slab Soil	Subsurface HFM/Native Soil	Groundwater
Ethanol		X			
Ethylbenzene		X			
Isopropanol		X			
Methylene chloride		X			
n-Hexane		X			
o-Xylene		X			
p/m-Xylene		X			
Tetrachloroethene		X			X
Tetrahydrofuran		X			
Toluene		X			
Trichloroethene		X			
Trichlorofluoromethane		X			
<i>Semi-Volatile Organic Compounds</i>					
Benzo(a)anthracene	X			X	X
Benzo(a)pyrene	X			X	X
Benzo(b)fluoranthene	X			X	X
Benzo(k)fluoranthene	X			X	X
Chrysene	X			X	X
Dibenzo(a,h)anthracene				X	
Hexachlorobenzene					X
Indeno(1,2,3-cd)pyrene	X			X	X
<i>Pesticides</i>					
4,4'-DDD	X			X	
4,4'-DDE	X			X	
4,4'-DDT	X			X	
Dieldrin	X			X	
<i>Metals</i>					
Antimony					X
Arsenic	X			X	
Barium				X	
Copper	X				
Iron					X
Lead	X			X	
Manganese					X
Mercury	X			X	
Sodium					X
Zinc	X			X	

Exposure pathways for Site contaminants are a function of the contaminant, the affected media, contaminant location, and the potentially impacted population. The potential exposure routes and pathways include the following:

- inhalation, dermal contact and/or ingestion of contaminated soil/fill on-Site;
- dermal contact and/or ingestion of contaminated groundwater on-Site; and
- inhalation of vapors emanating from contaminated groundwater.

The potential impacted populations at the Site and vicinity include Site visitors and trespassers, and workers which may be engaged in subsurface excavation during any future Site remediation and redevelopment. The following discusses the potential for Site contaminants to impact the affected populations.

Contaminants in Soil/Fill

One (1) VOC, seven (7) SVOCs, four (4) pesticides and six (6) metals were detected above SCGs in soil/fill. The concentrations of these contaminants of concern warrant remedial action as they are present in soil/fill that is readily accessible to dermal contact and ingestion. Furthermore, the Site is slated for redevelopment and disturbance of the soil/fill could create airborne contaminants that may be inhaled. The potential for dermal contact (including ingestion and inhalation) with exposure to the impacted soil/fill and the associated impact is, therefore, anticipated to be high.

Groundwater

Two (2) VOCs, seven (7) SVOCs and four (4) metals were detected above SCGs in groundwater within the Site. The two (2) VOCs were detected only slightly above SCGs. The Site and vicinity are provided with public water from the City of Schenectady. Groundwater may be encountered during Site redevelopment and the potential for dermal contact and ingestion for Site construction workers is viewed as moderate. Groundwater is not anticipated to be used as a potable water source by future Site occupants as the Site is provided with public water from the City of Schenectady. As such, potential exposure of future Site occupants to groundwater is viewed as low.

Soil Vapor

Exposure to soil vapor is likely. Although VOCs were detected only slightly above SCGs in groundwater and a single detection of acetone was identified in the soil/fill samples, they were detected in all of the soil vapor sampling points. The presence of soil vapor in Site soils has the potential to impact indoor air within future building structures. Potential exposure to site workers conducting earthwork activities is considered moderate, and low for site workers and trespassers that are not disturbing the soils.

The following Table 6.1-1 summarizes current and potential exposures to Site contaminants.

TABLE 6.1-1: POTENTIAL EXPOSURES TO SITE CONTAMINANTS	
Environmental Media & Exposure Route	Human Exposure Assessment
Direct Contact with Soil/Fill and Incidental Ingestion	• There is a high potential for site visitors and trespassers to come into contact with contaminated soil/fill. • There is a high potential for construction workers and curious bystanders to come into contact with contaminated soil/fill during excavation for site redevelopment.
Ingestion of Groundwater and Direct Contact with Groundwater	• Groundwater is not being used for drinking water, as the area is served by the public water supply. There are no known domestic water supply wells in the area. Groundwater is not anticipated to be used as a potable water source by future Site occupants as the Site is provided with public water from the City of Schenectady. As such, potential exposure of future Site occupants to groundwater is viewed as low. • People can come into contact with contaminated groundwater if private wells are installed on the property. • Construction workers may come into contact

TABLE 6.1-1: POTENTIAL EXPOSURES TO SITE CONTAMINANTS	
Environmental Media & Exposure Route	Human Exposure Assessment
	with contaminated groundwater during ground intrusive redevelopment work at the Site.
Inhalation of Air (exposures related to soil vapor intrusion)	Exposure to soil vapor is likely. Although VOCs were detected only slightly above SCGs in groundwater and a single detection of acetone was identified in the soil/fill samples, they were detected in all of the soil vapor sampling points. The presence of soil vapor in Site soils has the potential to impact indoor air within future building structures. Potential exposure to site workers conducting earthwork activities is considered moderate, and low for site workers and trespassers that are not disturbing the soils.

6.2 Off-Site Qualitative Exposure Assessment

Potential exposure scenarios to affected populations outside of the Site boundaries include inhalation of airborne contaminants from soil/fill during the remedial action. Perimeter dust and VOC monitoring should suffice to protect off-site affected populations from Site contaminants during the remedial action, and the existence of a public water supply will protect the off-site affected populations from ingestion of contaminated groundwater. New building construction which considers sub-slab depressurization systems will control vapor intrusion in the building envelopes.

The surrounding area land use consists of residential apartments and homes, and various commercial establishments. As reported by the City of Schenectady Water Department, all properties located within the City of Schenectady are connected to public water supply located on Rice Road which is greater than ½ mile from the site and private water wells are not allowed to exist. Therefore it is reasonable to anticipate that future groundwater use off-site will not occur.

The potential routes of contaminant migration to off-site areas are through groundwater and the atmosphere. Depending on their solubility, contaminants could dissolve in

groundwater and be transported in the direction of groundwater flow. The VOC, SVOC, pesticide and metal contaminants present in surface soil, HFM and native soils could be transported to the atmosphere through volatilization or as dust should this media be disturbed.

Because they are soluble, it is expected that the VOCs, SVOCs and the metal sodium will migrate in the direction of groundwater flow. For the most part, the insoluble metals may adsorb and absorb to soil particles, thus making it difficult for the metals to migrate with groundwater. Groundwater at the Site appears to be flowing in an overall easterly direction.

The VOCs and SVOCs in surface soil, subsurface HFM and native soils, and groundwater may diffuse slowly upward and horizontally to unsaturated soil vapor. Since the concentration of contaminants are relatively low, VOC and SVOC contaminants in the atmosphere are not expected to accumulate at detectable levels under existing conditions. Pesticides and metals do not exhibit volatility and therefore would not likely enter the atmosphere unless Site soils were disturbed in an uncontrolled manner. If such disturbance occurs, dust particles with VOCs, SVOCs, pesticides and metals adhered to them could enter the atmosphere and be transported off-site.

7.0 SUMMARY AND CONCLUSIONS

7.1 Summary

The RI work tasks have been completed in substantial conformance with the DEC-approved RIWP, dated December 2018 (Revised February 2019). Deviations to the final approved work plan have been described within the body of this report. The following provides an overview of the RI of the project Site.

7.1.1 Site Description and Previous Use

The Site is comprised of two (2) separate parcels located in the Hamilton Hill neighborhood in the City of Schenectady, Schenectady County, New York. The 830 Albany Street Parcel occupies the southwestern quadrant of the intersection of Craig and Albany Streets and the 834 Albany Street Parcel occupies the southeastern quadrant of the intersection of Craig and Albany Streets. The Parcels are transected by Craig Street.

The Site is approximately 0.81 acre in size and is identified on the City of Schenectady tax map as tax map numbers 49.33-2-33.1 (830 Albany Street Parcel) and 49.33-4-10.1 (834 Albany Street Parcel). See Figures 1 and 2: Site Location and Site Features Maps in Appendix A.

Prior to the turn of the 20th Century, the Site and surrounding area were mainly vacant land. Beginning in the early 1900s, the Site and surrounding area began to be developed with residential apartments and homes, and various commercial establishments.

Past commercial uses at the Site have included two (2) dry cleaning operations, a bakery and retail store. The former dry cleaner entities occupied the 830 and 834 Albany Street buildings on the Site's two (2) parcels. The bakery and retail store occupied the building on the 834 Albany Street parcel.

7.1.2 Physical Characteristics of the Project Site

The 830 Albany Street Parcel portion of the Site consists primarily of vacant, cleared land except for the remains of a building foundation and floor slab on the northeastern

corner of the parcel that was formerly operated as a dry cleaner, and two (2) multi-family buildings and detached garage on the central and southern portions of the parcel.

The 834 Albany Street Parcel portion of the Site currently consists of vacant, cleared land except for the remains of a building foundation and floor slab located on the northwestern/western portion of the parcel at the corner of Craig Street and Albany Street.

There are no water bodies or wetlands on the Site. The Mohawk River is located approximately one (1) mile north-northwest of the Site.

Fill soils are present at the Site from the surface to depths ranging from approximately one (1) to 12 feet below grade and in general consist of brown sands with varied amounts of silt and gravel and contain one or more urban fill components including brick, ash, coal, concrete, rock fragments and asphalt. The majority of the fill extends to depths that range from two (2) to six (6) feet bgs with some locations extending down to the 12-foot depth interval. The fill soils are underlain primarily by sandy soils with varied amounts of gravel, silt and clay. Beneath the primarily sandy soils, a soil layer containing an increased fraction of silt and/or clay was observed at varying depths, but generally between 14 and 18 feet below grade. This silt and/or clay layer was underlain generally by fine silty sands.

The observed shallow and deep groundwater flow direction is from west to east.

7.1.3 Nature and Extent of Contamination

The following summarizes the contaminants of concern (COCs) encountered at the Site in surface/shallow soil, subsurface HFM, subsurface native soil and groundwater.

Contaminants of Concern in Shallow Soil

COCs in shallow soil (0 to 2-feet bgs) include metals, pesticides and SVOCs. The entirety of the Site's shallow soil, with the exception of soil beneath the buildings addressed as 830 and 834 Albany Street, are impacted by the metals lead, mercury and zinc.

Pesticides were found to be present in shallow soil across the Site as they were detected above SCGs in four (4) of six (6) RI surface soil sampling locations (pesticides were not analyzed in the previous investigations).

SVOCs were confined to northern portions of the 834 Albany Street Parcel in the vicinity of Albany and Craig Streets.

Contaminants of Concern in Subsurface HFM and Native Soil

COCs in subsurface (>2 feet bgs) HFM and native soil include metals, pesticides and SVOCs, which were encountered at depths ranging from 2 to 6-feet bgs.

The predominant metals were lead, mercury and zinc. These were detected at depths ranging from 2 to 6-feet bgs in three (3) samples collected in the vicinity of the two (2) multi-family structures within southeastern portions of the 830 Albany Street Parcel, in two (2) samples collected in the vicinity of the former dry-cleaning building addressed as 830 Albany Street, and in three (3) samples collected within the 834 Albany Street Parcel.

The predominant pesticides were 4,4'-DDE and -DDT, which were encountered in samples collected along the northern and eastern boundary of the 830 Albany Street Parcel and adjacent to the former dry-cleaning building addressed as 830 Albany Street. There were no pesticides detected within the 834 Albany Street Parcel.

SVOCs were detected at depths ranging from 2 to 6-feet bgs in two (2) samples collected from the southern and eastern portion of the 830 Albany Street Parcel and from one (1) sample collected from the northwestern corner of the 834 Albany Street Parcel.

Contaminants of Concern in Groundwater

The COCs in groundwater include VOCs, SVOCs and metals.

The VOC tetrachloroethene was detected slightly above its SCGs in four (4) shallow groundwater samples collected from monitoring wells RIMW2, RIMW3, RIGP2 and RIGP3 within approximate central portions of the 830 Albany Street Parcel. Based on observed groundwater flow direction, the wells are located hydraulically cross-gradient of the former dry-cleaning building addressed as 830 Albany Street. Tetrachloroethene

was not detected above SCGs in any of the remaining shallow and deep monitoring wells.

The VOC chloroform was detected slightly above its SCG in six (6) shallow groundwater samples collected from monitoring wells MW-2, MW-5, RIMW2, RIMW4, RIGP1 and RIGP2 within the 830 Albany Street Parcel. Chloroform was not detected above SCGs in any of the remaining shallow and deep monitoring wells.

The SVOC detections were confined to shallow groundwater collected from four (4) monitoring wells along the northeastern property boundary of the 830 Albany Street Parcel (MW2); the northwestern property boundary of the 834 Albany Street Parcel (834 MW2); southeastern property boundary of the 834 Albany Street Parcel (RIMW5); and beneath the former building on the 834 Albany Street Parcel (RIGP5).

The metals iron and manganese in groundwater are believed to be naturally occurring and are not viewed as COCs. Sodium is likely related to the application of deicing products (sodium chloride) to the streets and sidewalks. Antimony was detected in shallow groundwater in monitoring well RIMW4, which is located near the northern boundary of the 830 Albany Street Parcel.

7.1.4 Fate and Transport

The Site related contaminants include SVOCs, pesticides and metals in surface/shallow soil; one (1) VOC (acetone), SVOCs, pesticides and metals in subsurface HFM and native soil; and VOCs, SVOCs and metals in groundwater.

The SVOC, pesticide and metal contaminants in soil will tend to adhere to surrounding fill and soil particles and not migrate into underlying groundwater. This is exemplified by the fact that the pesticide and metal contaminants in HFM and soil were not present in groundwater. An exception is that the SVOC contaminants in surface/shallow soil samples collected from RISS5, SS19 and GP-8, and subsurface HFM/native soil samples collected from RISB8, RISB10 and GP-12 were also present in groundwater samples collected from monitoring wells MW2, 834 MW2, RIMW5 and RIGP5. This is viewed as an anomaly because the SVOC contaminants in soil were confined to HFM/native soil sampling locations which were not converted into monitoring wells, with the exception of boring location GP-8 which was converted into monitoring well 834 MW2. Of the

seven (7) SVOCs detected above SCGs in shallow soil at GP-8, only one (1) low level SVOC (benzo(k)fluoranthene) was also detected in groundwater.

The potential routes of contaminant migration are through groundwater and the atmosphere, as follows.

-Because they are soluble, it is expected that the VOCs, SVOCs and the metal sodium will migrate in the direction of groundwater flow. For the most part, the insoluble metals will tend to adsorb and absorb to soil particles, thus making it difficult for the metals to migrate with groundwater. Groundwater at the Site appears to be flowing in an overall easterly direction.

-Since the concentration of contaminants in surface soil, subsurface HFM and native soils, and groundwater are relatively low, VOC and SVOC contaminants in the atmosphere are not expected to accumulate at detectable levels under existing Site conditions. Pesticides and metals do not exhibit volatility and therefore would not likely enter the atmosphere unless Site soils were disturbed in an uncontrolled manner such that dust particles with pesticides and metals adhered to them enter the atmosphere.

7.1.5 Exposure Assessment

Exposure pathways for Site contaminants include inhalation, dermal contact and/or ingestion of contaminated fill/soil on-Site; dermal contact and/or ingestion of contaminated groundwater on-Site; and inhalation of vapors emanating from contaminated groundwater. The potential impacted populations at the Site and vicinity include Site visitors and trespassers and workers which may be engaged in subsurface excavation during any future Site development, and future site occupants.

Contaminants in Soil/Fill

One (1) VOC (acetone), seven (7) SVOCs, four (4) pesticides and six (6) metals were detected above SCGs in soil/fill. The concentrations of these contaminants of concern warrant remedial action as they are present in soil/fill that is readily accessible to dermal contact and ingestion. Furthermore, the Site is slated for redevelopment and disturbance of the soil/fill could create airborne contaminants that may be inhaled. The

potential for dermal contact (including ingestion and inhalation) with exposure to the impacted soil/fill and the associated impact is, therefore, anticipated to be high.

Groundwater

Two (2) VOCs, seven (7) SVOCs and four (4) metals were detected above SCGs in groundwater within the Site. The two (2) VOCs were detected only slightly above SCGs. The Site and vicinity are provided with public water from the City of Schenectady. Groundwater may be encountered during Site redevelopment and the potential for dermal contact and ingestion for Site construction workers is viewed as moderate.

Soil Vapor

The potential for volatilization of groundwater contaminants into structures constructed in the future on the Site is viewed as moderate, as the VOCs were detected only slightly above SCGs. VOC vapors in soil were detected at all locations and therefore exposure to them in new structures is high.

7.2 Conclusions

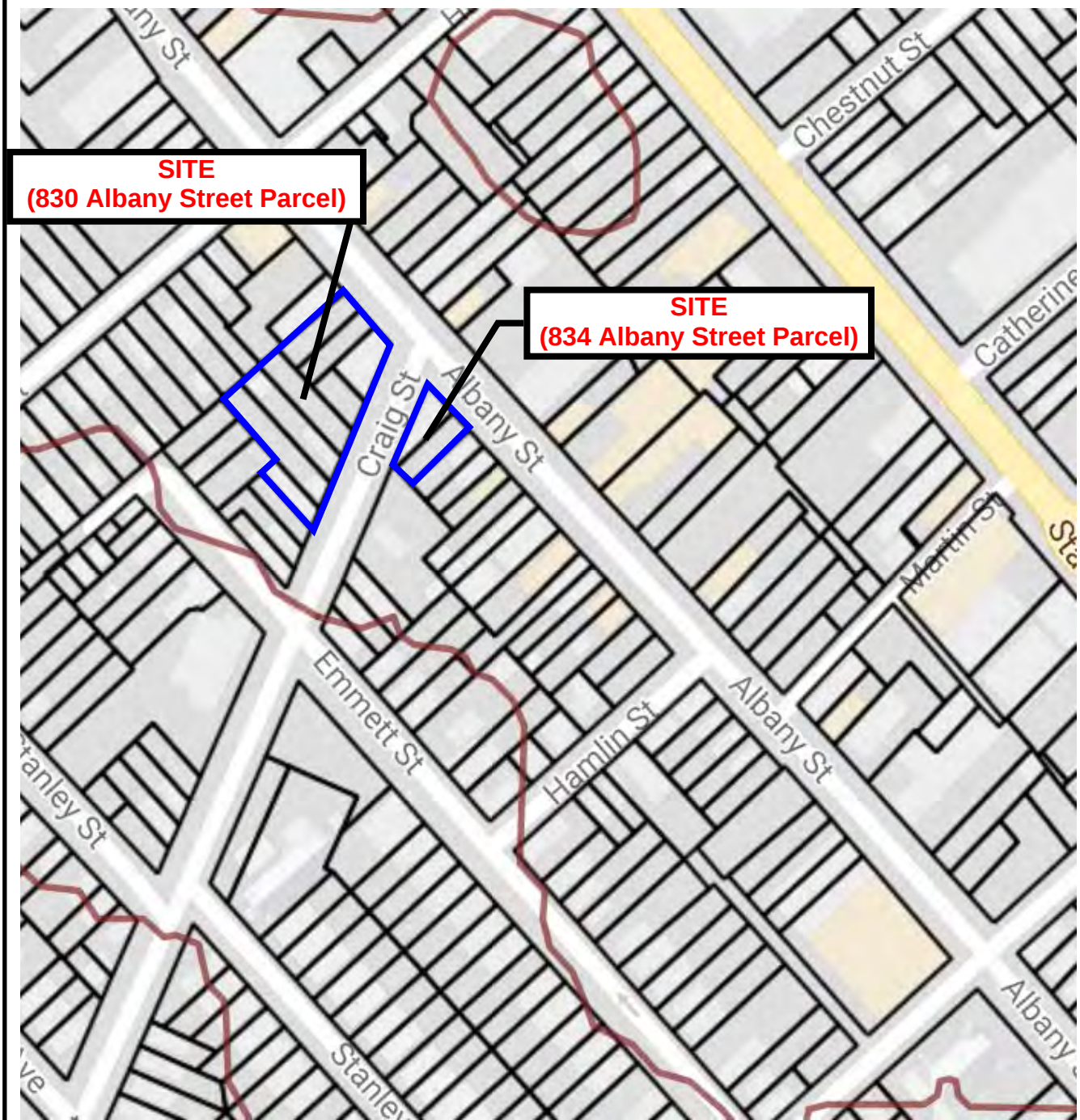
Based upon the findings and conclusion of this RI, additional investigative activities are not warranted. The RI has adequately delineated the presence and extent of the contaminants of concern in Site HFM, soil and groundwater. The existing data is considered to be sufficient for the preparation of the RWP.

7.2.1 Data Limitations and Disclaimer

All of the RI analytical data has been independently validated in accordance with DEC DUSR requirements. The analytical results for the previous investigations conducted in 2016, 2017 and 2018 have not been validated. The RI analytical results tabulated herein reflect the results of the DUSR and have been appropriately qualified. Data collected for the Site was submitted to DER in the DEC-approved electronic data deliverable (EDD).

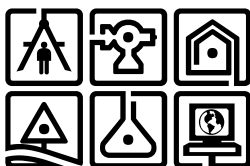
K:\Projects\166334\Env\Target Area 1 Remedial Investigation 2018-2019\RIR\3-Address DEC Comments to RIR\R DRAFT RIR Hamilton Hill II TA1 Including Supplemental Investigation.doc

APPENDIX A
FIGURES



MAP REFERENCE

USGS 7.5 Minute Topographical Map
Schenectady, New York Quadrangle
Year 2013



C.T. MALE ASSOCIATES

ENGINEERING, SURVEYING, ARCHITECTURE & LANDSCAPE ARCHITECTURE, D.P.C.

50 CENTURY HILL DRIVE
LATHAM, NY 12110

FIGURE 1: SITE LOCATION MAP HAMILTON HILL II - TARGET AREA 1 SITE

CITY OF SCHENECTADY

SCHENECTADY COUNTY, NY

SCALE: NOT TO SCALE

DRAFTER: SB

PROJECT No: 16.6334

The locations and features depicted on this map are approximate and do not represent an actual survey.

CAD DWG. FILE NAME: K:\Projects\177266\Survey\Drawings and Maps\FIGURE 2-REV 2.dwg

XREFS: NONE

PROJECT NUMBER: 16.6334

MAP REFERENCES:

- "Map Showing Lot Line Adjustment of No. 310 Craig Street No. 807 Emmett Street" City of Schenectady, County of Schenectady, New York State of New York prepared by Hershberg & Hershberg, Consulting Engineers and Land Surveyors dated March 23, 2016, Map No. 160068 and filed in the Schenectady County Clerk's Office on December 2, 2016 in Cabinet N, Map No. 279.
- ALTA/NSPS Land Title Boundary and Topographic Survey 820 Albany Street - 824 Albany Street - 830 Albany Street - 834 Albany Street - 840 Albany Street - 811 Albany Street - 827 Albany Street - 831 Albany Street - 302 Craig Street - 304 Craig Street - 306 Craig Street - 308 Craig Street - 310 Craig Street, prepared for TCB Holdings, Inc., prepared by C.T. Male Associates, Engineering, Surveying, Architecture & Landscape Architecture, D.P.C., dated May 24, 2017, Project No. 17.7266, Drawing No. 17-376.

MAP NOTES:

- Boundary and topographic information shown hereon was compiled from an actual field survey conducted on April 28, May 4, May 8-9 and May 24, 2017 and June 15, 2017.
- North orientation and bearings are Grid North based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00 obtained from GPS observations.
- Objects shown on this drawing with a distance indicating how far that object is from a particular line, lie on the same side of the line that the offset distance is written.
- Vertical datum shown hereon is NAVD 88 and was obtained from GPS observations which were post processed holding Albany CORS.
- Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
- Per map entitled National Flood Insurance Program, FIRM Flood Insurance Rate Map for Schenectady County, New York(All Jurisdictions)- contains Community Number 360739, Town of Niskayuna, Number 360740, Town of Rotterdam and Number 360741 City of Schenectady, Panel 170 of 257, Map Suffix: D, Map Number 36093C0170D, effective date January 8, 2014, the parcel shown hereon falls within an area designated as Zone X areas determined to be outside the 0.2% annual chance floodplain.

LEGEND

- | | |
|---------|--|
| □ CB | CATCH BASIN |
| ▢ CBCI | CATCH BASIN CURB INLET |
| ○ CBOL | CONCRETE BOLLARD |
| ○ DMH | DRAINAGE MANHOLE |
| ○ EMH | ELECTRIC MANHOLE |
| △ EMTR | ELECTRIC METER |
| ○ GM | GAS MARKER |
| □ GMTR | GAS METER |
| □ GT | GAS TEST |
| ○ GV | GAS VALVE |
| ○ GP | GATE POST |
| ⊕ HYD | HYDRANT |
| ○ IPF | IRON PIPE FOUND |
| ○ IRF | IRON ROD FOUND |
| ○ MB | MAIL BOX |
| ○ MFP | METAL FENCE POST |
| ○ SMH | SANITARY MANHOLE |
| ○ SBOL | STEEL BOLLARD |
| ○ TMH | TELEPHONE MANHOLE |
| ▢ TSB | TRAFFIC SIGNAL BOX |
| ○ TSP | TRAFFIC SIGNAL POLE |
| ○ MH | UTILITY MANHOLE |
| ○ UMH | UNKNOWN UTILITY MANHOLE |
| ⊕ | UTILITY POLE |
| ⊕ | UTILITY POLE W/LIGHT |
| ○ WSO | WATER SHUT-OFF |
| ○ WV | WATER VALVE |
| ⊕ GP-10 | PRE-RI GEOPROBE (APPROXIMATE LOCATION) |
| ● MW1 | PRE-RI MONITORING WELL LOCATION |
| □ SS3 | PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION) |
| ⊗ RISB1 | RI SUBSURFACE SOIL SAMPLE LOCATION |
| ⊗ RISV1 | RI SOIL VAPOR SAMPLE LOCATION |
| ⊗ RISS1 | RI SURFACE SOIL LOCATION |
| ⊗ RIHA1 | RI HAND AUGER LOCATION |
| ● RIMW1 | RI MONITORING WELL LOCATION |
| ⊕ RIGP1 | SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION |

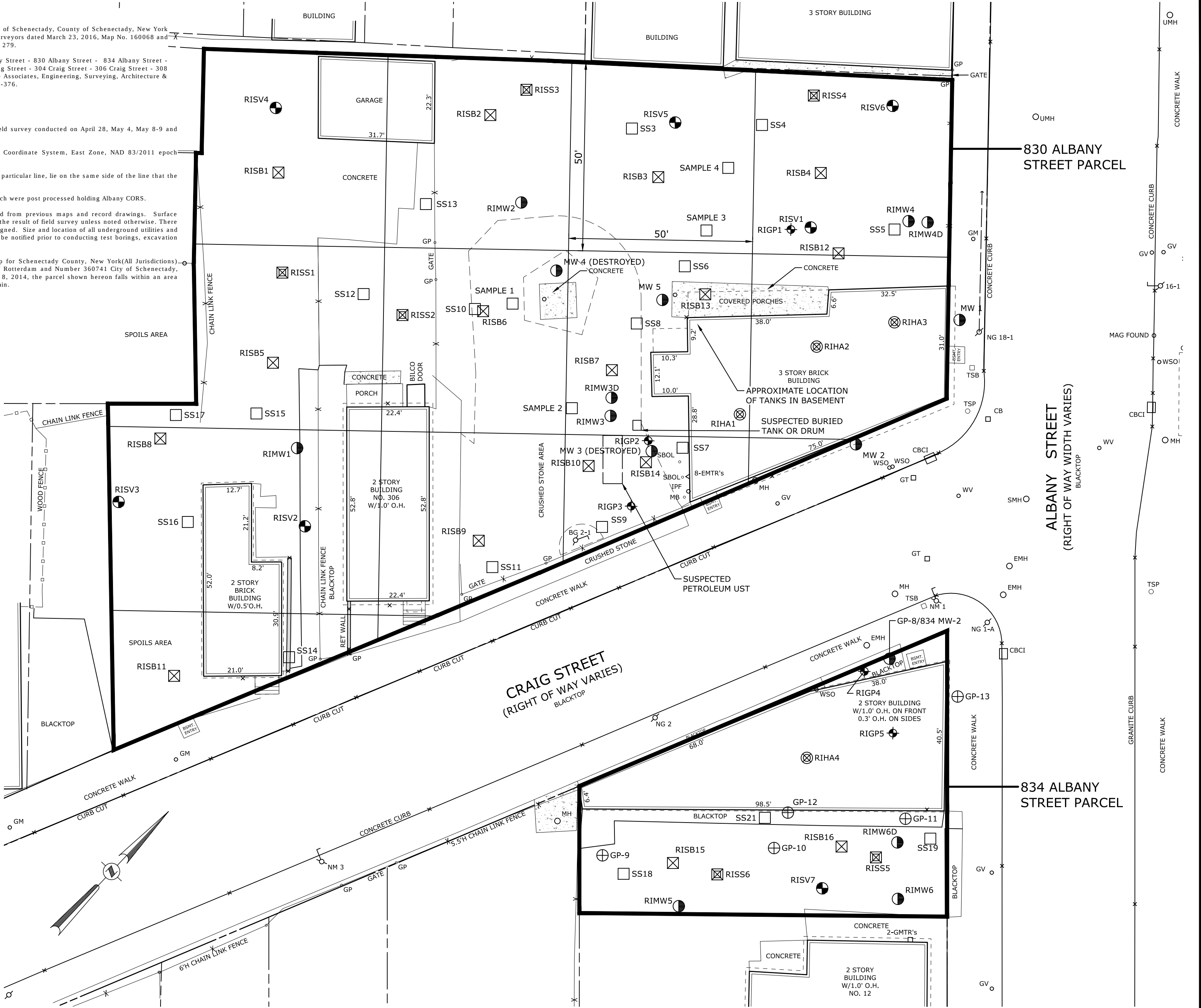


FIGURE 2: SITE FEATURES MAP
830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

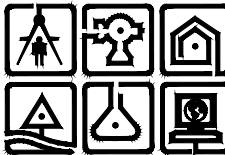
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6/21/19	③ MISC. REVISIONS TO LEGEND	MDD			
7/23/19	④ FIELD LOCATIONS	DBT			
8/27/19	⑤ MISC. REVISIONS	GLB			
	⑥				DESIGNED:
	⑦				DRAFTED : GLB
	⑧				CHECKED : JAM
	⑨				PROJ. NO : 16.6334
					SCALE : 1" = 20'
					DATE : DEC. 11, 2018

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LEGEND

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SBOL

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TMH

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TSB

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TSP

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MH

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UMH

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UTILITY POLE

⚡

UTILITY POLE W/LIGHT

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WSO

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WV

⊕

GP-10

●

MW1

□

SS3

⊗

RISB1

⊗

RISV1

⊗

RISS1

⊗

RIHA1

●

RIMW1

⬮

HFM+/- 3'

⚡

RIGP1
- CATCH BASIN
- ▢

CATCH BASIN CURB INLET
- CONCRETE BOLLARD
- DRAINAGE MANHOLE
- ELECTRIC MANHOLE
- △

ELECTRIC METER
- GAS MARKER
- GAS METER
- GAS TEST
- GAS VALVE
- GATE POST
- ⚡

HYDRANT
- IRON PIPE FOUND
- IRON ROD FOUND
- MAIL BOX
- METAL FENCE POST
- SANITARY MANHOLE
- STEEL BOLLARD
- TELEPHONE MANHOLE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- UTILITY MANHOLE
- UNKNOWN UTILITY MANHOLE
- ⚡

UTILITY POLE
- ⚡

UTILITY POLE W/LIGHT
- WATER SHUT-OFF
- WATER VALVE
- ⊕

PRE-RI GEOPROBE (APPROXIMATE LOCATION)
- PRE-RI MONITORING WELL LOCATION
- PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)
- ⊗

RI SUBSURFACE SOIL SAMPLE LOCATION
- ⊗

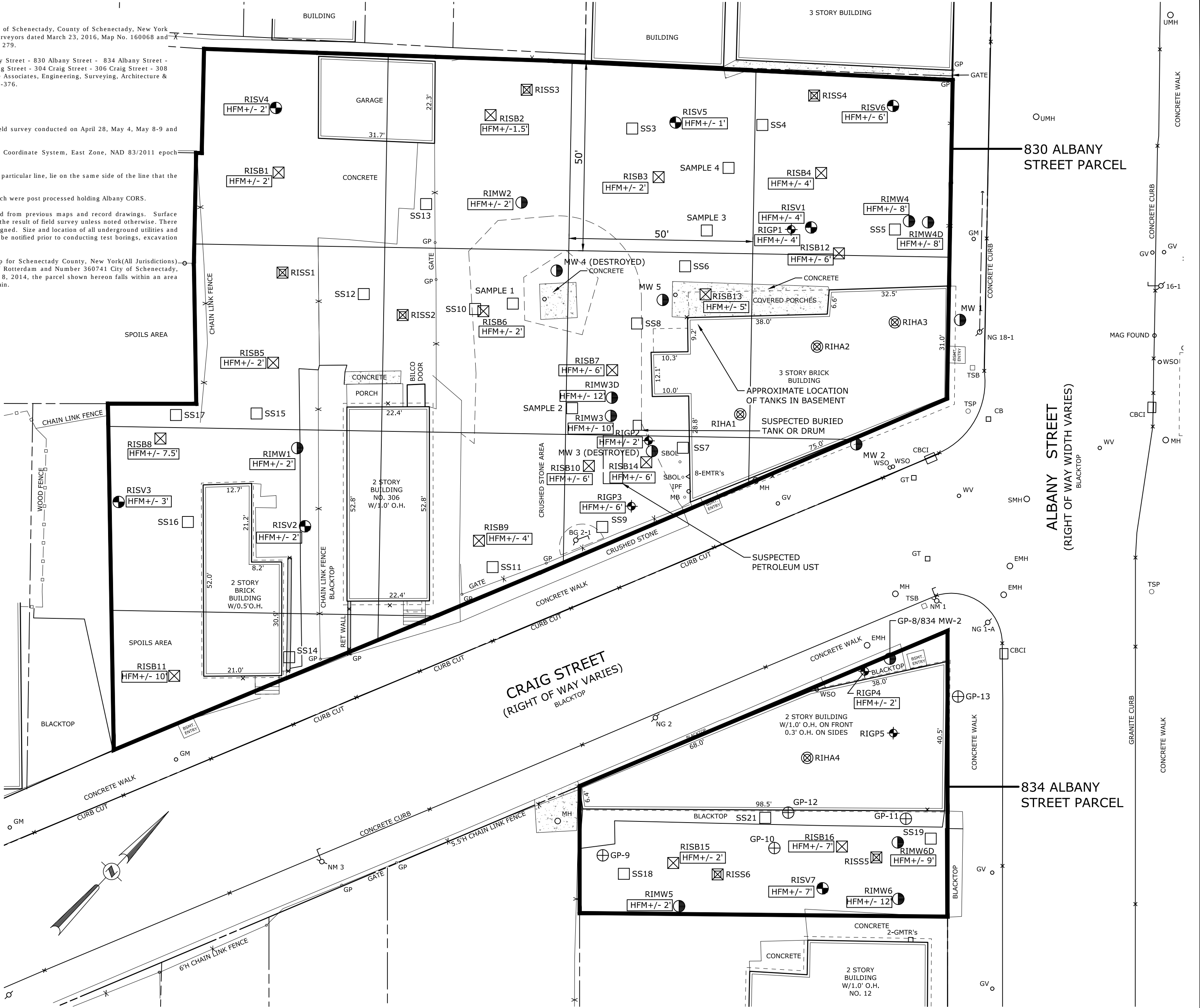
RI SOIL VAPOR SAMPLE LOCATION
- ⊗

RI SURFACE SOIL LOCATION
- ⊗

RI HAND AUGER LOCATION
- RI MONITORING WELL LOCATION
- ⬮

APPROXIMATE DEPTH OF HISTORICAL FILL MATERIAL (HFM)
- ⚡

SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION



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8/27/19	4	MISCELLANEOUS REVISIONS	MDD			
	5					DESIGNED:
	6					DRAFTED : GLB
	7					CHECKED : JAM
	8					PROJ. NO : 16.6334
	9					SCALE : 1" = 20'
						DATE : DEC. 11, 2018

FIGURE 3: APPROXIMATE DEPTHS OF HISTORICAL FILL MATERIAL (HFM)
830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

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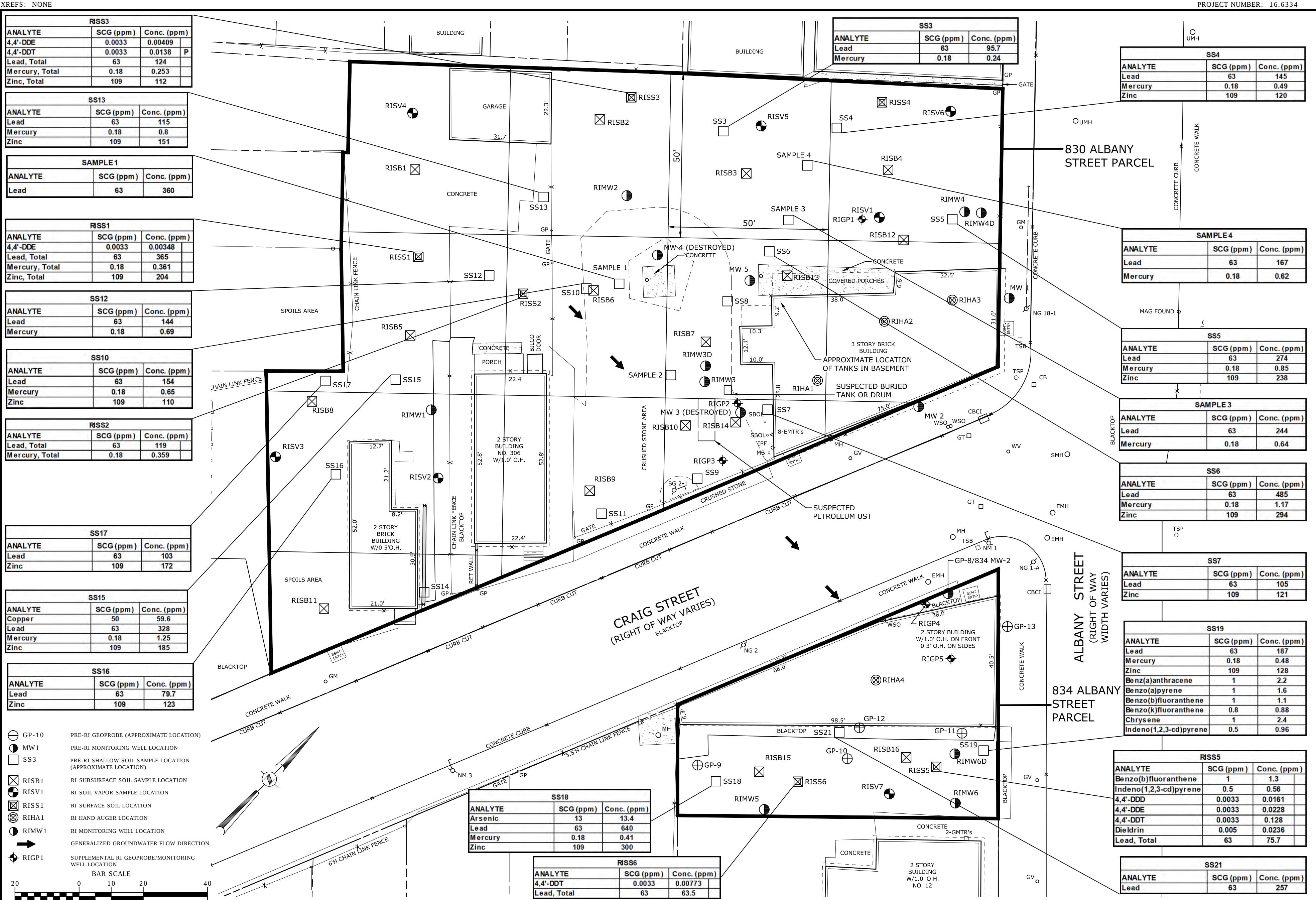
SHEET 2 OF 11

DWG. NO:18-578

CAD DWG. FILE NAME: K:\Projects\177266\Survey\Drawings and Maps\FIGURE DRAWINGS\FIGURE 3.dwg

FIGURE 3.dwg

CAD DWG. FILE NAME: K:\Projects\177266\Survey\Drawings and Maps\FIGURE 4.dwg



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LEGEND

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TSB

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UMH

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UV

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GP-10

●

MW1

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SS3

⊗

RISB1

⊗

RISV1

⊗

RISS1

⊗

RIHA1

⊗

RIMW1

TPVC=338.96

WLE=326.42

303

⊕

RIGP1
- CATCH BASIN

CATCH BASIN CURB INLET

CONCRETE BOLLARD

DRAINAGE MANHOLE

ELECTRIC MANHOLE

ELECTRIC METER

GAS MARKER

GAS METER

GAS TEST

GAS VALVE

GATE POST

HYDRANT

IRON PIPE FOUND

IRON ROD FOUND

MAIL BOX

METAL FENCE POST

SANITARY MANHOLE

STEEL BOLLARD

TELEPHONE MANHOLE

TRAFFIC SIGNAL BOX

TRAFFIC SIGNAL POLE

UTILITY MANHOLE

UNKNOWN UTILITY MANHOLE

UTILITY POLE

UTILITY POLE W/LIGHT

WATER SHUT-OFF

WATER VALVE

PRE-RI GEOPROBE (APPROXIMATE LOCATION)

PRE-RI MONITORING WELL LOCATION

PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)

RI SUBSURFACE SOIL SAMPLE LOCATION

RI SOIL VAPOR SAMPLE LOCATION

RI SURFACE SOIL LOCATION

RI HAND AUGER LOCATION

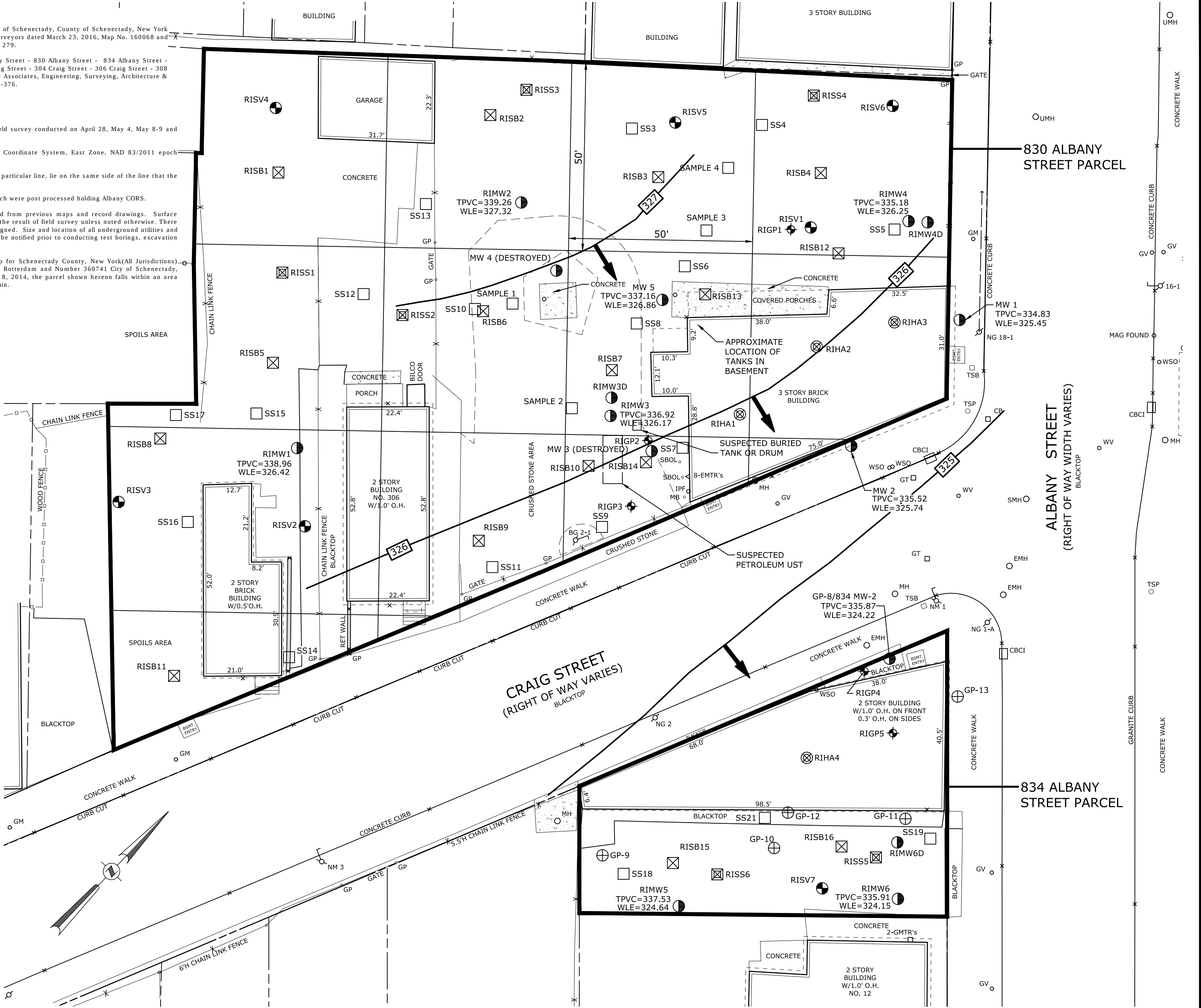
RI MONITORING WELL LOCATION

TOP OF PVC ELEVATION

WATER LEVEL ELEVATION

INFERRED GROUNDWATER CONTOUR
ARROW SHOWS DIRECTION OF FLOW

SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION



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3/29/19	2 FIELD LOCATION OF SAMPLE POINTS	MDD			
6/21/19	3 MISC REVISION TO GP-8/834 MW-2	MDD			
8/27/19	4 MISCELLANEOUS REVISIONS	MDD			
	5				
	6				
	7				
	8				
	9				

FIGURE 7: SHALLOW GROUNDWATER CONTOUR MAP 4/9/2019

830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

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SCHENECTADY COUNTY, NEW YORK

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LEGEND

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RISB1

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RISV1

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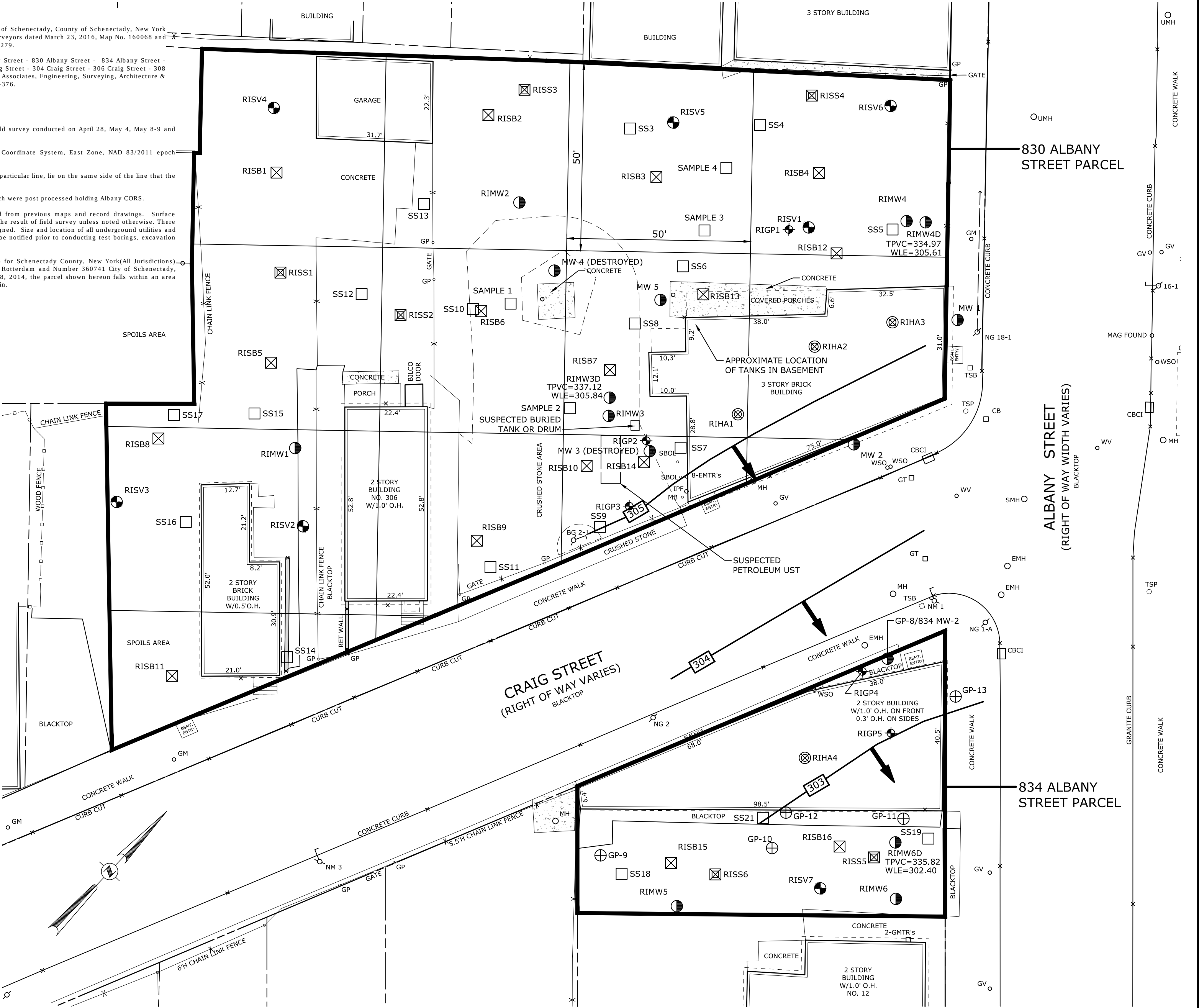
TPVC=338.96

WLE=326.42

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RIGP1
- CATCH BASIN
- CATCH BASIN CURB INLET
- CONCRETE BOLLARD
- DRAINAGE MANHOLE
- ELECTRIC MANHOLE
- ELECTRIC METER
- GAS MARKER
- GAS METER
- GAS TEST
- GAS VALVE
- GATE POST
- HYDRANT
- IRON PIPE FOUND
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- MAIL BOX
- METAL FENCE POST
- SANITARY MANHOLE
- STEEL BOLLARD
- TELEPHONE MANHOLE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- UTILITY MANHOLE
- UNKNOWN UTILITY MANHOLE
- UTILITY POLE
- UTILITY POLE W/LIGHT
- WATER SHUT-OFF
- WATER VALVE
- PRE-RI GEOPROBE (APPROXIMATE LOCATION)
- PRE-RI MONITORING WELL LOCATION
- PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)
- RI SUBSURFACE SOIL SAMPLE LOCATION
- RI SOIL VAPOR SAMPLE LOCATION
- RI SURFACE SOIL LOCATION
- RI HAND AUGER LOCATION
- RI MONITORING WELL LOCATION
- TOP OF PVC ELEVATION
- WATER LEVEL ELEVATION
- INFERRED GROUNDWATER CONTOUR
ARROW SHOWS DIRECTION OF FLOW
- SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION



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FIGURE 8: DEEP GROUNDWATER CONTOUR MAP 4/9/2019

830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

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TMH

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TSP

MH

UMH

UTILITY POLE

UTILITY POLE W/LIGHT

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SS3

RISB1

RISV1

RISS1

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RIMW1

TPVC= 338.96

WLE= 326.42

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RIGP1

CATCH BASIN

CATCH BASIN CURB INLET

CONCRETE BOLLARD

DRAINAGE MANHOLE

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UTILITY POLE W/LIGHT

WATER SHUT-OFF

WATER VALVE

PRE-RI GEOPROBE (APPROXIMATE LOCATION)

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RI SOIL VAPOR SAMPLE LOCATION

RI SURFACE SOIL LOCATION

RI HAND AUGER LOCATION

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TOP OF PVC ELEVATION

WATER LEVEL ELEVATION

INFERRED GROUNDWATER CONTOUR

ARROW SHOWS DIRECTION OF FLOW

SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION
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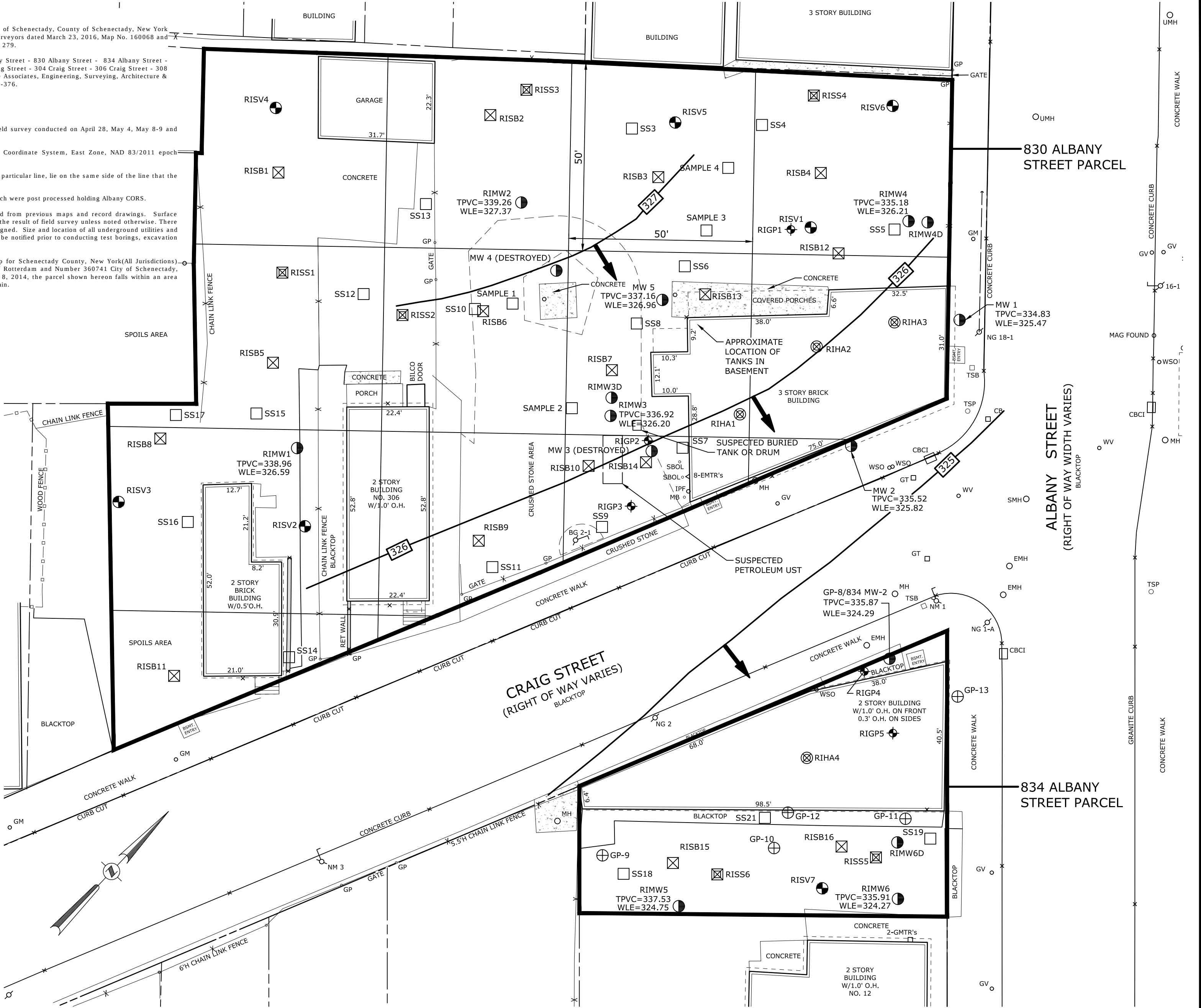
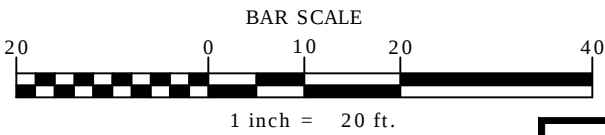


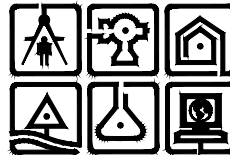
FIGURE 9: SHALLOW GROUNDWATER CONTOUR MAP 4/24/2019
830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

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LEGEND

- CB

CATCH BASIN
- CBCI

CATCH BASIN CURB INLET
- CBOL

CONCRETE BOLLARD
- DMH

DRAINAGE MANHOLE
- EMH

ELECTRIC MANHOLE
- △

EMTR

ELECTRIC METER
- GM

GAS MARKER
- GMTR

GAS METER
- GT

GAS TEST
- GV

GAS VALVE
- GP

GATE POST
- ⊕

HYD

HYDRANT
- IPF

IRON PIPE FOUND
- IRF

IRON ROD FOUND
- MB

MAIL BOX
- MFP

METAL FENCE POST
- SMH

SANITARY MANHOLE
- SBOL

STEEL BOLLARD
- TMH

TELEPHONE MANHOLE
- TSB

TRAFFIC SIGNAL BOX
- TSP

TRAFFIC SIGNAL POLE
- MH

UTILITY MANHOLE
- UMH

UNKNOWN UTILITY MANHOLE
- ⊕

UTILITY POLE
- ⊕

UTILITY POLE W/LIGHT
- WSO

WATER SHUT-OFF
- WV

WATER VALVE
- ⊕

GP-10

PRE-RI GEOPROBE (APPROXIMATE LOCATION)
- MW1

PRE-RI MONITORING WELL LOCATION
- SS3

PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)
- ⊗

RISB1

RI SUBSURFACE SOIL SAMPLE LOCATION
- ⊗

RISV1

RI SOIL VAPOR SAMPLE LOCATION
- ⊗

RISS1

RI SURFACE SOIL LOCATION
- ⊗

RIHA1

RI HAND AUGER LOCATION
- RIMW1

RI MONITORING WELL LOCATION
- TPVC=338.96

TOP OF PVC ELEVATION
- WLE=326.42

WATER LEVEL ELEVATION
- 303

INFERRED GROUNDWATER CONTOUR
ARROW SHOWS DIRECTION OF FLOW
- ⊕

RIGP1

SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION

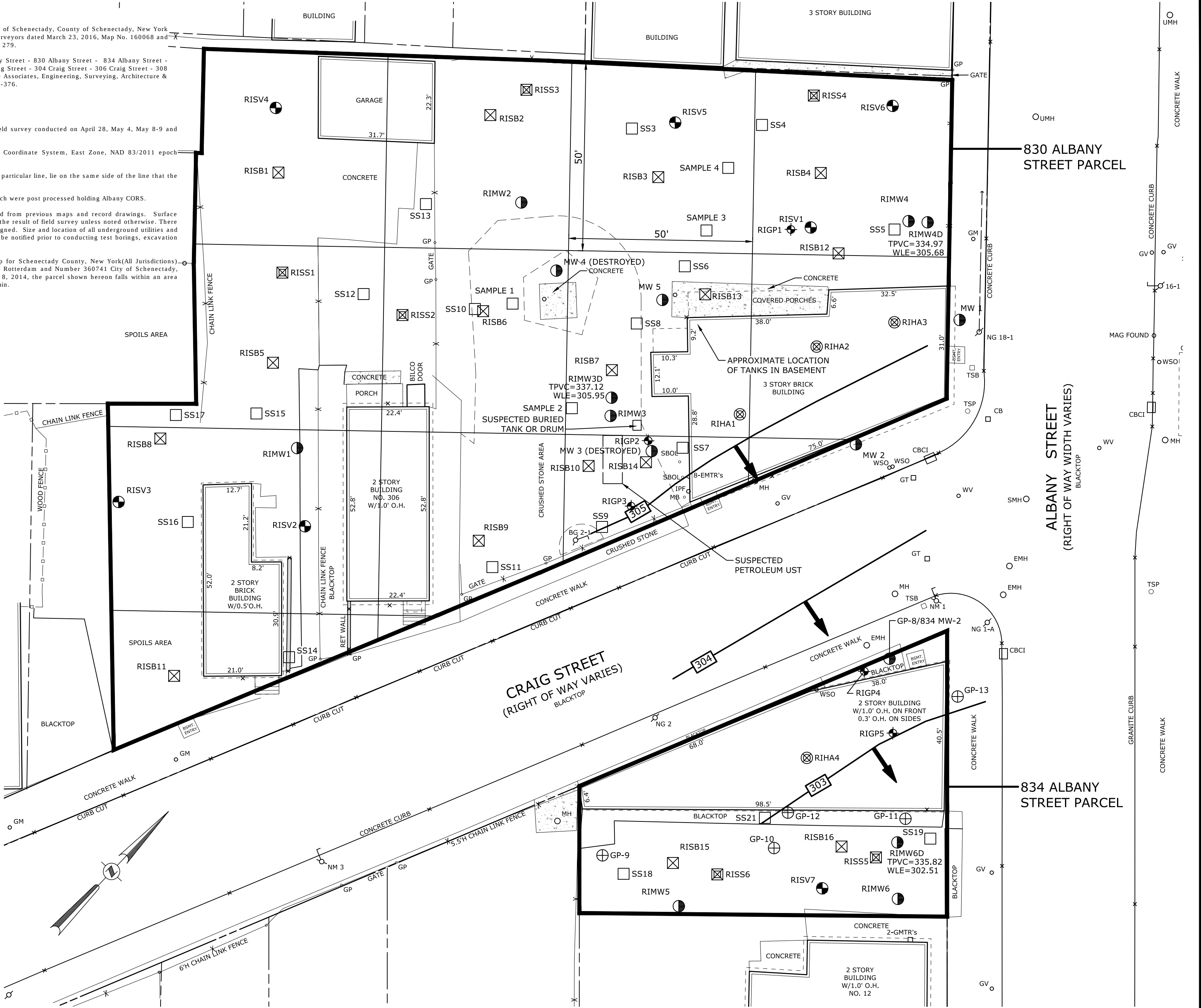


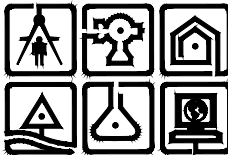
FIGURE 10: DEEP GROUNDWATER CONTOUR MAP 4/24/2019
830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

CITY OF SCHENECTADY SCHENECTADY COUNTY, NEW YORK

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50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299



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	6				DRAFTED : GLB
	7				CHECKED : JAM
	8				PROJ. NO : 16.6334
	9				SCALE : 1" = 20'
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LEGEND

- CB

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CBCI

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CBOL

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DMH

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GP-10

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MW1

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SS3

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RISB1

⊗

RISV1

⊗

RISS1

⊗

RIHA1

⊗

RIMW1

TPVC=338.96

WLE=326.42

303

⊕

RIGP1
- CATCH BASIN

CATCH BASIN CURB INLET

CONCRETE BOLLARD

DRAINAGE MANHOLE

ELECTRIC MANHOLE

ELECTRIC METER

GAS MARKER

GAS METER

GAS TEST

GAS VALVE

GATE POST

HYDRANT

IRON PIPE FOUND

IRON ROD FOUND

MAIL BOX

METAL FENCE POST

SANITARY MANHOLE

STEEL BOLLARD

TELEPHONE MANHOLE

TRAFFIC SIGNAL BOX

TRAFFIC SIGNAL POLE

UTILITY MANHOLE

UNKNOWN UTILITY MANHOLE

UTILITY POLE

UTILITY POLE W/LIGHT

WATER SHUT-OFF

WATER VALVE

PRE-RI GEOPROBE (APPROXIMATE LOCATION)

PRE-RI MONITORING WELL LOCATION

PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)

RI SUBSURFACE SOIL SAMPLE LOCATION

RI SOIL VAPOR SAMPLE LOCATION

RI SURFACE SOIL LOCATION

RI HAND AUGER LOCATION

RI MONITORING WELL LOCATION

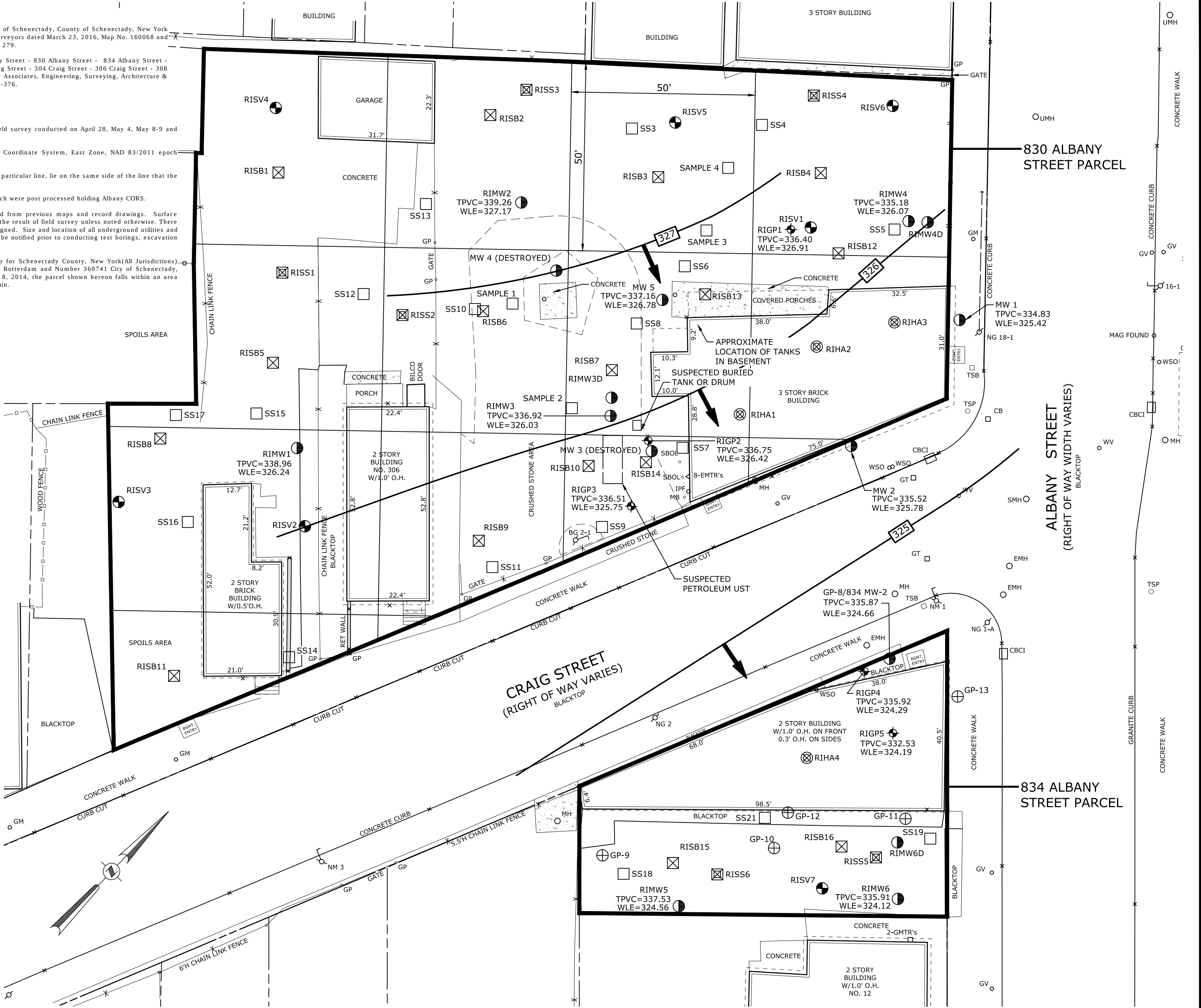
TOP OF PVC ELEVATION

WATER LEVEL ELEVATION

INFERRED GROUNDWATER CONTOUR

ARROW SHOWS DIRECTION OF FLOW

SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION



CAD DWG. FILE NAME: K:\Projects\177266(Survey)\Drawings and Maps\FIGURE DRAWINGS\FIGURE 11.dwg

CAD DWG. FILE NAME: FIGURE 11.dwg

FIGURE 11: SHALLOW GROUNDWATER CONTOUR MAP 7/23/2019
830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

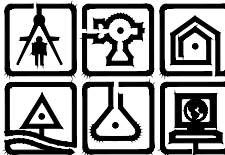
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WV

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GP-10

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MW1

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RISV1

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RIMW1

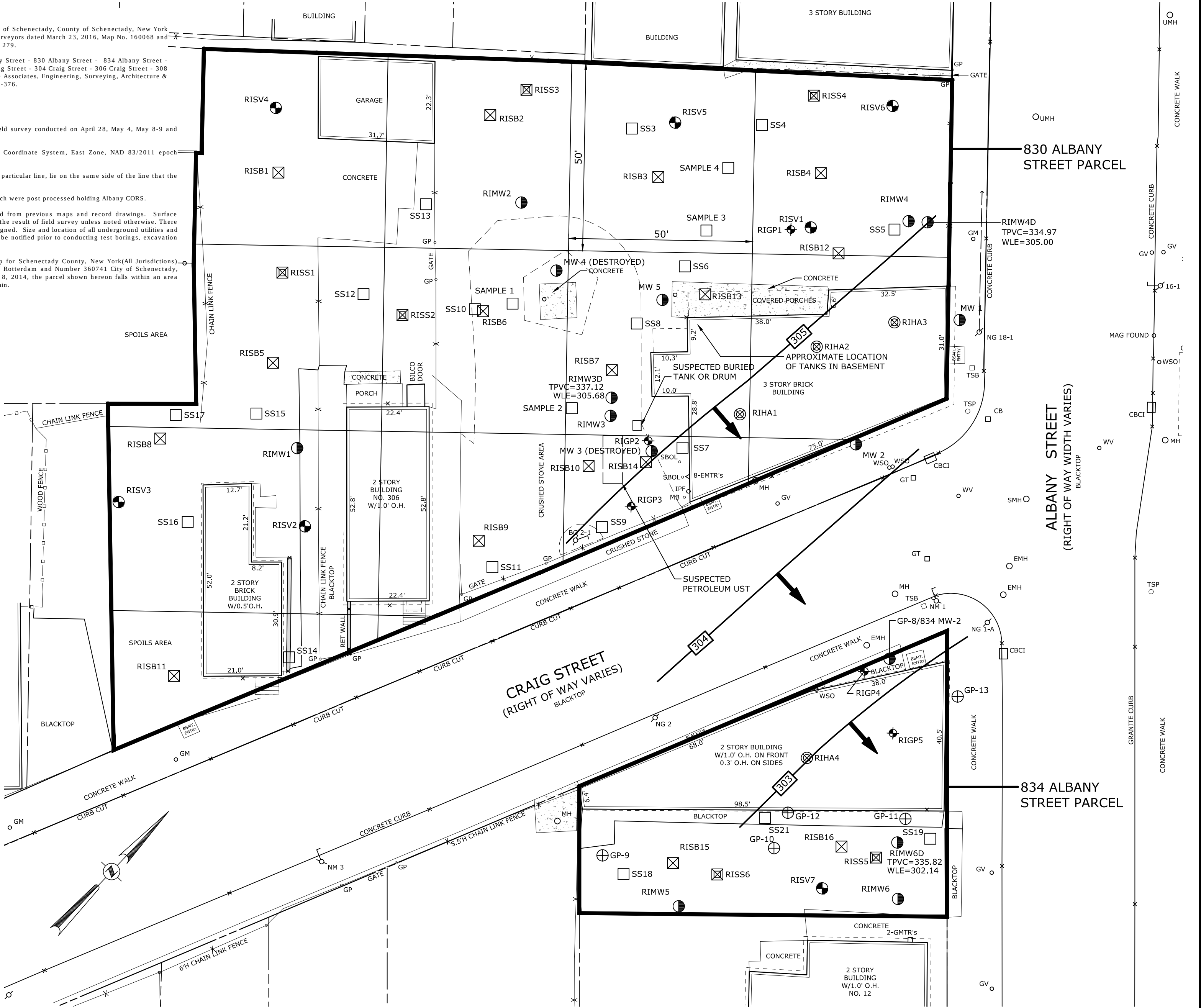
TPVC=338.96

WLE=326.42

303

⊕

RIGP1
- CATCH BASIN
- CATCH BASIN CURB INLET
- CONCRETE BOLLARD
- DRAINAGE MANHOLE
- ELECTRIC MANHOLE
- ELECTRIC METER
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- GAS METER
- GAS TEST
- GAS VALVE
- GATE POST
- HYDRANT
- IRON PIPE FOUND
- IRON ROD FOUND
- MAIL BOX
- METAL FENCE POST
- SANITARY MANHOLE
- STEEL BOLLARD
- TELEPHONE MANHOLE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- UTILITY MANHOLE
- UNKNOWN UTILITY MANHOLE
- UTILITY POLE
- UTILITY POLE W/LIGHT
- WATER SHUT-OFF
- WATER VALVE
- PRE-RI GEOPROBE (APPROXIMATE LOCATION)
- PRE-RI MONITORING WELL LOCATION
- PRE-RI SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)
- RI SUBSURFACE SOIL SAMPLE LOCATION
- RI SOIL VAPOR SAMPLE LOCATION
- RI SURFACE SOIL LOCATION
- RI HAND AUGER LOCATION
- RI MONITORING WELL LOCATION
- TOP OF PVC ELEVATION
- WATER LEVEL ELEVATION
- INFERRED GROUNDWATER CONTOUR
ARROW SHOWS DIRECTION OF FLOW
- SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION



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FIGURE 12: DEEP GROUNDWATER CONTOUR MAP 7/23/2019

830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

CITY OF SCHENECTADY

SCHENECTADY COUNTY, NEW YORK

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APPENDIX B
TABLES

TABLE 1: RI SURFACE SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RISS1				RISS2				RISS3				FD01_190327 (RISS3)			
			L1912447-01				L1912447-02				L1912447-03				L1912447-05			
			3/27/2019				3/27/2019				3/27/2019				3/27/2019			
			SOIL				SOIL				SOIL				SOIL			
		NY-UNRES ⁽¹⁾																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY EPA 5035																		
Tetrachloroethene	127-18-4	1.3	ND		0.00075	0.00029	ND		0.00059	0.00023	0.0062		0.00054	0.00021	0.0032		0.00063	0.00025
Trichlorofluoromethane	75-69-4	NA	ND		0.006	0.001	ND		0.0047	0.00082	ND		0.0043	0.00076	ND		0.0051	0.00088
Total VOCs		NA	-	-	-	-	-	-	-	-	0.0062	-	-	-	0.0032	-	-	-
VOLATILE ORGANICS BY EPA 5035-TIC																		
Unknown		NA	0.00811	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-		-	-	-	-	-	-	0.00513	J	0	0	-	-	-	-
Unknown		NA	-		-	-	-	-	-	-	0.007	J	0	0	-	-	-	-
Unknown		NA	-		-	-	-	-	-	-	0.0047	J	0	0	-	-	-	-
Unknown Alkane		NA	-		-	-	-	-	-	-	0.00356	J	0	0	-	-	-	-
Unknown Alkene		NA	-		-	-	-	-	-	-	0.0251	J	0	0	-	-	-	-
Unknown Alkene		NA	-		-	-	-	-	-	-	0.0066	J	0	0	-	-	-	-
Total TIC Compounds		NA	0.00811	J	0	0	-	-	-	-	0.0521	J	0	0	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS																		
2-Methylnaphthalene	91-57-6	NA	0.038	J	0.26	0.026	ND		0.24	0.024	ND		1.1	0.12	ND		1.1	0.11
Acenaphthene	83-32-9	20	0.058	J	0.17	0.022	ND		0.16	0.02	ND		0.76	0.099	ND		0.75	0.098
Anthracene	120-12-7	100	0.1	J	0.13	0.042	ND		0.12	0.038	ND		0.57	0.19	ND		0.57	0.18
Benzo(a)anthracene	56-55-3	1	0.6		0.13	0.024	0.046	J	0.12	0.022	0.63		0.57	0.11	0.59		0.57	0.11
Benzo(a)pyrene	50-32-8	1	0.53		0.17	0.052	ND		0.16	0.048	0.6	J	0.76	0.23	0.54	J	0.75	0.23
Benzo(b)fluoranthene	205-99-2	1	0.75		0.13	0.036	0.07	J	0.12	0.033	0.84		0.57	0.16	0.78		0.57	0.16
Benzo(ghi)perylene	191-24-2	100	0.33		0.17	0.025	0.036	J	0.16	0.023	0.37	J	0.76	0.11	0.34	J	0.75	0.11
Benzo(k)fluoranthene	207-08-9	0.8	0.27		0.13	0.034	ND		0.12	0.031	0.34	J	0.57	0.15	0.27	J	0.57	0.15
Bis(2-ethylhexyl)phthalate	117-81-7	NA	0.32		0.21	0.074	ND		0.2	0.068	ND		0.96	0.33	ND		0.94	0.33
Carbazole	86-74-8	NA	0.085	J	0.21	0.021	ND		0.2	0.019	ND		0.96	0.093	ND		0.94	0.092
Chrysene	218-01-9	1	0.67		0.13	0.022	0.053	J	0.12	0.02	0.73		0.57	0.099	0.69		0.57	0.098
Di-n-butylphthalate	84-74-2	NA	0.07	J	0.21	0.041	ND		0.2	0.037	ND		0.96	0.18	0.3	J	0.94	0.18
Dibenzo(a,h)anthracene	53-70-3	0.33	0.079	J	0.13	0.025	ND		0.12	0.023	ND		0.57	0.11	ND		0.57	0.11
Dibenzofuran	132-64-9	7	0.046	J	0.21	0.02	ND		0.2	0.019	ND		0.96	0.09	ND		0.94	0.089
Fluoranthene	206-44-0	100	1.2		0.13	0.025	0.069	J	0.12	0.023	1.2		0.57	0.11	1.2		0.57	0.11
Fluorene	86-73-7	30	0.055	J	0.21	0.021	ND		0.2	0.019	ND		0.96	0.093	ND		0.94	0.092
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.34		0.17	0.03	0.036	J	0.16	0.027	0.38	J	0.76	0.13	0.35	J	0.75	0.13
Naphthalene	91-20-3	12	0.049	J	0.21	0.026	ND		0.2	0.024	ND		0.96	0.12	ND		0.94	0.11
Phenanthrene	85-01-8	100	0.83		0.13	0.026	0.029	J	0.12	0.024	0.5	J	0.57	0.12	0.53	J	0.57	0.11
Pyrene	129-00-0	100	1		0.13	0.021	0.061	J	0.12	0.02	0.94		0.57	0.095	0.92		0.57	0.094
Total SVOCs		NA	7.42	-	-	-	0.4	-	-	-	6.53	-	-	-	6.51	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																		
Unknown		NA	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	0.33	J	0	0	1.44	J	0	0	-		-	-	-	-	-	-
Unknown		NA	0.186	J	0	0	0.998	J	0	0	-		-	-	-	-	-	-
Unknown Ketone		NA	-		-	-	-	-	-	-	-		-	-	-	-	-	-
Unknown Organic Acid		NA	-		-	-	-	-	-	-	-		-	-	-	-	-	-
Unknown PAH		NA	0.183	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	0.274	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-	-	-	-
Unknown PAH		NA	0.357	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	1.33	J	0	0	2.44	J	0	0	-		-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																		
4,4'-DDD	72-54-8	0.0033	ND		0.00197	0.000701	ND		0.00186	0.000664	ND		0.00184	0.000654	ND		0.00185	0.000658
4,4'-DDE	72-55-9	0.0033	0.00348		0.00197	0.000455	0.00106	J	0.00186	0.00043	0.00409		0.00184	0.000424	0.003		0.00185	0.000427
4,4'-DDT	50-29-3	0.0033	0.00192	JIP	0.00369	0.00158	ND		0.00349	0.0015	0.0138	P	0.00344	0.00148	0.00972		0.00346	0.00148
Chlordane	57-74-9	NA	ND		0.016	0.00651	ND		0.0151	0.00616	0.118		0.0149	0.00608	0.108		0.015	0.00612
cis-Chlordane	5103-71-9	0.094	0.000714	JIP	0.00246	0.000685	ND		0.00232	0.000648	0.0282	P	0.00229	0.000639	0.0162	IP	0.00231	0.000643
Delta-BHC	319-86-8	0.04	ND		0.00197	0.000385	ND		0.00186	0.000364	0.000678	J	0.00184	0.000359	ND		0.00185	0.000362
Dieldrin	60-57-1	0.005	ND		0.00123	0.000614	ND		0.00116	0.000581	0.00367	IP	0.00115	0.000573	0.00358	IP	0.00115	0.000577

TABLE 1: RI SURFACE SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RISS1				RISS2				RISS3				FD01_190327 (RISS3)			
			L1912447-01				L1912447-02				L1912447-03				L1912447-05			
			3/27/2019				3/27/2019				3/27/2019				3/27/2019			
			SOIL				SOIL				SOIL				SOIL			
		NY-UNRES ⁽¹⁾																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Heptachlor	76-44-8	0.042	ND		0.000983	0.000441	ND		0.00093	0.000417	ND		0.000918	0.000411	ND		0.000923	0.000414
Heptachlor epoxide	1024-57-3	NA	ND		0.00369	0.00111	ND		0.00349	0.00105	0.002	JIP	0.00344	0.00103	0.00179	JIP	0.00346	0.00104
trans-Chlordane	5103-74-2	NA	0.000814	JIP	0.00246	0.000649	0.000989	JIP	0.00232	0.000614	0.0184	P	0.00229	0.000606	0.0119	IP	0.00231	0.000609
POLYCHLORINATED BIPHENYLS BY GC																		
Aroclor 1254	11097-69-1	0.1	0.0162	J	0.0409	0.00447	0.0421		0.0377	0.00412	ND		0.0391	0.00427	ND		0.0384	0.0042
Aroclor 1260	11096-82-5	0.1	0.015	J	0.0409	0.00756	ND		0.0377	0.00697	ND		0.0391	0.00722	ND		0.0384	0.0071
Aroclor 1268	11100-14-4	0.1	ND		0.0409	0.00424	ND		0.0377	0.0039	0.0288	J	0.0391	0.00405	0.0253	J	0.0384	0.00398
PCBs, Total	1336-36-3	0.1	0.0312	J	0.0409	0.00363	0.0421		0.0377	0.00335	0.0288	J	0.0391	0.00347	0.0253	J	0.0384	0.00341
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	3880		9.76	2.64	3190		9.1	2.46	3070		9.05	2.44	3900		8.98	2.42
Antimony, Total	7440-36-0	NA	1.25	J	4.88	0.371	0.801	J	4.55	0.346	0.552	J	4.52	0.344	0.916	J	4.49	0.341
Arsenic, Total	7440-38-2	13	4.92		0.976	0.203	3.23		0.91	0.189	4.48		0.905	0.188	4.5		0.898	0.187
Barium, Total	7440-39-3	350	81.9		0.976	0.17	38.8		0.91	0.158	62.3		0.905	0.157	57.4		0.898	0.156
Beryllium, Total	7440-41-7	7.2	0.244	J	0.488	0.032	0.164	J	0.455	0.03	0.118	J	0.452	0.03	0.153	J	0.449	0.03
Cadmium, Total	7440-43-9	2.5	0.547	J	0.976	0.096	ND		0.91	0.089	0.534	J	0.905	0.089	0.61	J	0.898	0.088
Calcium, Total	7440-70-2	NA	7570		9.76	3.42	3420		9.1	3.19	66500		90.5	31.7	30900		8.98	3.14
Chromium, Total	7440-47-3	30	8.67		0.976	0.094	5.21		0.91	0.087	7.13		0.905	0.087	8.21		0.898	0.086
Cobalt, Total	7440-48-4	NA	3.43		1.95	0.162	3.09		1.82	0.151	3.41		1.81	0.15	3.81		1.8	0.149
Copper, Total	7440-50-8	50	34.6		0.976	0.252	15.7		0.91	0.235	18.2		0.905	0.233	21.1		0.898	0.232
Iron, Total	7439-89-6	NA	9000		4.88	0.882	8730		4.55	0.822	9890		4.52	0.817	11300		4.49	0.811
Lead, Total	7439-92-1	63	365		4.88	0.262	119		4.55	0.244	116		4.52	0.242	124		4.49	0.241
Magnesium, Total	7439-95-4	NA	3200		9.76	1.5	1230		9.1	1.4	24900		9.05	1.39	12800		8.98	1.38
Manganese, Total	7439-96-5	1600	201		0.976	0.155	182		0.91	0.145	228		0.905	0.144	204		0.898	0.143
Mercury, Total	7439-97-6	0.18	0.361		0.081	0.017	0.359		0.075	0.016	0.253		0.074	0.016	0.166		0.074	0.016
Nickel, Total	7440-02-0	30	9.78		2.44	0.236	6.46		2.28	0.22	9.26		2.26	0.219	11.8		2.24	0.217
Potassium, Total	7440-09-7	NA	254		244	14.1	225	J	228	13.1	355		226	13	433		224	12.9
Selenium, Total	7782-49-2	3.9	0.957	J	1.95	0.252	0.401	J	1.82	0.235	0.733	J	1.81	0.233	0.808	J	1.8	0.232
Sodium, Total	7440-23-5	NA	43.8	J	195	3.08	21.7	J	182	2.87	68.4	J	181	2.85	58.8	J	180	2.83
Vanadium, Total	7440-62-2	NA	13.6		0.976	0.198	11.1		0.91	0.185	14.8		0.905	0.184	14		0.898	0.182
Zinc, Total	7440-66-6	109	204		4.88	0.286	105		4.55	0.267	110		4.52	0.265	112		4.49	0.263
GENERAL CHEMISTRY																		
Solids, Total	NONE	NA	77		0.1	NA	84.1		0.1	NA	84.7		0.1	NA	86.2		0.1	NA
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION		(ug/kg)																
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NETFOSAA)	2991-50-6	NA	0.135	J	1.01	0.091	-		-	-	0.207	J	0.996	0.09	0.148	J	1	0.09
Perfluorobutanoic Acid (PFBA)	375-22-4	NA	0.208	J	1.01	0.022	-		-	-	0.162	J	0.996	0.021	0.103	J	1	0.021
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	NA	0.099	J	1.01	0.098	-		-	-	ND		0.996	0.097	ND		1	0.097
Perfluorodecanoic Acid (PFDA)	335-76-2	NA	0.244	J	1.01	0.073	-		-	-	0.157	J	0.996	0.072	0.118	J	1	0.072
Perfluorododecanoic Acid (PFDoA)	307-55-1	NA	0.106	J	1.01	0.087	-		-	-	ND		0.996	0.086	ND		1	0.086
Perfluoroheptanoic Acid (PFHpA)	375-85-9	NA	0.121	J	1.01	0.065	-		-	-	0.08	J	0.996	0.064	ND		1	0.064
Perfluorohexanoic Acid (PFHxA)	307-24-4	NA	0.102	J	1.01	0.065	-		-	-	0.075	J	0.996	0.064	ND		1	0.064
Perfluorononanoic Acid (PFNA)	375-95-1	NA	0.272	J	1.01	0.084	-		-	-	0.146	J	0.996	0.083	0.101	J	1	0.083
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	NA	2.85		1.01	0.122	-		-	-	2.19		0.996	0.12	1.84		1	0.121
Perfluorooctanoic Acid (PFOA)	335-67-1	NA	0.516	J	1.01	0.042	-		-	-	0.311	J	0.996	0.041	0.208	J	1	0.041
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NA	0.102	J	1.01	0.011	-		-	-	0.106	J	0.996	0.01	0.072	J	1	0.01
Perfluorotridecanoic Acid (PFTTrDA)	72629-94-8	NA	0.066	J	1.01	0.063	-		-	-	ND		0.996	0.062	ND		1	0.062
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	NA	0.148	J	1.01	0.057	-		-	-	0.11	J	0.996	0.056	0.078	J	1	0.056
PFOA/PFOS, Total		NA	3.37	J	1.01	0.042	-		-	-	2.5	J	0.996	0.041	2.05	J	1	0.041

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

NA denotes Not Applicable.

Qualifiers in parantheses are from the data validator

TABLE 1: RI SURFACE SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RISS4				RISS5				RISS6			
			L1912447-04				L1912447-08				L1912447-09			
			3/27/2019				3/28/2019				3/28/2019			
			SOIL				SOIL				SOIL			
		NY-UNRES ⁽¹⁾												
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY EPA 5035														
Tetrachloroethene	127-18-4	1.3	ND		0.00057	0.00022	ND		0.00065	0.00026	ND		0.00048	0.00019
Trichlorofluoromethane	75-69-4	NA	ND		0.0045	0.00079	0.0096		0.0052	0.00091	0.001	J	0.0038	0.00066
Total VOCs		NA	-	-	-	-	0.0096	-	-	-	0.001	-	-	-
VOLATILE ORGANICS BY EPA 5035-TIC														
Unknown		NA	-	-	-	-	-	-	-	-	0.00217	J	0	0
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkene		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkene		NA	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	-	-	-	-	-	-	-	-	0.00217	J	0	0
SEMIVOLATILE ORGANICS BY GC/MS														
2-Methylnaphthalene	91-57-6	NA	ND		0.22	0.022	ND		0.45	0.045	ND		0.22	0.022
Acenaphthene	83-32-9	20	ND		0.15	0.019	0.072	J	0.3	0.039	ND		0.15	0.019
Anthracene	120-12-7	100	ND		0.11	0.036	0.2	J	0.22	0.073	ND		0.11	0.036
Benzo(a)anthracene	56-55-3	1	0.22		0.11	0.021	0.98		0.22	0.042	0.16		0.11	0.021
Benzo(a)pyrene	50-32-8	1	0.22		0.15	0.045	0.86		0.3	0.091	0.16		0.15	0.045
Benzo(b)fluoranthene	205-99-2	1	0.34		0.11	0.031	1.3		0.22	0.063	0.21		0.11	0.031
Benzo(ghi)perylene	191-24-2	100	0.13	J	0.15	0.022	0.55		0.3	0.044	0.11	J	0.15	0.022
Benzo(k)fluoranthene	207-08-9	0.8	0.094	J	0.11	0.029	0.38		0.22	0.06	0.086	J	0.11	0.03
Bis(2-ethylhexyl)phthalate	117-81-7	NA	ND		0.18	0.063	0.33	J	0.37	0.13	ND		0.18	0.064
Carbazole	86-74-8	NA	ND		0.18	0.018	0.12	J	0.37	0.036	0.018	J	0.18	0.018
Chrysene	218-01-9	1	0.24		0.11	0.019	0.97		0.22	0.039	0.18		0.11	0.019
Di-n-butylphthalate	84-74-2	NA	ND		0.18	0.035	ND		0.37	0.071	ND		0.18	0.035
Dibenzo(a,h)anthracene	53-70-3	0.33	0.028	J	0.11	0.021	0.12	J	0.22	0.043	0.023	J	0.11	0.021
Dibenzofuran	132-64-9	7	ND		0.18	0.017	0.042	J	0.37	0.035	ND		0.18	0.017
Fluoranthene	206-44-0	100	0.44		0.11	0.021	1.9		0.22	0.043	0.26		0.11	0.021
Fluorene	86-73-7	30	ND		0.18	0.018	0.088	J	0.37	0.036	ND		0.18	0.018
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.13	J	0.15	0.026	0.56		0.3	0.052	0.11	J	0.15	0.026
Naphthalene	91-20-3	12	ND		0.18	0.022	ND		0.37	0.045	ND		0.18	0.022
Phenanthrene	85-01-8	100	0.16		0.11	0.022	0.94		0.22	0.045	0.12		0.11	0.022
Pyrene	129-00-0	100	0.34		0.11	0.018	1.5		0.22	0.037	0.22		0.11	0.018
Total SVOCs		NA	2.342	-	-	-	10.912	-	-	-	1.657	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC														
Unknown		NA	-	-	-	-	-	-	-	-	0.182	J	0	0
Unknown		NA	0.45	J	0	0	0.379	J	0	0	0.596	J	0	0
Unknown		NA	0.386	J	0	0	0.34	J	0	0	0.358	J	0	0
Unknown Ketone		NA	-	-	-	-	-	-	-	-	0.17	J	0	0
Unknown Organic Acid		NA	-	-	-	-	-	-	-	-	0.173	J	0	0
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.636	J	0	0	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	0.836	J	0	0	1.36	J	0	0	1.48	J	0	0
ORGANOCHLORINE PESTICIDES BY GC														
4,4'-DDD	72-54-8	0.0033	ND		0.00172	0.000613	0.0161		0.00178	0.000635	ND		0.00179	0.000638
4,4'-DDE	72-55-9	0.0033	0.000502	JIP	0.00172	0.000397	0.0228		0.00178	0.000412	0.00136	JIP	0.00179	0.000413
4,4'-DDT	50-29-3	0.0033	ND		0.00322	0.00138	0.128		0.00334	0.00143	0.00773		0.00335	0.00144
Chlordane	57-74-9	NA	ND		0.014	0.00569	0.105		0.0145	0.0059	ND		0.0145	0.00592
cis-Chlordane	5103-71-9	0.094	ND		0.00215	0.000598	0.0112	IP	0.00223	0.00062	0.00105	JIP	0.00223	0.000623
Delta-BHC	319-86-8	0.04	ND		0.00172	0.000336	ND		0.00178	0.000349	ND		0.00179	0.00035
Dieldrin	60-57-1	0.005	ND		0.00107	0.000537	0.0236		0.00111	0.000557	0.00176	IP	0.00112	0.000559

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830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RISS4				RISS5				RISS6			
			L1912447-04				L1912447-08				L1912447-09			
			3/27/2019				3/28/2019				3/28/2019			
			SOIL				SOIL				SOIL			
		NY-UNRES ⁽¹⁾												
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Heptachlor	76-44-8	0.042	ND		0.000859	0.000385	0.00159		0.000891	0.000399	ND		0.000894	0.000401
Heptachlor epoxide	1024-57-3	NA	ND		0.00322	0.000966	ND		0.00334	0.001	ND		0.00335	0.001
trans-Chlordane	5103-74-2	NA	ND		0.00215	0.000567	0.0161		0.00223	0.000588	0.000961	JIP	0.00223	0.00059
POLYCHLORINATED BIPHENYLS BY GC														
Aroclor 1254	11097-69-1	0.1	ND		0.0352	0.00385	ND		0.0359	0.00392	0.00481	J	0.0363	0.00397
Aroclor 1260	11096-82-5	0.1	ND		0.0352	0.0065	ND		0.0359	0.00663	0.00701	J	0.0363	0.00671
Aroclor 1268	11100-14-4	0.1	ND		0.0352	0.00364	ND		0.0359	0.00372	ND		0.0363	0.00376
PCBs, Total	1336-36-3	0.1	ND		0.0352	0.00312	ND		0.0359	0.00319	0.0118	J	0.0363	0.00322
TOTAL METALS														
Aluminum, Total	7429-90-5	NA	4000		8.68	2.34	6400		8.68	2.34	6300		8.9	2.4
Antimony, Total	7440-36-0	NA	0.582	J	4.34	0.33	0.599	J	4.34	0.33	0.943	J	4.45	0.338
Arsenic, Total	7440-38-2	13	2.6		0.868	0.181	4.61		0.868	0.18	4.84		0.89	0.185
Barium, Total	7440-39-3	350	18.2		0.868	0.151	82		0.868	0.151	46		0.89	0.155
Beryllium, Total	7440-41-7	7.2	0.217	J	0.434	0.029	0.191	J	0.434	0.029	0.258	J	0.445	0.029
Cadmium, Total	7440-43-9	2.5	ND		0.868	0.085	ND		0.868	0.085	ND		0.89	0.087
Calcium, Total	7440-70-2	NA	1190		8.68	3.04	91800		86.8	30.4	12900		8.9	3.11
Chromium, Total	7440-47-3	30	5.03		0.868	0.083	10.6		0.868	0.083	11		0.89	0.085
Cobalt, Total	7440-48-4	NA	3.07		1.74	0.144	4.44		1.74	0.144	6		1.78	0.148
Copper, Total	7440-50-8	50	8.14		0.868	0.224	17		0.868	0.224	20.1		0.89	0.23
Iron, Total	7439-89-6	NA	9010		4.34	0.784	12200		4.34	0.784	15200		4.45	0.803
Lead, Total	7439-92-1	63	58.2		4.34	0.233	75.7		4.34	0.233	63.5		4.45	0.238
Magnesium, Total	7439-95-4	NA	1300		8.68	1.34	11300		8.68	1.34	4490		8.9	1.37
Manganese, Total	7439-96-5	1600	144		0.868	0.138	276		0.868	0.138	335		0.89	0.141
Mercury, Total	7439-97-6	0.18	0.173		0.07	0.015	0.089		0.073	0.015	0.059	J	0.071	0.015
Nickel, Total	7440-02-0	30	6.37		2.17	0.21	10.5		2.17	0.21	12.6		2.22	0.215
Potassium, Total	7440-09-7	NA	223		217	12.5	687		217	12.5	485		222	12.8
Selenium, Total	7782-49-2	3.9	0.417	J	1.74	0.224	0.72	J	1.74	0.224	0.694	J	1.78	0.23
Sodium, Total	7440-23-5	NA	18.9	J	174	2.74	259		174	2.73	43.5	J	178	2.8
Vanadium, Total	7440-62-2	NA	11.2		0.868	0.176	16.3		0.868	0.176	13.9		0.89	0.181
Zinc, Total	7440-66-6	109	48.5		4.34	0.254	104		4.34	0.254	68.3		4.45	0.261
GENERAL CHEMISTRY														
Solids, Total	NONE	NA	90.3		0.1	NA	87.2		0.1	NA	88.5		0.1	NA
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION		(ug/kg)												
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NA	-		-	-	-		-	-	ND		0.859	0.077
Perfluorobutanoic Acid (PFBA)	375-22-4	NA	-		-	-	-		-	-	0.081	J	0.859	0.018
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	NA	-		-	-	-		-	-	ND		0.859	0.083
Perfluorodecanoic Acid (PFDA)	335-76-2	NA	-		-	-	-		-	-	0.104	J	0.859	0.062
Perfluorododecanoic Acid (PFDoA)	307-55-1	NA	-		-	-	-		-	-	ND		0.859	0.074
Perfluoroheptanoic Acid (PFHpA)	375-85-9	NA	-		-	-	-		-	-	0.093	J	0.859	0.055
Perfluorohexanoic Acid (PFHxA)	307-24-4	NA	-		-	-	-		-	-	0.067	J	0.859	0.055
Perfluorononanoic Acid (PFNA)	375-95-1	NA	-		-	-	-		-	-	0.085	J	0.859	0.071
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	NA	-		-	-	-		-	-	1.12		0.859	0.104
Perfluorooctanoic Acid (PFOA)	335-67-1	NA	-		-	-	-		-	-	0.273	J	0.859	0.035
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NA	-		-	-	-		-	-	0.079	J	0.859	0.009
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	NA	-		-	-	-		-	-	ND		0.859	0.053
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	NA	-		-	-	-		-	-	ND		0.859	0.048
PFOA/PFOS, Total		NA	-		-	-	-		-	-	1.39	J	0.859	0.035

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable.
Qualifiers in parantheses are from the data validator

TABLE 2: PREVIOUS INVESTIGATION SURFACE SOIL ANALYTICAL RESULTS SUMMARY Data Not Validated

830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

PARAMETER	UNRESTRICTED USE SCOs ⁽¹⁾	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4
		(9/11/2015)	(9/11/2015)	(9/11/2015)	(9/11/2015)
Metals, Total					
Arsenic	13	3.9	2.7	4.9	4.8
Barium	350	114	24.3	116	71.9
Cadmium	2.5	0.69	ND	0.37	ND
Chromium	30	8.53	6.87	12.5	10.7
Lead	63	360	15.6	244	167
Mercury	0.18	0.18	ND	0.64	0.62
Semi-Volatile Organic Compounds					
Benz(a)anthracene	1	ND	ND	0.28	0.27
Benzo(a)pyrene	1	ND	ND	0.27	0.28
Benzo(b)fluoranthene	1	ND	ND	0.33	0.31
Benzo(ghi)perylene	100	ND	ND	0.35	0.34
Benzo(k)fluoranthene	0.8	ND	ND	0.3	0.29
Chrysene	1	ND	ND	0.32	0.3
Fluoranthene	100	ND	ND	0.63	0.51
Indeno(1,2,3-cd)pyrene	0.5	ND	ND	0.28	0.28
Phenanthrene	100	ND	ND	0.35	0.25
Pyrene	100	ND	ND	0.53	0.47

(1) Soil Cleanup Objectives (SCOs) promulgated at 6 NYCRR Part 375.

Gray shaded values exceed their Unrestricted Use SCOs.

ND=Not detected above the laboratory method detection limit.

TABLE 3: PREVIOUS INVESTIGATION SURFACE SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

Data Not Validated

Parameter	Unrestricted Use SCOs ⁽¹⁾	SS3 (8/7/2017)	SS4 (8/7/2017)	SS5 (8/7/2017)	SS6 (8/7/2017)	SS7 (8/7/2017)	SS8 (8/7/2017)	SS9 (8/7/2017)	SS10 (8/7/2017)	SS11 (8/7/2017)	SS12 (8/7/2017)	SS13 (8/7/2017)	SS14 (8/7/2017)	SS15 (8/7/2017)	SS16 (8/7/2017)	SS17 (8/7/2017)	SS18 (8/7/2017)	SS19 (8/7/2017)	SS-21 (8/7/2017)
Metals																			
Aluminum	NS	7,040	5,950	6,530	6,030	10,300	4,620	4,920	6,170	6,270	5,520	5,000	4,680	7,010	6,220	9,040	4,280	5,610	5,920
Arsenic	13	4.04	3.47	5.18	4.08	6.35	2.12	1.69	4.13	1.49	3.91	5.42	ND	7.84	2.54	5	13.4	3.64	4.04
Barium	350	65.7	68.6	173	288	85.8	28.1	18.6	68.5	21.4	63.8	53.4	23.3	102	66.8	219	176	75.8	79.7
Beryllium	7.2	0.36	0.31	0.36	0.35	0.61	0.27	0.3	0.35	0.33	0.33	0.3	ND	0.43	0.35	0.47	0.4	0.36	0.36
Cadmium	2.5	0.71	0.57	1.12	0.93	0.97	0.34	ND	0.52	ND	0.44	2.06	ND	0.67	0.46	0.69	1.33	0.6	ND
Calcium	NS	9,460	5,920	4,200	8,800	10,200	5,800	591	2,760	296	1,640	11,400	341	1,670	30,400	53,700	49,800	23,800	13,800
Chromium	30	10.7	10	13.5	11.2	16.9	5.77	6.04	10.3	6.18	8.82	8	4.74	13.4	8.8	15.1	26.4	10.9	12.8
Cobalt	NS	5.38	4.95	5.14	4.06	10.6	3.25	3.76	4.04	3.98	3.93	4.52	2.74	4.52	4.98	6.49	5.47	5.56	6.22
Copper	50	22.7	21.7	37.3	35.5	32.1	10.2	9.1	32.4	8.42	23.5	30.7	5.75	59.6	15.7	24.9	47.5	29.5	20.7
Iron	NS	14,700	11,300	21,600	11,100	24,900	9,290	9,720	11,100	10,500	10,400	10,600	7,120	10,700	10,400	16,100	12,500	12,400	12,700
Lead	63	95.7	145	274	485	105	33.2	15	154	3.73	144	115	6.61	328	79.7	103	640	187	257
Magnesium	NS	3,680	3,130	2,040	1,610	9,350	4,220	1,360	1,880	1,560	1,250	2,970	794	1,370	3,630	10,900	24,800	12,500	5,970
Manganese	1,600	536	219	311	209	395	164	193	243	158	211	210	267	309	224	426	213	255	276
Mercury	0.18	0.24	0.49	0.85	1.17	0.06	0.08	0.03	0.65	ND	0.69	0.8	ND	1.25	0.09	0.09	0.41	0.48	0.12
Nickel	30	12.7	11.3	11.8	10	26.6	7.46	7.79	9.27	8.42	8.34	11.6	5.32	10.4	10.2	14.8	13.2	11.7	15
Potassium	NS	1,130	850	937	871	2,820	804	833	893	671	668	825	387	614	1,400	2,140	1,300	1,280	1,110
Silver	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44	ND	ND	ND	ND	ND
Sodium	NS	60.8	59.9	74.8	135	101	176	202	56.9	77.6	64.2	76	72.7	61.2	177	415	160	124	90.5
Vanadium	NS	16.2	14.7	17.7	15.4	21.6	11.1	11.9	13.9	12.6	14.7	13.1	9.95	17.8	15.6	23.4	14.2	18	20.6
Zinc	109	95.3	120	238	294	121	40.4	25.4	110	22.1	101	151	17	185	123	172	300	128	96.2
Semi-Volatile Organic Compounds																			
Acenaphthene	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25	ND
Anthracene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85	ND
Benz(a)anthracene	1	0.29	ND	0.28	ND	ND	ND	ND	ND	ND	ND	0.61	ND	ND	0.42	0.74	ND	2.2	0.25
Benzo(a)pyrene	1	0.3	ND	0.3	ND	ND	ND	ND	ND	ND	ND	0.74	ND	ND	0.37	0.73	ND	1.6	0.38
Benzo(b)fluoranthene	1	0.32	ND	0.36	ND	ND	ND	ND	ND	ND	ND	0.88	ND	ND	0.36	0.73	ND	1.1	0.32
Benzo(ghi)perylene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39	ND	ND	0.27	0.48	ND	0.88	0.38
Benzo(k)fluoranthene	0.8	0.3	ND	0.34	ND	ND	ND	ND	ND	ND	ND	0.71	ND	ND	0.28	0.6	ND	0.88	0.32
Bis(2-ethylhexyl)phthalate	NS	ND	ND	1.1	ND	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND	ND	ND
Carbazole	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.46	ND
Chrysene	1	0.36	0.26	0.4	ND	ND	ND	ND	0.29	ND	ND	0.75	ND	ND	0.45	0.85	ND	2.4	0.35
Dibenz(a,h)anthracene	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	0.26
Fluoranthene	100	0.66	0.41	0.65	0.28	ND	ND	ND	0.47	ND	ND	0.54	ND	0.33	0.93	1.1	ND	5.3	0.56
Fluorene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND
Indeno(1,2,3-cd)pyrene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43	ND	ND	0.28	0.48	ND	0.96	0.39
Phenanthrene	100	0.29	ND	0.3	ND	ND	ND	ND	0.29	ND	ND	ND	ND	ND	0.53	1	ND	4.2	0.29
Pyrene	100	0.58	0.36	0.6	ND	ND	ND	ND	0.42	ND	ND	0.57	ND	0.28	0.77	0.9	ND	4	0.5

(1) NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs)
All values are shown in parts per million.
Bold/shaded values exceed their Unrestricted Use SCOs.
ND=Not detected above the laboratory method detection limit.
NS=No Standard

TABLE 4: RI SUB-SLAB SOIL SAMPLING ANALYTICAL RESULTS SUMMARY
SOIL BENEATH BUILDING BASEMENT FLOOR SLABS
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.) ⁽²⁾ : SAMPLE MATRIX:			RIHA1_0-1.5				FD01_190326 (RIHA1_0-1.5)				RIHA2_0-1.5				RIHA3_0-1.5				RIHA4_0-2			
			L1911987-02				L1911987-05				L1911987-03				L1911987-04				L1912448-01			
			3/26/2019				3/26/2019				3/26/2019				3/26/2019				3/28/2019			
			0-1.5				0-1.5				0-1.5				0-1.5				0-2			
			SOIL				SOIL				SOIL				SOIL				SOIL			
		NY-UNRES ⁽¹⁾																				
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY EPA 5035																						
Acetone	67-64-1	0.05	ND		0.01	0.0049	0.0088	J	0.01	0.0049	ND		0.0088	0.0042	0.019		0.01	0.0048	0.0061	J	0.012	0.0058
Tetrachloroethene	127-18-4	1.3	0.0031		0.00051	0.0002	0.0023		0.00051	0.0002	0.00078		0.00044	0.00017	0.00074		0.0005	0.0002	0.00025	J	0.0006	0.00024
Total VOCs		NA	0.0031	-	-	-	0.0111	-	-	-	0.00078	-	-	-	0.01974	-	-	-	0.00635	-	-	-
VOLATILE ORGANICS BY EPA 5035-TIC																						
Unknown		NA	-	-	-	-	0.00338	J	0	0	-	-	-	-	0.0028	J	0	0	-	-	-	-
Total TIC Compounds		NA	-	-	-	-	0.00338	J	0	0	-	-	-	-	0.0028	J	0	0	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS (None Detected Above the Laboratory's Method Detection Limits)																						
SEMIVOLATILE ORGANICS BY GC/MS-TIC																						
Unknown		NA	-	-	-	-	0.26	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Amide		NA	0.166	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	0.166	J	0	0	0.26	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																						
4,4'-DDE	72-55-9	0.0033	ND		0.0018	0.000416	ND		0.00182	0.000422	ND		0.00181	0.000419	ND		0.00179	0.000414	0.000625	JP	0.00162	0.000375
POLYCHLORINATED BIPHENYLS BY GC (None Detecetd Above the Laboratory's Method Detection Limits)																						
TOTAL METALS																						
Aluminum, Total	7429-90-5	NA	2890		8.65	2.34	2160		8.91	2.4	2550		9.11	2.46	2490		8.51	2.3	2440		8.18	2.21
Antimony, Total	7440-36-0	NA	0.329	J	4.32	0.329	ND		4.46	0.338	ND		4.55	0.346	0.332	J	4.25	0.323	ND		4.09	0.311
Arsenic, Total	7440-38-2	13	1.8		0.865	0.18	1.63		0.891	0.185	1.88		0.911	0.189	2.2		0.851	0.177	2.46		0.818	0.17
Barium, Total	7440-39-3	350	8.15		0.865	0.15	5.96		0.891	0.155	9.69		0.911	0.158	9.74		0.851	0.148	9.27		0.818	0.142
Beryllium, Total	7440-41-7	7.2	0.156	J	0.432	0.029	0.116	J	0.446	0.029	0.164	J	0.455	0.03	0.179	J	0.425	0.028	0.082	J	0.409	0.027
Cadmium, Total	7440-43-9	2.5	0.476	J	0.865	0.085	0.508	J	0.891	0.087	0.574	J	0.911	0.089	0.613	J	0.851	0.083	ND		0.818	0.08
Calcium, Total	7440-70-2	NA	754		8.65	3.03	576		8.91	3.12	1400		9.11	3.19	907		8.51	2.98	34200		8.18	2.86
Chromium, Total	7440-47-3	30	4.34		0.865	0.083	3.39		0.891	0.086	4.19		0.911	0.087	3.8		0.851	0.082	3.58		0.818	0.079
Cobalt, Total	7440-48-4	NA	3.1		1.73	0.144	2.79		1.78	0.148	3.06		1.82	0.151	3.15		1.7	0.141	2.56		1.64	0.136
Copper, Total	7440-50-8	50	8.16		0.865	0.223	6.34		0.891	0.23	10.6		0.911	0.235	8.54		0.851	0.22	8.37		0.818	0.211
Iron, Total	7439-89-6	NA	8100		4.32	0.781	6200		4.46	0.804	7600		4.55	0.822	7240		4.25	0.768	7130		4.09	0.739
Lead, Total	7439-92-1	63	3.22	J	4.32	0.232	2.89	J	4.46	0.239	5.9		4.55	0.244	3.66	J	4.25	0.228	3.09	J	4.09	0.219
Magnesium, Total	7439-95-4	NA	1180		8.65	1.33	940		8.91	1.37	1150		9.11	1.4	1090		8.51	1.31	1760		8.18	1.26
Manganese, Total	7439-96-5	1600	140		0.865	0.138	116		0.891	0.142	65.2		0.911	0.145	152		0.851	0.135	218		0.818	0.13
Nickel, Total	7440-02-0	30	6.74		2.16	0.209	5.65		2.23	0.216	6.82		2.28	0.22	7.43		2.13	0.206	5.99		2.05	0.198
Potassium, Total	7440-09-7	NA	245		216	12.4	191	J	223	12.8	242		228	13.1	278		213	12.2	271		205	11.8
Selenium, Total	7782-49-2	3.9	ND		1.73	0.223	ND		1.78	0.23	ND		1.82	0.235	ND		1.7	0.22	0.622	J	1.64	0.211
Sodium, Total	7440-23-5	NA	19.4	J	173	2.72	17	J	178	2.81	30.8	J	182	2.87	33	J	170	2.68	70.4	J	164	2.58
Vanadium, Total	7440-62-2	NA	6.96		0.865	0.176	5.73		0.891	0.181	7.1		0.911	0.185	6.65		0.851	0.173	6.89		0.818	0.166
Zinc, Total	7440-66-6	109	19.8		4.32	0.253	17.9		4.46	0.261	27.7		4.55	0.267	23.4		4.25	0.249	18		4.09	0.24
GENERAL CHEMISTRY																						
Solids, Total	NONE	NA	86.8		0.1	NA	86.8		0.1	NA	86.8		0.1	NA	89.3		0.1	NA	93.9		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

(2) Sampling depth is feet beneath the building's basement floor slab.

NA denotes Not Applicable.

Qualifiers in parantheses are from the data validator.

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB1_ 2-4				RISB1_10-12				RISB2_ 2-4				FD01_190319 (RISB2_ 2-4)			
			L1910553-01				L1910554-01				L1910853-11				L1910853-14			
			3/18/2019				3/18/2019				3/19/2019				3/19/2019			
			2-4				10-12				2-4				2-4			
			SOIL				SOIL				SOIL				SOIL			
NY-UNRES																		
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY EPA 5035																		
1,1-Dichloroethene	75-35-4	0.33	ND		0.00096	0.00023	ND	(UJ)	0.001	0.00024	ND		0.0011	0.00026	ND	(UJ)	0.0012	0.00029
1,2-Dichlorobenzene	95-50-1	1.1	ND		0.0019	0.00014	ND	(UJ)	0.002	0.00015	ND		0.0022	0.00016	ND		0.0025	0.00018
1,3-Dichlorobenzene	541-73-1	2.4	ND		0.0019	0.00014	ND	(UJ)	0.002	0.00015	ND		0.0022	0.00016	ND		0.0025	0.00018
1,4-Dichlorobenzene	106-46-7	1.8	ND		0.0019	0.00016	ND	(UJ)	0.002	0.00017	ND		0.0022	0.00019	ND		0.0025	0.00021
Acetone	67-64-1	0.05	ND		0.0096	0.0046	ND		0.01	0.0049	ND		0.011	0.0053	ND		0.012	0.0059
Benzene	71-43-2	0.06	ND		0.00048	0.00016	ND	(UJ)	0.00051	0.00017	ND		0.00055	0.00018	ND		0.00062	0.0002
Bromodichloromethane	75-27-4	NA	ND		0.00048	0.0001	ND		0.00051	0.00011	ND		0.00055	0.00012	ND		0.00062	0.00013
Chlorobenzene	108-90-7	1.1	ND		0.00048	0.00012	ND		0.00051	0.00013	ND		0.00055	0.00014	ND		0.00062	0.00016
Chloroform	67-66-3	0.37	ND		0.0014	0.00013	ND		0.0015	0.00014	ND		0.0016	0.00015	ND		0.0018	0.00017
cis-1,2-Dichloroethene	156-59-2	0.25	ND		0.00096	0.00017	ND	(UJ)	0.001	0.00018	ND		0.0011	0.00019	ND		0.0012	0.00022
Ethylbenzene	100-41-4	1	ND		0.00096	0.00014	ND		0.001	0.00014	ND		0.0011	0.00016	ND		0.0012	0.00017
Methyl Acetate	79-20-9	NA	ND		0.0038	0.00091	ND		0.0041	0.00097	ND		0.0044	0.001	ND		0.0049	0.0012
o-Xylene	95-47-6	0.26	ND		0.00096	0.00028	ND		0.001	0.0003	ND		0.0011	0.00032	ND		0.0012	0.00036
p/m-Xylene	179601-23-1	0.26	ND		0.0019	0.00054	ND	(UJ)	0.002	0.00057	ND		0.0022	0.00062	ND		0.0025	0.00069
Tetrachloroethene	127-18-4	1.3	ND		0.00048	0.00019	ND	(UJ)	0.00051	0.0002	0.0065	(J)	0.00055	0.00022	0.0038	(J)	0.00062	0.00024
trans-1,2-Dichloroethene	156-60-5	0.19	ND		0.0014	0.00013	ND	(UJ)	0.0015	0.00014	ND		0.0016	0.00015	ND	(UJ)	0.0018	0.00017
Trichloroethene	79-01-6	0.47	ND		0.00048	0.00013	ND	(UJ)	0.00051	0.00014	ND		0.00055	0.00015	ND		0.00062	0.00017
Vinyl chloride	75-01-4	0.02	ND	(UJ)	0.00096	0.00032	ND		0.001	0.00034	ND		0.0011	0.00037	ND		0.0012	0.00041
Total VOCs		NA	-		-	-	-	-	-	-	0.0065	-	-	-	0.0038	-	-	-
VOLATILE ORGANICS BY EPA 5035-TIC																		
1,1'-Bicyclohexyl	000092-51-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Pentene	000109-67-1	NA	0.00345	NJ	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Butane, 2-Methyl-	000078-78-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclobutane, methyl-	000598-61-8	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclopentane	000287-92-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dodecane (C12)	000112-40-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentadecane	000629-62-9	NA	-	-	-	-	0.0026	NJ	0	0	-	-	-	-	-	-	-	-
Undecane	001120-21-4	NA	-	-	-	-	0.0034	NJ	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.00263	J	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.00567	J	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.0027	J	0	0	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	0.00275	J	0	0	-	-	-	-	-	-	-	-
Unknown Alkene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Aromatic		NA	-	-	-	-	0.00399	J	0	0	-	-	-	-	-	-	-	-
Unknown Cycloalkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	0.00805	J	0	0
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	0.00345	J (NJ)	0	0	0.0237	J	0	0	-	-	-	-	0.00805	J	0	0
SEMIVOLATILE ORGANICS BY GC/MS																		
2,4-Dinitrophenol	51-28-5		ND		0.84	0.081	ND		0.86	0.084	ND		0.89	0.087	ND		0.9	0.087
2-Methylnaphthalene	91-57-6	NA	ND		0.21	0.021	ND		0.22	0.022	ND		0.22	0.022	ND		0.22	0.022
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	ND		0.25	0.027	ND		0.26	0.028	ND		0.27	0.029	ND		0.27	0.029
Acenaphthene	83-32-9	20	ND		0.14	0.018	ND		0.14	0.019	ND		0.15	0.019	ND		0.15	0.019
Acenaphthylene	208-96-8	100	ND		0.14	0.027	ND		0.14	0.028	ND		0.15	0.029	ND		0.15	0.029
Anthracene	120-12-7	100	ND		0.1	0.034	ND		0.11	0.035	ND		0.11	0.036	ND		0.11	0.036
Benzaldehyde	100-52-7	NA	ND		0.23	0.047	ND		0.24	0.048	ND		0.24	0.05	ND		0.25	0.05
Benzo(a)anthracene	56-55-3	1	ND		0.1	0.02	ND		0.11	0.02	ND		0.11	0.021	ND		0.11	0.021
Benzo(a)pyrene	50-32-8	1	ND		0.14	0.043	ND		0.14	0.044	ND		0.15	0.045	ND		0.15	0.046
Benzo(b)fluoranthene	205-99-2	1	ND		0.1	0.029	ND		0.11	0.03	ND		0.11	0.031	ND		0.11	0.031
Benzo(ghi)perylene	191-24-2	100	ND		0.14	0.02	ND		0.14	0.021	ND		0.15	0.022	ND		0.15	0.022
Benzo(k)fluoranthene	207-08-9	0.8	ND		0.1	0.028	ND		0.11	0.029	ND		0.11	0.03	ND		0.11	0.03
Biphenyl	92-52-4	NA	ND		0.4	0.04	ND		0.41	0.042	ND		0.42	0.043	ND		0.42	0.043
Bis(2-ethylhexyl)phthalate	117-81-7	NA	ND		0.17	0.06	ND		0.18	0.062	0.084	J	0.19	0.064	ND		0.19	0.065
Butyl benzyl phthalate	85-68-7	NA	ND		0.17	0.044	ND		0.18	0.045	ND		0.19	0.047	ND		0.19	0.047
Carbazole	86-74-8	NA	ND		0.17	0.017	ND		0.18	0.017	ND		0.19	0.018	ND		0.19	0.018
Chrysene	218-01-9	1	ND		0.1	0.018	ND		0.11	0.019	ND		0.11	0.019	ND		0.11	0.019
Di-n-butylphthalate	84-74-2	NA	ND		0.17	0.033	ND		0.18	0.034	ND		0.19	0.035	ND		0.19	0.035

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB1_ 2-4				RISB1_10-12				RISB2_ 2-4				FD01_190319 (RISB2_ 2-4)			
			L1910553-01				L1910554-01				L1910853-11				L1910853-14			
			3/18/2019				3/18/2019				3/19/2019				3/19/2019			
			2-4				10-12				2-4				2-4			
			SOIL				SOIL				SOIL				SOIL			
NY-UNRES																		
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.33	ND		0.1	0.02	ND		0.11	0.021	ND		0.11	0.022	ND		0.11	0.022
Dibenzofuran	132-64-9	7	ND		0.17	0.016	ND		0.18	0.017	ND		0.19	0.018	ND		0.19	0.018
Fluoranthene	206-44-0	100	ND		0.1	0.02	ND		0.11	0.021	ND		0.11	0.021	ND		0.11	0.021
Fluorene	86-73-7	30	ND		0.17	0.017	ND		0.18	0.017	ND		0.19	0.018	ND		0.19	0.018
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	ND		0.14	0.024	ND		0.14	0.025	ND		0.15	0.026	ND		0.15	0.026
Naphthalene	91-20-3	12	ND		0.17	0.021	ND		0.18	0.022	ND		0.19	0.023	ND		0.19	0.023
Phenanthrene	85-01-8	100	ND		0.1	0.021	ND		0.11	0.022	ND		0.11	0.023	ND		0.11	0.023
Pyrene	129-00-0	100	ND		0.1	0.017	ND		0.11	0.018	ND		0.11	0.018	ND		0.11	0.018
Total SVOCs		NA	-	-	-	-	-	-	-	-	0.084	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																		
Tetrachloroethene	000127-18-4	NA	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-		-	-	1	J	0	0	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Amide		NA	0.244	J	0	0	-		-	-	0.586	J	0	0	0.478	J	0	0
Unknown Cyclohexane		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Ketone		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Thiophene		NA	-		-	-	-		-	-	-		-	-	-		-	-
Total TIC Compounds		NA	0.244	J	0	0	1	J	0	0	0.586	J	0	0	0.478	J	0	0
ORGANOCHLORINE PESTICIDES BY GC																		
4,4'-DDD	72-54-8	0.0033	ND		0.00164	0.000586	ND		0.00172	0.000612	ND		0.00177	0.000632	ND		0.00179	0.000639
4,4'-DDE	72-55-9	0.0033	ND		0.00164	0.00038	ND		0.00172	0.000397	ND		0.00177	0.00041	ND		0.00179	0.000414
4,4'-DDT	50-29-3	0.0033	ND		0.00308	0.00132	ND		0.00322	0.00138	ND		0.00332	0.00142	ND		0.00336	0.00144
Alpha-BHC	319-84-6	0.02	ND		0.000684	0.000194	ND		0.000715	0.000203	ND		0.000738	0.00021	ND		0.000746	0.000212
Chlordane	57-74-9	NA	ND		0.0133	0.00544	ND		0.0139	0.00568	ND		0.0144	0.00587	ND		0.0146	0.00593
cis-Chlordane	5103-71-9	0.094	ND		0.00205	0.000572	ND		0.00214	0.000597	ND		0.00221	0.000617	ND		0.00224	0.000624
Dieldrin	60-57-1	0.005	ND		0.00103	0.000513	ND		0.00107	0.000536	ND		0.00111	0.000554	ND		0.00112	0.00056
Endosulfan II	33213-65-9	2.4	ND		0.00164	0.000549	ND		0.00172	0.000573	ND		0.00177	0.000592	ND		0.00179	0.000598
Heptachlor epoxide	1024-57-3		ND		0.00308	0.000924	ND		0.00322	0.000965	ND		0.00332	0.000997	ND		0.00336	0.00101
trans-Chlordane	5103-74-2	NA	ND		0.00205	0.000542	ND		0.00214	0.000566	ND		0.00221	0.000585	ND		0.00224	0.000591
POLYCHLORINATED BIPHENYLS BY GC																		
Aroclor 1242	53469-21-9	0.1	ND		0.0346	0.00466	ND		0.0351	0.00474	ND		0.0364	0.00491	ND		0.0372	0.00501
Aroclor 1254	11097-69-1	0.1	ND		0.0346	0.00378	ND		0.0351	0.00384	ND		0.0364	0.00399	ND		0.0372	0.00407
Aroclor 1260	11096-82-5	0.1	ND		0.0346	0.00639	ND		0.0351	0.00649	ND		0.0364	0.00673	ND		0.0372	0.00687
Aroclor 1268	11100-14-4	0.1	ND		0.0346	0.00358	ND		0.0351	0.00364	ND		0.0364	0.00377	ND		0.0372	0.00385
PCBs, Total	1336-36-3	0.1	ND		0.0346	0.00307	ND		0.0351	0.00312	ND		0.0364	0.00324	ND		0.0372	0.0033

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB1_ 2-4				RISB1_10-12				RISB2_ 2-4				FD01_190319 (RISB2_ 2-4)			
			L1910553-01				L1910554-01				L1910853-11				L1910853-14			
			3/18/2019				3/18/2019				3/19/2019				3/19/2019			
			2-4				10-12				2-4				2-4			
			SOIL				SOIL				SOIL				SOIL			
		NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	6070		7.97	2.15	3070		8.55	2.31	5360		8.54	2.31	5900		8.98	2.42
Antimony, Total	7440-36-0	NA	0.359	J	3.98	0.303	ND		4.27	0.325	ND		4.27	0.324	ND		4.49	0.341
Arsenic, Total	7440-38-2	13	1.9		0.797	0.166	1.39		0.855	0.178	2.79		0.854	0.178	2.95		0.898	0.187
Barium, Total	7440-39-3	350	24	(J)	0.797	0.139	9.82		0.855	0.149	32.7		0.854	0.149	41.8		0.898	0.156
Beryllium, Total	7440-41-7	7.2	0.279	J	0.398	0.026	0.214	J	0.427	0.028	0.248	J	0.427	0.028	0.251	J	0.449	0.03
Cadmium, Total	7440-43-9	2.5	0.199	J	0.797	0.078	ND		0.855	0.084	0.162	J	0.854	0.084	0.18	J	0.898	0.088
Calcium, Total	7440-70-2	NA	522		7.97	2.79	899		8.55	2.99	4520	(J)	8.54	2.99	7860	(J)	8.98	3.14
Chromium, Total	7440-47-3	30	5.11		0.797	0.077	3.97		0.855	0.082	5.99		0.854	0.082	6.79		0.898	0.086
Cobalt, Total	7440-48-4	NA	2.96	(J)	1.59	0.132	3.29		1.71	0.142	3.06		1.71	0.142	3.4		1.8	0.149
Copper, Total	7440-50-8	50	6.62	(J)	0.797	0.206	9.65		0.855	0.22	9.74		0.854	0.22	11.1		0.898	0.232
Iron, Total	7439-89-6	NA	9150		3.98	0.72	8960		4.27	0.772	9790		4.27	0.771	10200		4.49	0.811
Lead, Total	7439-92-1	63	4.73	(J)	3.98	0.214	3.44	J	4.27	0.229	23.8	(J)	4.27	0.229	29.1	(J)	4.49	0.241
Magnesium, Total	7439-95-4	NA	1220	(J)	7.97	1.23	1220		8.55	1.32	1610	(J)	8.54	1.32	1740	(J)	8.98	1.38
Manganese, Total	7439-96-5	1600	155	(J)	0.797	0.127	241		0.855	0.136	359		0.854	0.136	367		0.898	0.143
Mercury, Total	7439-97-6	0.18	ND	(UJ)	0.067	0.014	ND	(UJ)	0.075	0.016	0.142		0.072	0.015	0.17		0.071	0.015
Nickel, Total	7440-02-0	30	7.07		1.99	0.193	7.22		2.14	0.207	5.68		2.14	0.207	6.17		2.24	0.217
Potassium, Total	7440-09-7	NA	212	(J)	199	11.5	251		214	12.3	341	(J)	214	12.3	366	(J)	224	12.9
Selenium, Total	7782-49-2	3.9	ND		1.59	0.206	ND		1.71	0.22	0.393	J	1.71	0.22	0.305	J	1.8	0.232
Silver, Total	7440-22-4	2	ND		0.797	0.226	ND		0.855	0.242	ND		0.854	0.242	ND		0.898	0.254
Sodium, Total	7440-23-5	NA	28.4	J	159	2.51	28.6	J (U)	171	2.69	56	J	171	2.69	79.8	J	180	2.83
Thallium, Total	7440-28-0	NA	ND		1.59	0.251	ND		1.71	0.269	0.342	J	1.71	0.269	0.341	J	1.8	0.283
Vanadium, Total	7440-62-2	NA	10.4		0.797	0.162	8.34		0.855	0.174	11.3		0.854	0.173	12.4		0.898	0.182
Zinc, Total	7440-66-6	109	24.2	(J)	3.98	0.234	22.9		4.27	0.25	30.5	(J)	4.27	0.25	38.9	(J)	4.49	0.263
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.847	0.169	ND		0.875	0.175	ND		0.902	0.18	ND		0.905	0.181
Cyanide, Total	57-12-5	27	ND	(UJ)	0.98	0.21	ND	(UJ)	1.1	0.23	ND		1	0.22	ND		1.1	0.23
Solids, Total	NONE	NA	94.4		0.1	NA	91.4		0.1	NA	88.7		0.1	NA	88.4		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:	RISB3_ 2-4				RISB4_ 2-4				RISB4_ 4-6				RISB4_ 6-8			
			LAB ID:	L1910853-07				L1910853-01				L1910853-02				L1912498-01			
			COLLECTION DATE:	3/19/2019				3/19/2019				3/19/2019				3/19/2019			
			SAMPLE DEPTH (Ft.):	2-4				2-4				4-6				6-8			
			SAMPLE MATRIX:	SOIL				SOIL				SOIL				SOIL			
			NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	
VOLATILE ORGANICS BY EPA 5035																			
1,1-Dichloroethene	75-35-4	0.33	ND		0.0012	0.00029	ND		0.00098	0.00023	-		-	-	-		-	-	
1,2-Dichlorobenzene	95-50-1	1.1	ND		0.0025	0.00018	ND		0.002	0.00014	-		-	-	-		-	-	
1,3-Dichlorobenzene	541-73-1	2.4	ND		0.0025	0.00018	ND		0.002	0.00014	-		-	-	-		-	-	
1,4-Dichlorobenzene	106-46-7	1.8	ND		0.0025	0.00021	ND		0.002	0.00017	-		-	-	-		-	-	
Acetone	67-64-1	0.05	0.086		0.012	0.006	0.0083	J (U)	0.0098	0.0047	-		-	-	-		-	-	
Benzene	71-43-2	0.06	ND		0.00062	0.0002	ND		0.00049	0.00016	-		-	-	-		-	-	
Bromodichloromethane	75-27-4	NA	ND		0.00062	0.00013	ND		0.00049	0.00011	-		-	-	-		-	-	
Chlorobenzene	108-90-7	1.1	ND		0.00062	0.00016	ND		0.00049	0.00012	-		-	-	-		-	-	
Chloroform	67-66-3	0.37	ND		0.0018	0.00017	ND		0.0015	0.00014	-		-	-	-		-	-	
cis-1,2-Dichloroethene	156-59-2	0.25	ND		0.0012	0.00022	ND		0.00098	0.00017	-		-	-	-		-	-	
Ethylbenzene	100-41-4	1	0.0022		0.0012	0.00017	ND		0.00098	0.00014	-		-	-	-		-	-	
Methyl Acetate	79-20-9	NA	ND		0.005	0.0012	ND		0.0039	0.00093	-		-	-	-		-	-	
o-Xylene	95-47-6	0.26	0.0042		0.0012	0.00036	ND		0.00098	0.00028	-		-	-	-		-	-	
p/m-Xylene	179601-23-1	0.26	0.012		0.0025	0.00069	ND		0.002	0.00055	-		-	-	-		-	-	
Tetrachloroethene	127-18-4	1.3	0.029		0.00062	0.00024	0.0011		0.00049	0.00019	-		-	-	-		-	-	
trans-1,2-Dichloroethene	156-60-5	0.19	ND		0.0018	0.00017	ND		0.0015	0.00013	-		-	-	-		-	-	
Trichloroethene	79-01-6	0.47	ND		0.00062	0.00017	ND		0.00049	0.00013	-		-	-	-		-	-	
Vinyl chloride	75-01-4	0.02	ND		0.0012	0.00041	ND		0.00098	0.00033	-		-	-	-		-	-	
Total VOCs		NA	0.1334	-	-	-	0.0094	-	-	-	-	-	-	-	-	-	-	-	
VOLATILE ORGANICS BY EPA 5035-TIC																			
1,1'-Bicyclohexyl	000092-51-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1-Pentene	000109-67-1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Butane, 2-Methyl-	000078-78-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cyclobutane, methyl-	000598-61-8	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cyclopentane	000287-92-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dodecane (C12)	000112-40-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pentadecane	000629-62-9	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Undecane	001120-21-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	0.00442	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkene		NA	0.00521	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkene		NA	0.00251	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Aromatic		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Cycloalkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Naphthalene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total TIC Compounds		NA	0.0121	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-	
SEMIVOLATILE ORGANICS BY GC/MS																			
2,4-Dinitrophenol	51-28-5		ND		0.86	0.084	ND		0.86	0.083	-		-	-	-	-	-	-	
2-Methylnaphthalene	91-57-6	NA	ND		0.22	0.022	ND		0.21	0.022	-		-	-	-	-	-	-	
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	ND		0.26	0.028	ND		0.26	0.028	-		-	-	-	-	-	-	
Acenaphthene	83-32-9	20	ND		0.14	0.019	ND		0.14	0.018	-		-	-	-	-	-	-	
Acenaphthylene	208-96-8	100	ND		0.14	0.028	ND		0.14	0.028	-		-	-	-	-	-	-	
Anthracene	120-12-7	100	ND		0.11	0.035	ND		0.11	0.035	-		-	-	-	-	-	-	
Benzaldehyde	100-52-7	NA	ND		0.24	0.048	ND		0.24	0.048	-		-	-	-	-	-	-	
Benzo(a)anthracene	56-55-3	1	ND		0.11	0.02	0.023	J	0.11	0.02	-		-	-	-	-	-	-	
Benzo(a)pyrene	50-32-8	1	ND		0.14	0.044	ND		0.14	0.044	-		-	-	-	-	-	-	
Benzo(b)fluoranthene	205-99-2	1	ND		0.11	0.03	0.032	J	0.11	0.03	-		-	-	-	-	-	-	
Benzo(ghi)perylene	191-24-2	100	ND		0.14	0.021	ND		0.14	0.021	-		-	-	-	-	-	-	
Benzo(k)fluoranthene	207-08-9	0.8	ND		0.11	0.029	ND		0.11	0.028	-		-	-	-	-	-	-	
Biphenyl	92-52-4	NA	ND		0.41	0.042	ND		0.41	0.041	-		-	-	-	-	-	-	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	ND		0.18	0.062	0.15	J	0.18	0.062	-		-	-	-	-	-	-	
Butyl benzyl phthalate	85-68-7	NA	ND		0.18	0.045	ND		0.18	0.045	-		-	-	-	-	-	-	
Carbazole	86-74-8	NA	ND		0.18	0.017	ND		0.18	0.017	-		-	-	-	-	-	-	
Chrysene	218-01-9	1	ND		0.11	0.019	0.024	J	0.11	0.018	-		-	-	-	-	-	-	
Di-n-butylphthalate	84-74-2	NA	ND		0.18	0.034	ND		0.18	0.034	-		-	-	-	-	-	-	

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:	RISB3_ 2-4				RISB4_ 2-4				RISB4_ 4-6				RISB4_ 6-8			
			LAB ID:	L1910853-07				L1910853-01				L1910853-02				L1912498-01			
			COLLECTION DATE:	3/19/2019				3/19/2019				3/19/2019				3/19/2019			
			SAMPLE DEPTH (Ft.):	2-4				2-4				4-6				6-8			
			SAMPLE MATRIX:	SOIL				SOIL				SOIL				SOIL			
ANALYTE	CAS	NY-UNRES	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	
Dibenzo(a,h)anthracene	53-70-3	0.33	ND		0.11	0.021	ND		0.11	0.021	-	-	-	-	-	-	-	-	
Dibenzofuran	132-64-9	7	ND		0.18	0.017	ND		0.18	0.017	-	-	-	-	-	-	-	-	
Fluoranthene	206-44-0	100	ND		0.11	0.021	0.039	J	0.11	0.02	-	-	-	-	-	-	-	-	
Fluorene	86-73-7	30	ND		0.18	0.017	ND		0.18	0.017	-	-	-	-	-	-	-	-	
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	ND		0.14	0.025	ND		0.14	0.025	-	-	-	-	-	-	-	-	
Naphthalene	91-20-3	12	ND		0.18	0.022	ND		0.18	0.022	-	-	-	-	-	-	-	-	
Phenanthrene	85-01-8	100	ND		0.11	0.022	ND		0.11	0.022	-	-	-	-	-	-	-	-	
Pyrene	129-00-0	100	ND		0.11	0.018	0.035	J	0.11	0.018	-	-	-	-	-	-	-	-	
Total SVOCs		NA	-	-	-	-	0.303	-	-	-	-	-	-	-	-	-	-	-	
SEMIVOLATILE ORGANICS BY GC/MS-TIC																			
Tetrachloroethene	000127-18-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	0.175	J	0	0	-	-	-	-	-	-	-	-	
Unknown		NA	0.193	J	0	0	0.159	J	0	0	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	0.157	J	0	0	-	-	-	-	-	-	-	-	
Unknown		NA	-	-	-	-	0.175	J	0	0	-	-	-	-	-	-	-	-	
Unknown		NA	0.216	J	0	0	0.208	J	0	0	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Amide		NA	0.15	J	0	0	0.164	J	0	0	-	-	-	-	-	-	-	-	
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Ketone		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Thiophene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total TIC Compounds		NA	0.559	J	0	0	1.04	J	0	0	-	-	-	-	-	-	-	-	
ORGANOCHLORINE PESTICIDES BY GC																			
4,4'-DDD	72-54-8	0.0033	ND		0.00173	0.000617	ND		0.00173	0.000618	ND		0.00168	0.000599	ND		0.00184	0.000656	
4,4'-DDE	72-55-9	0.0033	ND		0.00173	0.0004	ND		0.00173	0.000401	0.000965	J	0.00168	0.000388	ND		0.00184	0.000426	
4,4'-DDT	50-29-3	0.0033	ND		0.00324	0.00139	0.00334		0.00325	0.00139	0.00534		0.00315	0.00135	0.00174	JP	0.00345	0.00148	
Alpha-BHC	319-84-6	0.02	ND		0.00072	0.000205	ND		0.000722	0.000205	ND		0.0007	0.000199	ND		0.000767	0.000218	
Chlordane	57-74-9	NA	ND		0.014	0.00573	ND		0.0141	0.00574	ND		0.0136	0.00556	ND		0.015	0.0061	
cis-Chlordane	5103-71-9	0.094	ND		0.00216	0.000602	ND		0.00217	0.000604	0.0023		0.0021	0.000585	ND		0.0023	0.000641	
Dieldrin	60-57-1	0.005	ND		0.00108	0.00054	ND		0.00108	0.000542	0.00108		0.00105	0.000525	ND		0.00115	0.000575	
Endosulfan II	33213-65-9	2.4	ND		0.00173	0.000578	ND		0.00173	0.000579	ND		0.00168	0.000561	ND		0.00184	0.000615	
Heptachlor epoxide	1024-57-3		ND		0.00324	0.000973	ND		0.00325	0.000975	ND		0.00315	0.000944	ND		0.00345	0.00104	
trans-Chlordane	5103-74-2	NA	ND		0.00216	0.00057	ND		0.00217	0.000572	0.00218		0.0021	0.000554	ND		0.0023	0.000607	
POLYCHLORINATED BIPHENYLS BY GC																			
Aroclor 1242	53469-21-9	0.1	ND		0.036	0.00486	0.018	J	0.0361	0.00486	-		-	-	-		-	-	
Aroclor 1254	11097-69-1	0.1	ND		0.036	0.00394	ND		0.0361	0.00394	-		-	-	-		-	-	
Aroclor 1260	11096-82-5	0.1	ND		0.036	0.00666	ND		0.0361	0.00666	-		-	-	-		-	-	
Aroclor 1268	11100-14-4	0.1	ND		0.036	0.00373	ND		0.0361	0.00374	-		-	-	-		-	-	
PCBs, Total	1336-36-3	0.1	ND		0.036	0.0032	0.018	J	0.0361	0.0032	-		-	-	-		-	-	

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HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB3_ 2-4				RISB4_ 2-4				RISB4_ 4-6				RISB4_ 6-8			
			L1910853-07				L1910853-01				L1910853-02				L1912498-01			
			3/19/2019				3/19/2019				3/19/2019				3/19/2019			
			2-4				2-4				4-6				6-8			
			SOIL				SOIL				SOIL				SOIL			
		NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	3960		8.19	2.21	3990		8.49	2.29	-		-	-	-		-	-
Antimony, Total	7440-36-0	NA	ND		4.1	0.311	ND		4.24	0.323	-		-	-	-		-	-
Arsenic, Total	7440-38-2	13	2.15		0.819	0.17	2.6		0.849	0.177	-		-	-	-		-	-
Barium, Total	7440-39-3	350	9.34		0.819	0.142	28.5		0.849	0.148	-		-	-	-		-	-
Beryllium, Total	7440-41-7	7.2	0.18	J	0.41	0.027	0.212	J	0.424	0.028	-		-	-	-		-	-
Cadmium, Total	7440-43-9	2.5	0.139	J	0.819	0.08	0.187	J	0.849	0.083	-		-	-	-		-	-
Calcium, Total	7440-70-2	NA	504		8.19	2.87	985		8.49	2.97	-		-	-	-		-	-
Chromium, Total	7440-47-3	30	4.66		0.819	0.079	5.26		0.849	0.082	-		-	-	-		-	-
Cobalt, Total	7440-48-4	NA	3.1		1.64	0.136	3.69		1.7	0.141	-		-	-	-		-	-
Copper, Total	7440-50-8	50	6.85		0.819	0.211	8.7		0.849	0.219	-		-	-	-		-	-
Iron, Total	7439-89-6	NA	8950		4.1	0.74	9870		4.24	0.767	-		-	-	-		-	-
Lead, Total	7439-92-1	63	2.67	J	4.1	0.22	16.8	(J)	4.24	0.228	-		-	-	-		-	-
Magnesium, Total	7439-95-4	NA	1230	(J)	8.19	1.26	1280	(J)	8.49	1.31	-		-	-	-		-	-
Manganese, Total	7439-96-5	1600	182		0.819	0.13	381		0.849	0.135	-		-	-	-		-	-
Mercury, Total	7439-97-6	0.18	ND		0.068	0.014	0.044	J	0.068	0.014	-		-	-	-		-	-
Nickel, Total	7440-02-0	30	6.14		2.05	0.198	6.59		2.12	0.206	-		-	-	-		-	-
Potassium, Total	7440-09-7	NA	336	(J)	205	11.8	426	(J)	212	12.2	-		-	-	-		-	-
Selenium, Total	7782-49-2	3.9	ND		1.64	0.211	ND		1.7	0.219	-		-	-	-		-	-
Silver, Total	7440-22-4	2	ND		0.819	0.232	ND		0.849	0.24	-		-	-	-		-	-
Sodium, Total	7440-23-5	NA	22.6	J	164	2.58	38.5	J	170	2.67	-		-	-	-		-	-
Thallium, Total	7440-28-0	NA	ND		1.64	0.258	0.416	J	1.7	0.267	-		-	-	-		-	-
Vanadium, Total	7440-62-2	NA	9.16		0.819	0.166	10.4		0.849	0.172	-		-	-	-		-	-
Zinc, Total	7440-66-6	109	18.1	(J)	4.1	0.24	28.1	(J)	4.24	0.249	-		-	-	-		-	-
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.871	0.174	ND		0.87	0.174	-		-	-	-		-	-
Cyanide, Total	57-12-5	27	ND		1	0.22	ND		1	0.21	-		-	-	-		-	-
Solids, Total	NONE	NA	91.8		0.1	NA	92		0.1	NA	90.7		0.1	NA	86.2		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB5_2-4				RISB6_2-4				RISB7_2-4				RISB7_4-6			
			L1910553-04				L1911122-06				L1910853-18				L1910853-19			
			3/18/2019				3/20/2019				3/19/2019				3/19/2019			
			2-4				2-4				2-4				4-6			
			SOIL				SOIL				SOIL				SOIL			
NY-UNRES																		
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY EPA 5035																		
1,1-Dichloroethene	75-35-4	0.33	ND		0.001	0.00024	ND		0.001	0.00024	ND		0.0011	0.00026	-		-	-
1,2-Dichlorobenzene	95-50-1	1.1	ND		0.002	0.00014	ND		0.002	0.00014	ND		0.0022	0.00016	-		-	-
1,3-Dichlorobenzene	541-73-1	2.4	ND		0.002	0.00015	ND		0.002	0.00015	ND		0.0022	0.00016	-		-	-
1,4-Dichlorobenzene	106-46-7	1.8	ND		0.002	0.00017	ND		0.002	0.00017	ND		0.0022	0.00018	-		-	-
Acetone	67-64-1	0.05	0.0053	J	0.01	0.0048	0.018		0.01	0.0049	0.0068	J (U)	0.011	0.0052	-		-	-
Benzene	71-43-2	0.06	ND		0.0005	0.00017	ND		0.00051	0.00017	ND		0.00054	0.00018	-		-	-
Bromodichloromethane	75-27-4	NA	ND		0.0005	0.00011	ND		0.00051	0.00011	ND		0.00054	0.00012	-		-	-
Chlorobenzene	108-90-7	1.1	ND		0.0005	0.00013	ND		0.00051	0.00013	ND		0.00054	0.00014	-		-	-
Chloroform	67-66-3	0.37	ND		0.0015	0.00014	ND		0.0015	0.00014	ND		0.0016	0.00015	-		-	-
cis-1,2-Dichloroethene	156-59-2	0.25	ND		0.001	0.00018	0.25		0.001	0.00018	ND		0.0011	0.00019	-		-	-
Ethylbenzene	100-41-4	1	ND		0.001	0.00014	ND		0.001	0.00014	ND		0.0011	0.00015	-		-	-
Methyl Acetate	79-20-9	NA	ND		0.004	0.00095	ND		0.004	0.00096	ND		0.0043	0.001	-		-	-
o-Xylene	95-47-6	0.26	ND		0.001	0.00029	ND		0.001	0.00029	ND		0.0011	0.00031	-		-	-
p/m-Xylene	179601-23-1	0.26	ND		0.002	0.00056	ND		0.002	0.00057	ND		0.0022	0.0006	-		-	-
Tetrachloroethene	127-18-4	1.3	ND		0.0005	0.0002	0.00058		0.00051	0.0002	0.0096		0.00054	0.00021	-		-	-
trans-1,2-Dichloroethene	156-60-5	0.19	ND		0.0015	0.00014	ND		0.0015	0.00014	ND		0.0016	0.00015	-		-	-
Trichloroethene	79-01-6	0.47	ND		0.0005	0.00014	ND		0.00051	0.00014	ND		0.00054	0.00015	-		-	-
Vinyl chloride	75-01-4	0.02	ND		0.001	0.00034	ND		0.001	0.00034	ND		0.0011	0.00036	-		-	-
Total VOCs		NA	0.0053		-	-	0.01858	-	-	-	0.0164	-	-	-	-	-	-	-
VOLATILE ORGANICS BY EPA 5035-TIC																		
1,1'-Bicyclohexyl	000092-51-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Pentene	000109-67-1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butane, 2-Methyl-	000078-78-4	NA	-	-	-	-	-	-	-	-	0.00286	NJ	0	0	-	-	-	-
Cyclobutane, methyl-	000598-61-8	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclopentane	000287-92-3	NA	-	-	-	-	0.00892	NJ	0	0	0.0452	NJ	0	0	-	-	-	-
Dodecane (C12)	000112-40-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentadecane	000629-62-9	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Undecane	001120-21-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	0.0219	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkene	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkene	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Aromatic	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Cycloalkane	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Cyclohexane	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	0.0219	J	0	0	0.00892	J	0	0	0.0481	J	0	0	-		-	-
SEMIVOLATILE ORGANICS BY GC/MS																		
2,4-Dinitrophenol	51-28-5		ND		0.84	0.081	ND		0.81	0.079	ND		0.87	0.085	-		-	-
2-Methylnaphthalene	91-57-6	NA	ND		0.21	0.021	ND		0.2	0.02	ND		0.22	0.022	-		-	-
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	ND		0.25	0.027	ND		0.24	0.026	ND		0.26	0.028	-		-	-
Acenaphthene	83-32-9	20	ND		0.14	0.018	ND		0.13	0.017	ND		0.14	0.019	-		-	-
Acenaphthylene	208-96-8	100	ND		0.14	0.027	ND		0.13	0.026	ND		0.14	0.028	-		-	-
Anthracene	120-12-7	100	ND		0.1	0.034	ND		0.1	0.033	ND		0.11	0.036	-		-	-
Benzaldehyde	100-52-7	NA	ND		0.23	0.047	ND		0.22	0.046	ND		0.24	0.049	-		-	-
Benzo(a)anthracene	56-55-3	1	ND		0.1	0.02	ND		0.1	0.019	0.04	J	0.11	0.02	-		-	-
Benzo(a)pyrene	50-32-8	1	ND		0.14	0.042	ND		0.13	0.041	ND		0.14	0.044	-		-	-
Benzo(b)fluoranthene	205-99-2	1	ND		0.1	0.029	ND		0.1	0.028	0.053	J	0.11	0.031	-		-	-
Benzo(ghi)perylene	191-24-2	100	ND		0.14	0.02	ND		0.13	0.02	0.031	J	0.14	0.021	-		-	-
Benzo(k)fluoranthene	207-08-9	0.8	ND		0.1	0.028	ND		0.1	0.027	ND		0.11	0.029	-		-	-
Biphenyl	92-52-4	NA	ND		0.4	0.04	ND		0.38	0.039	ND		0.42	0.042	-		-	-
Bis(2-ethylhexyl)phthalate	117-81-7	NA	ND		0.17	0.06	ND		0.17	0.058	ND		0.18	0.063	-		-	-
Butyl benzyl phthalate	85-68-7	NA	ND		0.17	0.044	ND		0.17	0.042	ND		0.18	0.046	-		-	-
Carbazole	86-74-8	NA	ND		0.17	0.017	ND		0.17	0.016	ND		0.18	0.018	-		-	-
Chrysene	218-01-9	1	ND		0.1	0.018	ND		0.1	0.018	0.039	J	0.11	0.019	-		-	-
Di-n-butylphthalate	84-74-2	NA	ND		0.17	0.033	ND		0.17	0.032	ND		0.18	0.034	-		-	-

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:	RISB5_2-4				RISB6_2-4				RISB7_2-4				RISB7_4-6			
			LAB ID:	L1910553-04				L1911122-06				L1910853-18				L1910853-19			
			COLLECTION DATE:	3/18/2019				3/20/2019				3/19/2019				3/19/2019			
			SAMPLE DEPTH (Ft.):	2-4				2-4				2-4				4-6			
			SAMPLE MATRIX:	SOIL				SOIL				SOIL				SOIL			
		NY-UNRES																	
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	
Dibenzo(a,h)anthracene	53-70-3	0.33	ND		0.1	0.02	ND		0.1	0.02	ND		0.11	0.021	-		-	-	
Dibenzofuran	132-64-9	7	ND		0.17	0.016	ND		0.17	0.016	ND		0.18	0.017	-		-	-	
Fluoranthene	206-44-0	100	ND		0.1	0.02	ND		0.1	0.019	0.066	J	0.11	0.021	-		-	-	
Fluorene	86-73-7	30	ND		0.17	0.017	ND		0.17	0.016	ND		0.18	0.018	-		-	-	
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	ND		0.14	0.024	ND		0.13	0.024	0.026	J	0.14	0.025	-		-	-	
Naphthalene	91-20-3	12	ND		0.17	0.021	ND		0.17	0.02	ND		0.18	0.022	-		-	-	
Phenanthrene	85-01-8	100	ND		0.1	0.021	ND		0.1	0.02	0.031	J	0.11	0.022	-		-	-	
Pyrene	129-00-0	100	ND		0.1	0.017	ND		0.1	0.017	0.053	J	0.11	0.018	-		-	-	
Total SVOCs		NA	-	-	-	-	-	-	-	-	0.339	-	-	-	-	-	-	-	
SEMIVOLATILE ORGANICS BY GC/MS-TIC																			
Tetrachloroethene	000127-18-4	NA	-		-	-	-	-	-	-	0.31	NJ	0	0	-	-	-	-	
Unknown		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Amide		NA	0.224	J	0	0	0.229	J	0	0	0.394	J	0	0	-	-	-	-	
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Ketone		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown PAH		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Unknown Thiophene		NA	-		-	-	-	-	-	-	-		-	-	-		-	-	
Total TIC Compounds		NA	0.224	J	0	0	0.229	J	0	0	0.704	J	0	0	-		-	-	
ORGANOCHLORINE PESTICIDES BY GC																			
4,4'-DDD	72-54-8	0.0033	ND		0.00167	0.000596	ND		0.00158	0.000563	ND		0.00166	0.000592	ND		0.00868	0.0031	
4,4'-DDE	72-55-9	0.0033	ND		0.00167	0.000387	ND		0.00158	0.000365	0.000479	JP (J)	0.00166	0.000384	ND		0.00868	0.00201	
4,4'-DDT	50-29-3	0.0033	ND		0.00313	0.00134	ND		0.00296	0.00127	0.00507		0.00311	0.00134	ND		0.0163	0.00698	
Alpha-BHC	319-84-6	0.02	ND		0.000697	0.000198	ND		0.000658	0.000187	ND		0.000692	0.000196	ND		0.00362	0.00103	
Chlordane	57-74-9	NA	ND		0.0136	0.00554	ND		0.0128	0.00523	ND		0.0135	0.0055	ND		0.0706	0.0288	
cis-Chlordane	5103-71-9	0.094	ND		0.00209	0.000582	ND		0.00197	0.00055	ND		0.00208	0.000578	ND		0.0108	0.00302	
Dieldrin	60-57-1	0.005	ND		0.00104	0.000522	ND		0.000987	0.000493	ND		0.00104	0.000519	ND		0.00543	0.00271	
Endosulfan II	33213-65-9	2.4	ND		0.00167	0.000559	ND		0.00158	0.000528	ND		0.00166	0.000555	ND		0.00868	0.0029	
Heptachlor epoxide	1024-57-3		ND		0.00313	0.00094	ND		0.00296	0.000888	ND		0.00311	0.000934	ND		0.0163	0.00488	
trans-Chlordane	5103-74-2	NA	ND		0.00209	0.000552	ND		0.00197	0.000521	ND		0.00208	0.000548	0.00297	J	0.0108	0.00286	
POLYCHLORINATED BIPHENYLS BY GC																			
Aroclor 1242	53469-21-9	0.1	ND		0.0342	0.00461	ND		0.0344	0.00464	ND		0.036	0.00485	-		-	-	
Aroclor 1254	11097-69-1	0.1	ND		0.0342	0.00374	ND		0.0344	0.00377	ND		0.036	0.00394	-		-	-	
Aroclor 1260	11096-82-5	0.1	ND		0.0342	0.00632	ND		0.0344	0.00637	ND		0.036	0.00665	-		-	-	
Aroclor 1268	11100-14-4	0.1	ND		0.0342	0.00354	ND		0.0344	0.00357	ND		0.036	0.00373	-		-	-	
PCBs, Total	1336-36-3	0.1	ND		0.0342	0.00304	ND		0.0344	0.00306	ND		0.036	0.00319	-		-	-	

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB5_2-4				RISB6_2-4				RISB7_2-4				RISB7_4-6			
			L1910553-04				L1911122-06				L1910853-18				L1910853-19			
			3/18/2019				3/20/2019				3/19/2019				3/19/2019			
			2-4				2-4				2-4				4-6			
			SOIL				SOIL				SOIL				SOIL			
		NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	5010		8.32	2.25	5670		8	2.16	5630		8.37	2.26	6600		8.48	2.29
Antimony, Total	7440-36-0	NA	0.374	J	4.16	0.316	0.752	J	4	0.304	ND		4.18	0.318	0.712	J	4.24	0.322
Arsenic, Total	7440-38-2	13	2.2		0.832	0.173	2.34		0.8	0.166	4.02		0.837	0.174	3.66		0.848	0.176
Barium, Total	7440-39-3	350	13.1	(J)	0.832	0.145	12.6		0.8	0.139	51.5		0.837	0.146	49.5		0.848	0.148
Beryllium, Total	7440-41-7	7.2	0.266	J	0.416	0.027	0.336	J	0.4	0.026	0.276	J	0.418	0.028	0.322	J	0.424	0.028
Cadmium, Total	7440-43-9	2.5	0.216	J	0.832	0.082	ND		0.8	0.078	0.326	J	0.837	0.082	0.407	J	0.848	0.083
Calcium, Total	7440-70-2	NA	384		8.32	2.91	376		8	2.8	7490		8.37	2.93	18900	(J)	8.48	2.97
Chromium, Total	7440-47-3	30	4.99		0.832	0.08	6.36		0.8	0.077	8.3		0.837	0.08	10.2		0.848	0.081
Cobalt, Total	7440-48-4	NA	3.57	(J)	1.66	0.138	4.15		1.6	0.133	3.88		1.67	0.139	4.32		1.7	0.141
Copper, Total	7440-50-8	50	7.89	(J)	0.832	0.215	9.18		0.8	0.206	14.6		0.837	0.216	21		0.848	0.219
Iron, Total	7439-89-6	NA	9400		4.16	0.751	11200		4	0.723	11100		4.18	0.756	11700		4.24	0.766
Lead, Total	7439-92-1	63	9.05	(J)	4.16	0.223	3.83	J	4	0.214	127	(J)	4.18	0.224	240		4.24	0.227
Magnesium, Total	7439-95-4	NA	1310	(J)	8.32	1.28	1690		8	1.23	2710	(J)	8.37	1.29	2970		8.48	1.31
Manganese, Total	7439-96-5	1600	130	(J)	0.832	0.132	218		0.8	0.127	222		0.837	0.133	271		0.848	0.135
Mercury, Total	7439-97-6	0.18	ND	(UJ)	0.066	0.014	ND		0.067	0.014	0.842		0.07	0.015	1.19	(J)	0.07	0.015
Nickel, Total	7440-02-0	30	7.36		2.08	0.201	8.45		2	0.194	8.6		2.09	0.202	10.6		2.12	0.205
Potassium, Total	7440-09-7	NA	228	(J)	208	12	256		200	11.5	422	(J)	209	12	446		212	12.2
Selenium, Total	7782-49-2	3.9	ND		1.66	0.215	ND		1.6	0.206	0.418	J	1.67	0.216	0.602	J	1.7	0.219
Silver, Total	7440-22-4	2	ND		0.832	0.235	ND		0.8	0.226	1.03		0.837	0.237	ND		0.848	0.24
Sodium, Total	7440-23-5	NA	16	J	166	2.62	89.6	J	160	2.52	129	J	167	2.64	299		170	2.67
Thallium, Total	7440-28-0	NA	ND		1.66	0.262	ND		1.6	0.252	ND		1.67	0.264	ND		1.7	0.267
Vanadium, Total	7440-62-2	NA	10.6		0.832	0.169	12.1		0.8	0.162	12.2		0.837	0.17	13.9		0.848	0.172
Zinc, Total	7440-66-6	109	26.5	(J)	4.16	0.244	22.1		4	0.234	78.8	(J)	4.18	0.245	86.6		4.24	0.248
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.842	0.168	ND		0.835	0.167	0.365	J	0.884	0.177	ND		0.878	0.176
Cyanide, Total	57-12-5	27	ND	(UJ)	1	0.22	ND		1	0.21	ND		1	0.22	-		-	-
Solids, Total	NONE	NA	95		0.1	NA	95.8		0.1	NA	90.5		0.1	NA	91.1		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:				RISB7_6-8				RISB8_2-4				RISB8_4-6				RISB8_6-8			
			LAB ID:				L1912498-03				L1910377-01				L1911116-01				L1911778-01			
			COLLECTION DATE:				3/19/2019				3/15/2019				3/15/2019				3/15/2019			
			SAMPLE DEPTH (Ft.):				6-8				2-4				4-6				6-8			
			SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL			
			NY-UNRES																			
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.33	-	-	-	-	0.22		0.11	0.022	0.12		0.11	0.021	-	-	-	-	-	-	-	-
Dibenzofuran	132-64-9	7	-	-	-	-	0.45		0.19	0.018	0.044	J	0.18	0.018	-	-	-	-	-	-	-	-
Fluoranthene	206-44-0	100	-	-	-	-	3.6	(J)	0.11	0.022	0.88		0.11	0.021	-	-	-	-	-	-	-	-
Fluorene	86-73-7	30	-	-	-	-	0.71		0.19	0.018	0.064	J	0.18	0.018	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	-	-	-	-	0.81		0.15	0.026	0.34		0.15	0.026	-	-	-	-	-	-	-	-
Naphthalene	91-20-3	12	-	-	-	-	0.71		0.19	0.023	0.046	J	0.18	0.023	-	-	-	-	-	-	-	-
Phenanthrene	85-01-8	100	-	-	-	-	4.8	(J)	0.11	0.023	0.55		0.11	0.022	-	-	-	-	-	-	-	-
Pyrene	129-00-0	100	-	-	-	-	3.2	(J)	0.11	0.019	0.87		0.11	0.018	-	-	-	-	-	-	-	-
Total SVOCs		NA	-	-	-	-	26.083	-	-	-	7.299	-	-	-	-	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																						
Tetrachloroethene	000127-18-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.256	J	0	0	0.28	J	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.484	J	0	0	0.151	J	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	0.259	J	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.854	J	0	0	0.331	J	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	1.49	J	0	0	0.166	J	0	0	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Amide		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Ketone		NA	-	-	-	-	0.324	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.919	J	0	0	0.159	J	0	0	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	1.23	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.318	J	0	0	0.893	J	0	0	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.285	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.316	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.667	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.304	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.925	J	0	0	0.391	J	0	0	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	0.381	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Thiophene		NA	-	-	-	-	0.289	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	-	-	-	-	9.04	J	0	0	2.63	J	0	0	-	-	-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																						
4,4'-DDD	72-54-8	0.0033	-	-	-	-	ND		0.00178	0.000635	-	-	-	-	-	-	-	-	-	-	-	-
4,4'-DDE	72-55-9	0.0033	-	-	-	-	ND		0.00178	0.000412	-	-	-	-	-	-	-	-	-	-	-	-
4,4'-DDT	50-29-3	0.0033	-	-	-	-	0.00278	JIP (J)	0.00334	0.00143	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	319-84-6	0.02	-	-	-	-	ND		0.000741	0.00021	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane	57-74-9	NA	-	-	-	-	ND		0.0144	0.00589	-	-	-	-	-	-	-	-	-	-	-	-
cis-Chlordane	5103-71-9	0.094	-	-	-	-	ND		0.00222	0.00062	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	60-57-1	0.005	-	-	-	-	ND		0.00111	0.000556	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan II	33213-65-9	2.4	-	-	-	-	0.00137	JIP (J)	0.00178	0.000595	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	1024-57-3		-	-	-	-	ND		0.00334	0.001	-	-	-	-	-	-	-	-	-	-	-	-
trans-Chlordane	5103-74-2	NA	-	-	-	-	ND		0.00222	0.000587	-	-	-	-	-	-	-	-	-	-	-	-
POLYCHLORINATED BIPHENYLS BY GC																						
Aroclor 1242	53469-21-9	0.1	-	-	-	-	ND		0.037	0.00499	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	11097-69-1	0.1	-	-	-	-	ND		0.037	0.00405	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	11096-82-5	0.1	-	-	-	-	ND		0.037	0.00684	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1268	11100-14-4	0.1	-	-	-	-	ND		0.037	0.00384	-	-	-	-	-	-	-	-	-	-	-	-
PCBs, Total	1336-36-3	0.1	-	-	-	-	ND		0.037	0.00329	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB7_6-8				RISB8_2-4				RISB8_4-6				RISB8_6-8			
			L1912498-03				L1910377-01				L1911116-01				L1911778-01			
			3/19/2019				3/15/2019				3/15/2019				3/15/2019			
			6-8				2-4				4-6				6-8			
			SOIL				SOIL				SOIL				SOIL			
		NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	3410		8.14	2.2	6330		9.08	2.45	4460		8.72	2.35	4540		8.18	2.21
Antimony, Total	7440-36-0	NA	1.41	J	4.07	0.309	0.517	J	4.54	0.345	0.575	J	4.36	0.331	ND		4.09	0.311
Arsenic, Total	7440-38-2	13	2.39		0.814	0.169	4.21		0.908	0.189	3.44		0.872	0.181	3		0.818	0.17
Barium, Total	7440-39-3	350	12.5		0.814	0.142	84.1		0.908	0.158	136		0.872	0.152	14.2		0.818	0.142
Beryllium, Total	7440-41-7	7.2	0.179	J	0.407	0.027	0.3	J	0.454	0.03	0.253	J	0.436	0.029	0.246	J	0.409	0.027
Cadmium, Total	7440-43-9	2.5	ND		0.814	0.08	ND		0.908	0.089	ND		0.872	0.085	ND		0.818	0.08
Calcium, Total	7440-70-2	NA	790		8.14	2.85	10400		9.08	3.18	13300		8.72	3.05	870		8.18	2.86
Chromium, Total	7440-47-3	30	4.6		0.814	0.078	7.64		0.908	0.087	8.76		0.872	0.084	5.37		0.818	0.079
Cobalt, Total	7440-48-4	NA	3.52		1.63	0.135	3.65		1.82	0.151	3.28		1.74	0.145	3.71		1.64	0.136
Copper, Total	7440-50-8	50	10.7		0.814	0.21	16.1		0.908	0.234	16.6		0.872	0.225	9.42		0.818	0.211
Iron, Total	7439-89-6	NA	8450		4.07	0.735	9630		4.54	0.82	9250		4.36	0.787	10400		4.09	0.739
Lead, Total	7439-92-1	63	3.92	J	4.07	0.218	171	(J)	4.54	0.243	343		4.36	0.234	5.79		4.09	0.219
Magnesium, Total	7439-95-4	NA	1240		8.14	1.25	1700		9.08	1.4	1760		8.72	1.34	1480		8.18	1.26
Manganese, Total	7439-96-5	1600	236		0.814	0.129	257		0.908	0.144	235		0.872	0.139	244		0.818	0.13
Mercury, Total	7439-97-6	0.18	ND		0.068	0.014	0.457	(J)	0.089	0.019	0.95		0.072	0.015	ND		0.068	0.014
Nickel, Total	7440-02-0	30	8.2		2.03	0.197	7.48		2.27	0.22	6.83		2.18	0.211	6.64		2.05	0.198
Potassium, Total	7440-09-7	NA	347		203	11.7	542		227	13.1	454		218	12.6	506		205	11.8
Selenium, Total	7782-49-2	3.9	0.285	J	1.63	0.21	ND		1.82	0.234	0.436	J	1.74	0.225	ND		1.64	0.211
Silver, Total	7440-22-4	2	ND		0.814	0.23	ND		0.908	0.257	ND		0.872	0.247	ND		0.818	0.232
Sodium, Total	7440-23-5	NA	125	J	163	2.56	170	J	182	2.86	137	J	174	2.74	88.1	J	164	2.58
Thallium, Total	7440-28-0	NA	ND		1.63	0.256	ND		1.82	0.286	ND		1.74	0.274	ND		1.64	0.258
Vanadium, Total	7440-62-2	NA	8.56		0.814	0.165	13.1		0.908	0.184	10.2		0.872	0.177	10.8		0.818	0.166
Zinc, Total	7440-66-6	109	24.7		4.07	0.238	142		4.54	0.266	294		4.36	0.255	22.6		4.09	0.24
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.86	0.172	0.37	J	0.926	0.185	ND		0.914	0.183	ND		0.871	0.174
Cyanide, Total	57-12-5	27	-		-	-	ND		1.1	0.23	ND		1.1	0.24	-		-	-
Solids, Total	NONE	NA	93		0.1	NA	86.4		0.1	NA	87.5		0.1	NA	91.8		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB9_2-4				RISB9_4-6				RISB10_2-4				RISB10_4-6			
			L1910853-15				L1910853-16				L1911122-02				L1911122-03			
			3/19/2019				3/19/2019				3/20/2019				3/20/2019			
			2-4				4-6				2-4				4-6			
			SOIL				SOIL				SOIL				SOIL			
ANALYTE	CAS	NY-UNRES (mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.33	0.021	J	0.1	0.02	-	-	-	-	0.55	J	1.6	0.3	0.16	J	0.52	0.1
Dibenzofuran	132-64-9	7	ND		0.18	0.016	-	-	-	-	ND		2.6	0.24	ND		0.88	0.083
Fluoranthene	206-44-0	100	0.045	J	0.1	0.02	-	-	-	-	7.4		1.6	0.3	1.9		0.52	0.1
Fluorene	86-73-7	30	ND		0.18	0.017	-	-	-	-	0.34	J	2.6	0.25	ND		0.88	0.085
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.025	J	0.14	0.024	-	-	-	-	2.1		2.1	0.36	0.65	J	0.7	0.12
Naphthalene	91-20-3	12	ND		0.18	0.021	-	-	-	-	ND		2.6	0.32	ND		0.88	0.11
Phenanthrene	85-01-8	100	0.029	J	0.1	0.021	-	-	-	-	4.6		1.6	0.31	1		0.52	0.11
Pyrene	129-00-0	100	0.036	J	0.1	0.017	-	-	-	-	5.4		1.6	0.26	1.4		0.52	0.087
Total SVOCs		NA	0.287	-	-	-	-	-	-	-	41.07	-	-	-	11.25	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																		
Tetrachloroethene	000127-18-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	0.373	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Amide		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Ketone		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	2.39	J	0	0	0.761	J	0	0
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Thiophene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	0.373	J	0	0	-	-	-	-	2.39	J	0	0	0.761	J	0	0
ORGANOCHLORINE PESTICIDES BY GC																		
4,4'-DDD	72-54-8	0.0033	ND		0.00167	0.000595	-	-	-	-	0.00147	J	0.00166	0.000592	ND		0.00834	0.00297
4,4'-DDE	72-55-9	0.0033	ND		0.00167	0.000386	-	-	-	-	0.00696		0.00166	0.000384	0.00552	JP	0.00834	0.00193
4,4'-DDT	50-29-3	0.0033	ND		0.00313	0.00134	-	-	-	-	0.0602		0.00311	0.00134	0.0355		0.0156	0.0067
Alpha-BHC	319-84-6	0.02	ND		0.000695	0.000198	-	-	-	-	ND		0.000692	0.000196	ND		0.00347	0.000986
Chlordane	57-74-9	NA	ND		0.0136	0.00553	-	-	-	-	ND		0.0135	0.0055	ND		0.0677	0.0276
cis-Chlordane	5103-71-9	0.094	ND		0.00209	0.000581	-	-	-	-	ND		0.00208	0.000578	ND		0.0104	0.0029
Dieldrin	60-57-1	0.005	ND		0.00104	0.000522	-	-	-	-	ND		0.00104	0.000519	ND		0.00521	0.0026
Endosulfan II	33213-65-9	2.4	ND		0.00167	0.000558	-	-	-	-	ND		0.00166	0.000555	ND		0.00834	0.00279
Heptachlor epoxide	1024-57-3		ND		0.00313	0.000939	-	-	-	-	ND		0.00311	0.000934	ND		0.0156	0.00469
trans-Chlordane	5103-74-2	NA	ND		0.00209	0.000551	-	-	-	-	ND		0.00208	0.000548	ND		0.0104	0.00275
POLYCHLORINATED BIPHENYLS BY GC																		
Aroclor 1242	53469-21-9	0.1	ND		0.0341	0.00459	-	-	-	-	ND		0.0349	0.0047	-		-	-
Aroclor 1254	11097-69-1	0.1	ND		0.0341	0.00373	-	-	-	-	ND		0.0349	0.00382	-		-	-
Aroclor 1260	11096-82-5	0.1	ND		0.0341	0.00629	-	-	-	-	ND		0.0349	0.00645	-		-	-
Aroclor 1268	11100-14-4	0.1	ND		0.0341	0.00353	-	-	-	-	ND		0.0349	0.00362	-		-	-
PCBs, Total	1336-36-3	0.1	ND		0.0341	0.00302	-	-	-	-	ND		0.0349	0.0031	-		-	-

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:		RISB9_2-4		RISB9_4-6		RISB10_2-4		RISB10_4-6							
			LAB ID:		L1910853-15		L1910853-16		L1911122-02		L1911122-03							
			COLLECTION DATE:		3/19/2019		3/19/2019		3/20/2019		3/20/2019							
			SAMPLE DEPTH (Ft.):		2-4		4-6		2-4		4-6							
			SAMPLE MATRIX:		SOIL		SOIL		SOIL		SOIL							
		NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	5060		7.99	2.16	3760		8.02	2.16	3660		8.3	2.24	-	-	-	
Antimony, Total	7440-36-0	NA	ND		4	0.304	0.425	J	4.01	0.304	0.672	J	4.15	0.316	-	-	-	
Arsenic, Total	7440-38-2	13	2.44		0.799	0.166	2.8		0.802	0.167	5.16		0.83	0.173	-	-	-	
Barium, Total	7440-39-3	350	31.4		0.799	0.139	18.1		0.802	0.139	52.2		0.83	0.144	-	-	-	
Beryllium, Total	7440-41-7	7.2	0.184	J	0.4	0.026	0.232	J	0.401	0.026	0.241	J	0.415	0.027	-	-	-	
Cadmium, Total	7440-43-9	2.5	0.232	J	0.799	0.078	0.224	J	0.802	0.079	0.307	J	0.83	0.081	-	-	-	
Calcium, Total	7440-70-2	NA	13900		7.99	2.8	3050	(J)	8.02	2.8	59900		8.3	2.91	-	-	-	
Chromium, Total	7440-47-3	30	7.13		0.799	0.077	5.15		0.802	0.077	6.18		0.83	0.08	-	-	-	
Cobalt, Total	7440-48-4	NA	3.63		1.6	0.133	3.16		1.6	0.133	3.35		1.66	0.138	-	-	-	
Copper, Total	7440-50-8	50	8.81		0.799	0.206	8.71		0.802	0.207	12.7		0.83	0.214	-	-	-	
Iron, Total	7439-89-6	NA	9960		4	0.722	8760		4.01	0.724	8170		4.15	0.75	-	-	-	
Lead, Total	7439-92-1	63	84.1	(J)	4	0.214	29.9		4.01	0.215	59.7		4.15	0.222	-	-	-	
Magnesium, Total	7439-95-4	NA	2040	(J)	7.99	1.23	1470		8.02	1.23	27200		8.3	1.28	-	-	-	
Manganese, Total	7439-96-5	1600	265		0.799	0.127	171		0.802	0.127	167		0.83	0.132	-	-	-	
Mercury, Total	7439-97-6	0.18	0.122		0.067	0.014	0.022	J	0.068	0.014	0.014	J	0.067	0.014	-	-	-	
Nickel, Total	7440-02-0	30	7.06		2	0.193	7.32		2	0.194	8.53		2.08	0.201	-	-	-	
Potassium, Total	7440-09-7	NA	646	(J)	200	11.5	301		200	11.5	460		208	12	-	-	-	
Selenium, Total	7782-49-2	3.9	0.368	J	1.6	0.206	ND		1.6	0.207	0.324	J	1.66	0.214	-	-	-	
Silver, Total	7440-22-4	2	ND		0.799	0.226	ND		0.802	0.227	1.34		0.83	0.235	-	-	-	
Sodium, Total	7440-23-5	NA	128	J	160	2.52	60.6	J	160	2.52	182		166	2.62	-	-	-	
Thallium, Total	7440-28-0	NA	ND		1.6	0.252	ND		1.6	0.252	ND		1.66	0.262	-	-	-	
Vanadium, Total	7440-62-2	NA	10.6		0.799	0.162	8.55		0.802	0.163	13.4		0.83	0.168	-	-	-	
Zinc, Total	7440-66-6	109	56.8	(J)	4	0.234	32.2		4.01	0.235	49.2		4.15	0.243	-	-	-	
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.85	0.17	ND		0.853	0.17	ND		0.853	0.17	-	-	-	
Cyanide, Total	57-12-5	27	ND		0.97	0.2	-	-	-	-	ND		0.98	0.21	-	-	-	
Solids, Total	NONE	NA	94.1		0.1	NA	93.8		0.1	NA	93.8		0.1	NA	92.8		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:				RISB10_ 6-8				RISB10_ 10-12				RISB11_ 2-4				RISB11_ 10-12			
			LAB ID:				L1911122-04				L1911122-05				L1910377-02				L1911116-02			
			COLLECTION DATE:				3/20/2019				3/20/2019				3/15/2019				3/15/2019			
			SAMPLE DEPTH (Ft.):				6-8				10-12				2-4				10-12			
			SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL			
			NY-UNRES																			
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.33	ND		0.1	0.02	ND		0.11	0.021	0.087	J	0.11	0.022	-		-	-	-		-	-
Dibenzofuran	132-64-9	7	ND		0.17	0.016	ND		0.18	0.017	0.12	J	0.19	0.018	-		-	-	-		-	-
Fluoranthene	206-44-0	100	ND		0.1	0.02	ND		0.11	0.021	1.5		0.11	0.022	-		-	-	-		-	-
Fluorene	86-73-7	30	ND		0.17	0.016	ND		0.18	0.018	0.16	J	0.19	0.018	-		-	-	-		-	-
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	ND		0.14	0.024	ND		0.15	0.026	0.37		0.15	0.027	-		-	-	-		-	-
Naphthalene	91-20-3	12	ND		0.17	0.021	ND		0.18	0.022	0.062	J	0.19	0.023	-		-	-	-		-	-
Phenanthrene	85-01-8	100	ND		0.1	0.021	ND		0.11	0.022	1.2		0.11	0.023	-		-	-	-		-	-
Pyrene	129-00-0	100	ND		0.1	0.017	ND		0.11	0.018	1.3		0.11	0.019	-		-	-	-		-	-
Total SVOCs		NA	-	-	-	-	-	-	-	-	9.939	-	-	-	-	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																						
Tetrachloroethene	000127-18-4	NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	0.817	J	0	0	-		-	-	-		0.335	J	0	0	-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	0.86	J	0	0	-		-	-	-		0.452	J	0	0	-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		0.633	J	0	0	-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		0.553	J	0	0	-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		0.452	J	0	0	-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		0.491	J	0	0	-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		0.298	J	0	0	-	-	-		-	-
Unknown Alkane		NA	-		-	-	-		-	-	-		0.972	J	0	0	-	-	-		-	-
Unknown Amide		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Cyclohexane		NA	-		-	-	-		-	-	-		0.402	J	0	0	-	-	-		-	-
Unknown Ketone		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		0.191	J	0	0	-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		0.354	J	0	0	-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-	-	-	-	-		-	-	-		-	-	-	-	-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		0.237	J	0	0	-	-	-		-	-
Unknown PAH		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Thiophene		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Total TIC Compounds		NA	1.68	J	0	0	-		-	-	-		5.37	J	0	0	-	-	-		-	-
ORGANOCHLORINE PESTICIDES BY GC																						
4,4'-DDD	72-54-8	0.0033	ND		0.00164	0.000585	ND		0.00169	0.000604	0.0352		0.0018	0.000642	ND		0.00168	0.000599				
4,4'-DDE	72-55-9	0.0033	ND		0.00164	0.000379	ND		0.00169	0.000391	0.0379		0.0018	0.000416	ND		0.00168	0.000388				
4,4'-DDT	50-29-3	0.0033	ND		0.00308	0.00132	ND		0.00317	0.00136	0.0917		0.00337	0.00145	ND		0.00315	0.00135				
Alpha-BHC	319-84-6	0.02	ND		0.000684	0.000194	ND		0.000705	0.0002	ND		0.00075	0.000213	ND		0.0007	0.000199				
Chlordane	57-74-9	NA	ND		0.0133	0.00543	ND		0.0138	0.00561	0.0586		0.0146	0.00596	ND		0.0136	0.00556				
cis-Chlordane	5103-71-9	0.094	ND		0.00205	0.000572	ND		0.00212	0.00059	0.00603		0.00225	0.000627	ND		0.0021	0.000585				
Dieldrin	60-57-1	0.005	ND		0.00102	0.000513	ND		0.00106	0.000529	0.00982		0.00112	0.000562	ND		0.00105	0.000525				
Endosulfan II	33213-65-9	2.4	ND		0.00164	0.000548	ND		0.00169	0.000566	ND		0.0018	0.000601	ND		0.00168	0.000561				
Heptachlor epoxide	1024-57-3		ND		0.00308	0.000923	ND		0.00317	0.000952	ND		0.00337	0.00101	ND		0.00315	0.000945				
trans-Chlordane	5103-74-2	NA	ND		0.00205	0.000541	ND		0.00212	0.000558	0.0041	IP (J)	0.00225	0.000594	ND		0.0021	0.000554				
POLYCHLORINATED BIPHENYLS BY GC																						
Aroclor 1242	53469-21-9	0.1	-		-	-	ND		0.0362	0.00488	ND		0.0384	0.00518	-		-	-	-		-	-
Aroclor 1254	11097-69-1	0.1	-		-	-	ND		0.0362	0.00396	0.0438		0.0384	0.0042	-		-	-	-		-	-
Aroclor 1260	11096-82-5	0.1	-		-	-	ND		0.0362	0.00669	ND		0.0384	0.0071	-		-	-	-		-	-
Aroclor 1268	11100-14-4	0.1	-		-	-	ND		0.0362	0.00375	ND		0.0384	0.00398	-		-	-	-		-	-
PCBs, Total	1336-36-3	0.1	-		-	-	ND		0.0362	0.00321	0.0438		0.0384	0.00341	-		-	-	-		-	-

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:				RISB10_ 6-8				RISB10_ 10-12				RISB11_ 2-4				RISB11_ 10-12			
			LAB ID:				L1911122-04				L1911122-05				L1910377-02				L1911116-02			
			COLLECTION DATE:				3/20/2019				3/20/2019				3/15/2019				3/15/2019			
			SAMPLE DEPTH (Ft.):				6-8				10-12				2-4				10-12			
			SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL			
			NY-UNRES																			
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																						
Aluminum, Total	7429-90-5	NA	-	-	-	-	2790		8.73	2.36	6770		9.27	2.5	2290		7.98	2.16				
Antimony, Total	7440-36-0	NA	-	-	-	-	0.995	J	4.36	0.332	0.982	J	4.63	0.352	ND		3.99	0.303				
Arsenic, Total	7440-38-2	13	-	-	-	-	2.21		0.873	0.182	5.42		0.927	0.193	1.16		0.798	0.166				
Barium, Total	7440-39-3	350	-	-	-	-	8.95		0.873	0.152	85.2		0.927	0.161	8.26		0.798	0.139				
Beryllium, Total	7440-41-7	7.2	-	-	-	-	0.183	J	0.436	0.029	0.287	J	0.463	0.031	0.136	J	0.399	0.026				
Cadmium, Total	7440-43-9	2.5	-	-	-	-	ND		0.873	0.086	ND		0.927	0.091	ND		0.798	0.078				
Calcium, Total	7440-70-2	NA	-	-	-	-	988		8.73	3.05	34500		9.27	3.24	5290		7.98	2.79				
Chromium, Total	7440-47-3	30	-	-	-	-	3.95		0.873	0.084	12		0.927	0.089	3.36		0.798	0.077				
Cobalt, Total	7440-48-4	NA	-	-	-	-	3.18		1.74	0.145	6.96		1.85	0.154	2.59		1.6	0.132				
Copper, Total	7440-50-8	50	-	-	-	-	10		0.873	0.225	49		0.927	0.239	8.19		0.798	0.206				
Iron, Total	7439-89-6	NA	-	-	-	-	8520		4.36	0.788	14000		4.63	0.837	6930		3.99	0.721				
Lead, Total	7439-92-1	63	-	-	-	-	3.32	J	4.36	0.234	93.3	(J)	4.63	0.248	2.99	J	3.99	0.214				
Magnesium, Total	7439-95-4	NA	-	-	-	-	1290		8.73	1.34	6130		9.27	1.43	1260		7.98	1.23				
Manganese, Total	7439-96-5	1600	-	-	-	-	237		0.873	0.139	305		0.927	0.147	79.3		0.798	0.127				
Mercury, Total	7439-97-6	0.18	-	-	-	-	ND		0.07	0.015	0.095	J	0.098	0.021	ND		0.067	0.014				
Nickel, Total	7440-02-0	30	-	-	-	-	7.49		2.18	0.211	16		2.32	0.224	5.89		2	0.193				
Potassium, Total	7440-09-7	NA	-	-	-	-	277		218	12.6	1130		232	13.3	258		200	11.5				
Selenium, Total	7782-49-2	3.9	-	-	-	-	ND		1.74	0.225	ND		1.85	0.239	ND		1.6	0.206				
Silver, Total	7440-22-4	2	-	-	-	-	ND		0.873	0.247	ND		0.927	0.262	ND		0.798	0.226				
Sodium, Total	7440-23-5	NA	-	-	-	-	136	J	174	2.75	171	J	185	2.92	32.1	J	160	2.52				
Thallium, Total	7440-28-0	NA	-	-	-	-	ND		1.74	0.275	ND		1.85	0.292	ND		1.6	0.252				
Vanadium, Total	7440-62-2	NA	-	-	-	-	7.67		0.873	0.177	14.7		0.927	0.188	5.94		0.798	0.162				
Zinc, Total	7440-66-6	109	-	-	-	-	22.7		4.36	0.256	109		4.63	0.272	20.1		3.99	0.234				
GENERAL CHEMISTRY																						
Chromium, Hexavalent	18540-29-9	1	-	-	-	-	ND		0.891	0.178	0.376	J	0.94	0.188	ND		0.85	0.17				
Cyanide, Total	57-12-5	27	-	-	-	-	ND		1.1	0.23	ND		1.1	0.23	ND		1	0.22				
Solids, Total	NONE	NA	94.8		0.1	NA	89.8		0.1	NA	85.1		0.1	NA	94.1		0.1	NA				

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:				RISB12_ 2-4				RISB12_ 4-6				RISB12_ 6-8				RISB13_ 10-12			
			LAB ID:				L1910853-04				L1910853-05				L1912498-02				L1911122-09			
			COLLECTION DATE:				3/19/2019				3/19/2019				3/19/2019				3/20/2019			
			SAMPLE DEPTH (Ft.):				2-4				4-6				6-8				10-12			
			SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL			
				NY-UNRES																		
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL				
VOLATILE ORGANICS BY EPA 5035																						
1,1-Dichloroethene	75-35-4	0.33	ND		0.0011	0.00025	-		-	-	-		-	-	ND		0.001	0.00024				
1,2-Dichlorobenzene	95-50-1	1.1	ND		0.0021	0.00015	-		-	-	-		-	-	ND		0.0021	0.00015				
1,3-Dichlorobenzene	541-73-1	2.4	ND		0.0021	0.00016	-		-	-	-		-	-	ND		0.0021	0.00015				
1,4-Dichlorobenzene	106-46-7	1.8	ND		0.0021	0.00018	-		-	-	-		-	-	ND		0.0021	0.00018				
Acetone	67-64-1	0.05	0.022	(U)	0.011	0.0051	-		-	-	-		-	-	ND		0.01	0.005				
Benzene	71-43-2	0.06	ND		0.00053	0.00018	-		-	-	-		-	-	ND		0.00052	0.00017				
Bromodichloromethane	75-27-4	NA	ND		0.00053	0.00012	-		-	-	-		-	-	0.0003	J	0.00052	0.00011				
Chlorobenzene	108-90-7	1.1	ND		0.00053	0.00013	-		-	-	-		-	-	ND		0.00052	0.00013				
Chloroform	67-66-3	0.37	ND		0.0016	0.00015	-		-	-	-		-	-	0.0012	J	0.0015	0.00014				
cis-1,2-Dichloroethene	156-59-2	0.25	ND		0.0011	0.00018	-		-	-	-		-	-	ND		0.001	0.00018				
Ethylbenzene	100-41-4	1	ND		0.0011	0.00015	-		-	-	-		-	-	ND		0.001	0.00014				
Methyl Acetate	79-20-9	NA	ND		0.0042	0.001	-		-	-	-		-	-	ND		0.0041	0.00098				
o-Xylene	95-47-6	0.26	ND		0.0011	0.00031	-		-	-	-		-	-	ND		0.001	0.0003				
p/m-Xylene	179601-23-1	0.26	ND		0.0021	0.00059	-		-	-	-		-	-	ND		0.0021	0.00058				
Tetrachloroethene	127-18-4	1.3	0.0038		0.00053	0.00021	-		-	-	-		-	-	0.0022		0.00052	0.0002				
trans-1,2-Dichloroethene	156-60-5	0.19	ND		0.0016	0.00014	-		-	-	-		-	-	ND		0.0015	0.00014				
Trichloroethene	79-01-6	0.47	0.00041	J	0.00053	0.00014	-		-	-	-		-	-	ND		0.00052	0.00014				
Vinyl chloride	75-01-4	0.02	ND		0.0011	0.00036	-		-	-	-		-	-	ND		0.001	0.00034				
Total VOCs		NA	0.02621	-	-	-	-	-	-	-	-	-	-	-	0.0037	-	-	-				
VOLATILE ORGANICS BY EPA 5035-TIC																						
1,1'-Bicyclohexyl	000092-51-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1-Pentene	000109-67-1	NA	0.0123	NJ (UJ)	0	0	-		-	-	-		-	-	-		-	-				
Butane, 2-Methyl-	000078-78-4	NA	-		-	-	-		-	-	-		-	-	-		-	-				
Cyclobutane, methyl-	000598-61-8	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Cyclopentane	000287-92-3	NA	-		-	-	-		-	-	-		-	-	-		-	-				
Dodecane (C12)	000112-40-3	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Pentadecane	000629-62-9	NA	-		-	-	-		-	-	-		-	-	-		-	-				
Undecane	001120-21-4	NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Alkane		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Alkene		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Alkene		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Aromatic		NA	-		-	-	-		-	-	-		-	-	-		-	-				
Unknown Cycloalkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unknown Naphthalene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total TIC Compounds		NA	0.0123	J	0	0	-		-	-	-		-	-	-		-	-				
SEMIVOLATILE ORGANICS BY GC/MS																						
2,4-Dinitrophenol	51-28-5		ND		0.88	0.085	-		-	-	-		-	-	ND		0.94	0.092				
2-Methylnaphthalene	91-57-6	NA	0.05	J	0.22	0.022	-		-	-	-		-	-	ND		0.24	0.024				
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	ND		0.26	0.029	-		-	-	-		-	-	ND		0.28	0.031				
Acenaphthene	83-32-9	20	0.07	J	0.15	0.019	-		-	-	-		-	-	ND		0.16	0.02				
Acenaphthylene	208-96-8	100	0.18		0.15	0.028	-		-	-	-		-	-	ND		0.16	0.03				
Anthracene	120-12-7	100	0.2		0.11	0.036	-		-	-	-		-	-	ND		0.12	0.038				
Benzaldehyde	100-52-7	NA	ND		0.24	0.049	-		-	-	-		-	-	ND		0.26	0.053				
Benzo(a)anthracene	56-55-3	1	0.68		0.11	0.021	-		-	-	-		-	-	ND		0.12	0.022				
Benzo(a)pyrene	50-32-8	1	0.67		0.15	0.045	-		-	-	-		-	-	ND		0.16	0.048				
Benzo(b)fluoranthene	205-99-2	1	0.83		0.11	0.031	-		-	-	-		-	-	ND		0.12	0.033				
Benzo(ghi)perylene	191-24-2	100	0.35		0.15	0.022	-		-	-	-		-	-	ND		0.16	0.023				
Benzo(k)fluoranthene	207-08-9	0.8	0.32		0.11	0.029	-		-	-	-		-	-	ND		0.12	0.031				
Biphenyl	92-52-4	NA	ND		0.42	0.042	-		-	-	-		-	-	ND		0.45	0.046				
Bis(2-ethylhexyl)phthalate	117-81-7	NA	ND		0.18	0.063	-		-	-	-		-	-	ND		0.2	0.068				
Butyl benzyl phthalate	85-68-7	NA	ND		0.18	0.046	-		-	-	-		-	-	ND		0.2	0.05				
Carbazole	86-74-8	NA	0.12	J	0.18	0.018	-		-	-	-		-	-	ND		0.2	0.019				
Chrysene	218-01-9	1	0.7		0.11	0.019	-		-	-	-		-	-	ND		0.12	0.02				
Di-n-butylphthalate	84-74-2	NA	ND		0.18	0.035	-		-	-	-		-	-	ND		0.2	0.037				

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB12 2-4				RISB12 4-6				RISB12 6-8				RISB13 10-12			
			L1910853-04				L1910853-05				L1912498-02				L1911122-09			
			3/19/2019				3/19/2019				3/19/2019				3/20/2019			
			2-4				4-6				6-8				10-12			
			SOIL				SOIL				SOIL				SOIL			
NY-UNRES																		
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.33	0.086	J	0.11	0.021	-	-	-	-	-	-	-	-	ND	-	0.12	0.023
Dibenzofuran	132-64-9	7	0.1	J	0.18	0.017	-	-	-	-	-	-	-	-	ND	-	0.2	0.019
Fluoranthene	206-44-0	100	1.5	-	0.11	0.021	-	-	-	-	-	-	-	-	ND	-	0.12	0.022
Fluorene	86-73-7	30	0.11	J	0.18	0.018	-	-	-	-	-	-	-	-	ND	-	0.2	0.019
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.38	-	0.15	0.026	-	-	-	-	-	-	-	-	ND	-	0.16	0.027
Naphthalene	91-20-3	12	0.12	J	0.18	0.022	-	-	-	-	-	-	-	-	ND	-	0.2	0.024
Phenanthrene	85-01-8	100	1.1	-	0.11	0.022	-	-	-	-	-	-	-	-	ND	-	0.12	0.024
Pyrene	129-00-0	100	1.3	-	0.11	0.018	-	-	-	-	-	-	-	-	ND	-	0.12	0.02
Total SVOCs		NA	8.866	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																		
Tetrachloroethene	000127-18-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	0.309	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Amide		NA	0.273	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Ketone		NA	0.314	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	0.158	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	0.177	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	0.432	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	0.221	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Thiophene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	1.88	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																		
4,4'-DDD	72-54-8	0.0033	ND	-	0.00173	0.000618	0.00203	IP (J)	0.00176	0.000627	ND	-	0.00171	0.00061	ND	-	0.00187	0.000666
4,4'-DDE	72-55-9	0.0033	0.00458	-	0.00173	0.000401	0.00748	-	0.00176	0.000406	ND	-	0.00171	0.000396	0.0013	J	0.00187	0.000432
4,4'-DDT	50-29-3	0.0033	0.0251	-	0.00325	0.00139	0.0569	-	0.0033	0.00141	ND	-	0.00321	0.00138	0.00376	-	0.0035	0.0015
Alpha-BHC	319-84-6	0.02	ND	-	0.000722	0.000205	ND	-	0.000732	0.000208	ND	-	0.000713	0.000202	ND	-	0.000778	0.000221
Chlordane	57-74-9	NA	ND	-	0.0141	0.00574	0.206	-	0.0143	0.00582	ND	-	0.0139	0.00567	ND	-	0.0152	0.00619
cis-Chlordane	5103-71-9	0.094	0.00515	-	0.00217	0.000604	0.0297	-	0.0022	0.000612	ND	-	0.00214	0.000596	ND	-	0.00233	0.000651
Dieldrin	60-57-1	0.005	0.00277	-	0.00108	0.000542	0.00517	-	0.0011	0.000549	ND	-	0.00107	0.000534	ND	-	0.00117	0.000584
Endosulfan II	33213-65-9	2.4	ND	-	0.00173	0.000579	ND	-	0.00176	0.000587	ND	-	0.00171	0.000572	ND	-	0.00187	0.000624
Heptachlor epoxide	1024-57-3		ND	-	0.00325	0.000975	ND	(U)	0.0033	0.000989	ND	-	0.00321	0.000962	ND	-	0.0035	0.00105
trans-Chlordane	5103-74-2	NA	0.00416	IP (J)	0.00217	0.000572	0.0344	-	0.0022	0.00058	ND	-	0.00214	0.000564	ND	-	0.00233	0.000616
POLYCHLORINATED BIPHENYLS BY GC																		
Aroclor 1242	53469-21-9	0.1	ND	-	0.0357	0.00481	-	-	-	-	-	-	-	-	ND	-	0.0391	0.00526
Aroclor 1254	11097-69-1	0.1	0.00666	J	0.0357	0.00391	-	-	-	-	-	-	-	-	ND	-	0.0391	0.00427
Aroclor 1260	11096-82-5	0.1	0.00971	J	0.0357	0.0066	-	-	-	-	-	-	-	-	ND	-	0.0391	0.00722
Aroclor 1268	11100-14-4	0.1	0.0048	J	0.0357	0.0037	-	-	-	-	-	-	-	-	ND	-	0.0391	0.00405
PCBs, Total	1336-36-3	0.1	0.0212	J	0.0357	0.00317	-	-	-	-	-	-	-	-	ND	-	0.0391	0.00347

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830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

			SAMPLE ID:		RISB12_2-4		RISB12_4-6		RISB12_6-8		RISB13_10-12							
			LAB ID:		L1910853-04		L1910853-05		L1912498-02		L1911122-09							
			COLLECTION DATE:		3/19/2019		3/19/2019		3/19/2019		3/20/2019							
			SAMPLE DEPTH (Ft.):		2-4		4-6		6-8		10-12							
			SAMPLE MATRIX:		SOIL		SOIL		SOIL		SOIL							
		NY-UNRES																
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	5320		8.55	2.31	5030		8.54	2.3	2690		8.34	2.25	2040		9.46	2.56
Antimony, Total	7440-36-0	NA	ND		4.27	0.325	0.683	J	4.27	0.324	0.384	J	4.17	0.317	0.369	J	4.73	0.36
Arsenic, Total	7440-38-2	13	3.75		0.855	0.178	6.32		0.854	0.178	1.87		0.834	0.174	1.71		0.946	0.197
Barium, Total	7440-39-3	350	69		0.855	0.149	60.6		0.854	0.148	8.05		0.834	0.145	6.62		0.946	0.165
Beryllium, Total	7440-41-7	7.2	0.256	J	0.427	0.028	0.282	J	0.427	0.028	0.125	J	0.417	0.028	0.104	J	0.473	0.031
Cadmium, Total	7440-43-9	2.5	0.325	J	0.855	0.084	0.495	J	0.854	0.084	ND		0.834	0.082	ND		0.946	0.093
Calcium, Total	7440-70-2	NA	2090		8.55	2.99	3640	(J)	8.54	2.99	723		8.34	2.92	597		9.46	3.31
Chromium, Total	7440-47-3	30	7.17		0.855	0.082	6.25		0.854	0.082	3.59		0.834	0.08	3.5		0.946	0.091
Cobalt, Total	7440-48-4	NA	3.67		1.71	0.142	3.67		1.71	0.142	2.77		1.67	0.138	2.54		1.89	0.157
Copper, Total	7440-50-8	50	24.9		0.855	0.22	15.6		0.854	0.22	7.51		0.834	0.215	6.86		0.946	0.244
Iron, Total	7439-89-6	NA	10400		4.27	0.772	10400		4.27	0.771	7760		4.17	0.754	7580		4.73	0.854
Lead, Total	7439-92-1	63	124	(J)	4.27	0.229	129		4.27	0.229	2.92	J	4.17	0.224	2.54	J	4.73	0.254
Magnesium, Total	7439-95-4	NA	1350	(J)	8.55	1.32	1460		8.54	1.31	926		8.34	1.28	910		9.46	1.46
Manganese, Total	7439-96-5	1600	214		0.855	0.136	247		0.854	0.136	226		0.834	0.133	66.8		0.946	0.15
Mercury, Total	7439-97-6	0.18	0.679		0.07	0.015	0.427	(J)	0.07	0.015	ND		0.069	0.015	ND		0.076	0.016
Nickel, Total	7440-02-0	30	7.65		2.14	0.207	8.61		2.13	0.206	5.81		2.09	0.202	5.05		2.36	0.229
Potassium, Total	7440-09-7	NA	332	(J)	214	12.3	384		213	12.3	255		209	12	213	J	236	13.6
Selenium, Total	7782-49-2	3.9	0.316	J	1.71	0.22	ND		1.71	0.22	0.242	J	1.67	0.215	ND		1.89	0.244
Silver, Total	7440-22-4	2	ND		0.855	0.242	ND		0.854	0.242	ND		0.834	0.236	ND		0.946	0.268
Sodium, Total	7440-23-5	NA	47.8	J	171	2.69	184		171	2.69	20.9	J	167	2.63	26.4	J	189	2.98
Thallium, Total	7440-28-0	NA	ND		1.71	0.269	ND		1.71	0.269	ND		1.67	0.263	ND		1.89	0.298
Vanadium, Total	7440-62-2	NA	12.8		0.855	0.174	12.6		0.854	0.173	8.1		0.834	0.169	8.09		0.946	0.192
Zinc, Total	7440-66-6	109	111	(J)	4.27	0.25	142		4.27	0.25	18.9		4.17	0.244	19.2		4.73	0.277
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.889	0.178	ND		0.896	0.179	ND		0.875	0.175	ND		0.957	0.191
Cyanide, Total	57-12-5	27	ND		1.1	0.23	-		-	-	-		-	-	ND		1.1	0.24
Solids, Total	NONE	NA	90		0.1	NA	89.3		0.1	NA	91.4		0.1	NA	83.6		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB14_ 9-11				RISB15_ 2-4				FD02-190312 (RISB15_ 2-4)				RISB16_ 6-8			
			L19111222-01				L1909635-01				L1909635-04				L1909887-01			
			3/20/2019				3/12/2019				3/12/2019				3/13/2019			
			9-11				2-4				2-4				6-8			
			SOIL				SOIL				SOIL				SOIL			
NY-UNRES																		
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.33	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Dibenzofuran	132-64-9	7	ND		0.17	0.016	ND		0.17	0.016	ND		0.17	0.016	ND		0.18	0.017
Fluoranthene	206-44-0	100	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	0.1		0.1	0.02
Fluorene	86-73-7	30	ND		0.17	0.017	ND		0.17	0.017	ND		0.17	0.017	ND		0.18	0.017
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	ND		0.14	0.024	ND		0.14	0.024	ND		0.14	0.024	0.03	J	0.14	0.024
Naphthalene	91-20-3	12	ND		0.17	0.021	ND		0.17	0.021	ND		0.17	0.021	ND		0.18	0.021
Phenanthrene	85-01-8	100	ND		0.1	0.021	ND		0.1	0.021	ND		0.1	0.021	0.075	J	0.1	0.021
Pyrene	129-00-0	100	ND		0.1	0.017	ND		0.1	0.017	ND		0.1	0.017	0.074	J	0.1	0.018
Total SVOCs		NA	-	-	-	-	-	-	-	-	-	-	-	-	0.593	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																		
Tetrachloroethene	000127-18-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	0.142	J	0	0	-	-	-	-	0.384	J	0	0
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	0.166	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown		NA	0.173	J	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Amide		NA	0.347	J	0	0	-	-	-	-	0.35	J	0	0	-	-	-	-
Unknown Cyclohexane		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Ketone		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Thiophene		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	0.686	J	0	0	0.142	J	0	0	0.35	J	0	0	0.384	J	0	0
ORGANOCHLORINE PESTICIDES BY GC																		
4,4'-DDD	72-54-8	0.0033	ND		0.00167	0.000596	ND		0.00168	0.000599	ND		0.00166	0.000592	ND		0.00164	0.000586
4,4'-DDE	72-55-9	0.0033	ND		0.00167	0.000386	ND		0.00168	0.000388	ND		0.00166	0.000384	ND		0.00164	0.00038
4,4'-DDT	50-29-3	0.0033	ND		0.00313	0.00134	ND		0.00315	0.00135	ND		0.00311	0.00133	ND		0.00308	0.00132
Alpha-BHC	319-84-6	0.02	ND		0.000696	0.000198	ND		0.000699	0.000199	ND		0.000692	0.000196	0.000974	IP (J)	0.000684	0.000194
Chlordane	57-74-9	NA	ND		0.0136	0.00554	ND		0.0136	0.00556	ND		0.0135	0.0055	ND		0.0133	0.00544
cis-Chlordane	5103-71-9	0.094	ND		0.00209	0.000582	ND		0.0021	0.000585	ND		0.00207	0.000578	0.0011	J	0.00205	0.000572
Dieldrin	60-57-1	0.005	ND		0.00104	0.000522	ND		0.00105	0.000524	ND		0.00104	0.000519	ND		0.00103	0.000513
Endosulfan II	33213-65-9	2.4	ND		0.00167	0.000559	ND		0.00168	0.000561	ND		0.00166	0.000555	ND		0.00164	0.000549
Heptachlor epoxide	1024-57-3		ND		0.00313	0.00094	ND		0.00315	0.000944	ND		0.00311	0.000934	ND		0.00308	0.000924
trans-Chlordane	5103-74-2	NA	ND		0.00209	0.000552	ND		0.0021	0.000554	ND		0.00207	0.000548	ND		0.00205	0.000542
POLYCHLORINATED BIPHENYLS BY GC																		
Aroclor 1242	53469-21-9	0.1	ND		0.034	0.00458	ND		0.0346	0.00467	ND		0.0344	0.00463	ND		0.0354	0.00478
Aroclor 1254	11097-69-1	0.1	ND		0.034	0.00372	ND		0.0346	0.00379	ND		0.0344	0.00376	0.0198	J	0.0354	0.00388
Aroclor 1260	11096-82-5	0.1	ND		0.034	0.00628	ND		0.0346	0.0064	ND		0.0344	0.00635	0.0165	J	0.0354	0.00655
Aroclor 1268	11100-14-4	0.1	ND		0.034	0.00352	ND		0.0346	0.00359	ND		0.0344	0.00356	0.00656	J	0.0354	0.00367
PCBs, Total	1336-36-3	0.1	ND		0.034	0.00302	ND		0.0346	0.00307	ND		0.0344	0.00305	0.0429	J	0.0354	0.00315

TABLE 5: RI SUBSURFACE FILL/SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Ft.): SAMPLE MATRIX:			RISB14 9-11				RISB15 2-4				FD02-190312 (RISB15 2-4)				RISB16 6-8			
			L1911122-01				L1909635-01				L1909635-04				L1909887-01			
			3/20/2019				3/12/2019				3/12/2019				3/13/2019			
			9-11				2-4				2-4				6-8			
			SOIL				SOIL				SOIL				SOIL			
			NY-UNRES															
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NA	2590		8.23	2.22	3650		8.13	2.2	3920		8.38	2.26	3240		8.47	2.29
Antimony, Total	7440-36-0	NA	0.403	J	4.11	0.313	0.455	J	4.06	0.309	0.796	J	4.19	0.318	0.474	J	4.24	0.322
Arsenic, Total	7440-38-2	13	2.66		0.823	0.171	1.82		0.813	0.169	2.82		0.838	0.174	2.36		0.847	0.176
Barium, Total	7440-39-3	350	13.1		0.823	0.143	10.5		0.813	0.141	12.2		0.838	0.146	22.9		0.847	0.147
Beryllium, Total	7440-41-7	7.2	0.189	J	0.411	0.027	0.211	J	0.406	0.027	0.21	J	0.419	0.028	0.136	J	0.424	0.028
Cadmium, Total	7440-43-9	2.5	0.255	J	0.823	0.081	ND		0.813	0.08	ND	(UJ)	0.838	0.082	ND		0.847	0.083
Calcium, Total	7440-70-2	NA	3290		8.23	2.88	1170		8.13	2.84	1160		8.38	2.93	10100		8.47	2.96
Chromium, Total	7440-47-3	30	4.5		0.823	0.079	4.37		0.813	0.078	4.8		0.838	0.08	5.02		0.847	0.081
Cobalt, Total	7440-48-4	NA	3.43		1.64	0.137	3.06		1.63	0.135	3.35		1.68	0.139	3.45		1.69	0.141
Copper, Total	7440-50-8	50	6.73		0.823	0.212	8.92	(J)	0.813	0.21	9.01		0.838	0.216	9.22		0.847	0.219
Iron, Total	7439-89-6	NA	11400		4.11	0.743	8390		4.06	0.734	9080		4.19	0.757	9180		4.24	0.765
Lead, Total	7439-92-1	63	6.26		4.11	0.22	9.15		4.06	0.218	7.02		4.19	0.225	21.2		4.24	0.227
Magnesium, Total	7439-95-4	NA	1160		8.23	1.27	1320	(J)	8.13	1.25	1380	(J)	8.38	1.29	3330	(J)	8.47	1.3
Manganese, Total	7439-96-5	1600	352		0.823	0.131	189	(J)	0.813	0.129	219		0.838	0.133	253		0.847	0.135
Mercury, Total	7439-97-6	0.18	ND		0.067	0.014	ND		0.067	0.014	ND		0.066	0.014	ND		0.069	0.015
Nickel, Total	7440-02-0	30	6.68		2.06	0.199	6.34		2.03	0.197	7.02		2.1	0.203	7.37		2.12	0.205
Potassium, Total	7440-09-7	NA	254		206	11.8	282		203	11.7	350	(J)	210	12.1	323		212	12.2
Selenium, Total	7782-49-2	3.9	ND		1.64	0.212	ND		1.63	0.21	0.268	J	1.68	0.216	0.347	J	1.69	0.219
Silver, Total	7440-22-4	2	ND		0.823	0.233	ND		0.813	0.23	ND		0.838	0.237	ND		0.847	0.24
Sodium, Total	7440-23-5	NA	96.9	J	164	2.59	19.8	J (U)	163	2.56	31.4	J (U)	168	2.64	55.3	J	169	2.67
Thallium, Total	7440-28-0	NA	ND		1.64	0.259	ND		1.63	0.256	ND		1.68	0.264	ND		1.69	0.267
Vanadium, Total	7440-62-2	NA	14.4		0.823	0.167	8.22	(J)	0.813	0.165	8.92		0.838	0.17	8.92		0.847	0.172
Zinc, Total	7440-66-6	109	22.8		4.11	0.241	20.8		4.06	0.238	21.5		4.19	0.246	39.5		4.24	0.248
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	1	ND		0.849	0.17	ND		0.84	0.168	ND		0.845	0.169	ND		0.868	0.174
Cyanide, Total	57-12-5	27	ND		1	0.21	ND		1	0.21	ND		1	0.21	ND		1	0.21
Solids, Total	NONE	NA	94.2		0.1	NA	95.2		0.1	NA	94.7		0.1	NA	92.2		0.1	NA

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.
NA denotes Not Applicable
Qualifiers in parantheses are from the data validator

**TABLE 5A: SOIL/FILL SAMPLING ANALYTICAL SUMMARY RESULTS (EXCLUDING 1,4-DIOXANE AND PFAS)
SUPPLEMENTAL REMEDIAL INVESTIGATION
HAMILTON HILL II - TARGET AREA 1 BCP SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY**

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Feet): SAMPLE MATRIX:			RIGP1_0-2				RIGP1_2-4				RIGP1_4-6				RIGP1_6-8				RIGP1_8-10				RIGP2_6-8							
			L1932200-01				L1932200-02				L1932200-03				L1932200-04				L1932200-05				L1932200-06							
			7/19/2019				7/19/2019				7/19/2019				7/19/2019				7/19/2019				7/19/2019							
			0-2				2-4				4-6				6-8				8-10				6-8							
			SOIL				SOIL				SOIL				SOIL				SOIL				SOIL							
NY-UNRES ⁽¹⁾																														
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL				
VOLATILE ORGANICS BY EPA 5035																														
Acetone	67-64-1	0.05	ND		0.01	0.005	0.0089	J (U)	0.0089	0.0043	0.0084	J (U)	0.0084	0.004	0.0083	J (U)	0.0083	0.004	0.026	(U)	0.01	0.0049	0.01	J (U)	0.01		0.005			
Methyl Acetate	79-20-9	NS	ND		0.0042	0.00099	ND	J	0.0036	0.00084	ND		0.0034	0.0008	ND		0.0033	0.00079	0.014		0.004	0.00096	ND			0.0042	0.001			
Tetrachloroethene	127-18-4	1.3	0.003		0.00052	0.0002	0.0036		0.00044	0.00017	0.0016		0.00042	0.00016	0.0058		0.00041	0.00016	0.0086		0.0005	0.0002	0.0015			0.00052	0.0002			
Trichloroethene	79-01-6	0.47	ND		0.00052	0.00014	ND		0.00044	0.00012	ND		0.00042	0.00012	ND		0.00041	0.00011	0.00028	J	0.0005	0.00014	ND			0.00052	0.00014			
Total VOCs		NS	0.003	-	-	-	0.0081	-	-	-	0.0068	-	-	-	0.0114	-	-	-	0.04888	-	-	-	0.0071	-	-	-	-			
VOLATILE ORGANICS BY EPA 5035-TIC																														
.beta.-Myrcene	000123-35-3	NS	-		-	-	0.00442	NJ	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Camphene	000079-92-5	NS	-		-	-	0.00716	NJ	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Cyclopentane	000287-92-3	NS	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown		NS	Unknown		-	-	0.00311	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown		NS	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	0.00391	J	0	0				
Unknown		NS	-		-	-	0.0271	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown		NS	-		-	-	0.00605	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown		NS	Unknown		-	-	0.00197	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown		NS	-		-	-	0.00801	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown Alkene		NS	0.00212	J	0	0	0.0373	J	0	0	-		-	-	-	-		-	-	-	-	0.00247	J	0	0	-	-			
Unknown Naphthalene		NS	-		-	-	0.00597	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Unknown Naphthalene		NS	-		-	-	0.0138	J	0	0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-			
Total TIC Compounds		NS	0.00212	J	0	0	0.115	J	0	0	-		-	-	-	-		-	-	-	-	0.00247	J	0	0	0.00391	J	0	0	
SEMIVOLATILE ORGANICS BY GC/MS																														
Acenaphthene	83-32-9	20	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.14	0.018				
Anthracene	120-12-7	100	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.034				
Benzo(a)anthracene	56-55-3	1	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.02				
Benzo(a)pyrene	50-32-8	1	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND	(UJ)	0.14	0.043				
Benzo(b)fluoranthene	205-99-2	1	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.03				
Benzo(ghi)perylene	191-24-2	100	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.14	0.021				
Benzo(k)fluoranthene	207-08-9	0.8	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.028				
Carbazole	86-74-8	NS	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.18	0.017				
Chrysene	218-01-9	1	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.018				
Dibenzo(a,h)anthracene	53-70-3	0.33	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.02				
Dibenzofuran	132-64-9	7	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.18	0.017				
Fluoranthene	206-44-0	100	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.02				
Fluorene	86-73-7	30	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.18	0.017				
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.14	0.024				
Phenanthrene	85-01-8	100	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.021				
Pyrene	129-00-0	100	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	ND		0.1	0.017				
Total SVOCs		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SEMIVOLATILE ORGANICS BY GC/MS-TIC																														
Unknown		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown Alkene		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown Amide		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.285	J	0	0				
Unknown Amide		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.508	J	0	0				
Unknown Amide		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown Ketone		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown PAH		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown PAH		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown PAH		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unknown PAH		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Total TIC Compounds		NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.793	J	0	0				
ORGANOCHLORINE PESTICIDES BY GC (None Detecetd Above the Laboratory's Method Detection Limits)																														
POLYCHLORINATED BIPHENYLS BY GC																														
Aroclor 1242	53469-21-9	0.1	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	0.0176	J	0.0338	0.00456				
PCBs, Total	1336-36-3	0.1	-		-	-	-		-	-	-		-	-	-	-		-	-	-	-	-	0.0176	J	0.0338	0.00301				

TABLE 5A: SOIL/FILL SAMPLING ANALYTICAL SUMMARY RESULTS (EXCLUDING 1,4-DIOXANE AND PFAS)
SUPPLEMENTAL REMEDIAL INVESTIGATION
HAMILTON HILL II - TARGET AREA 1 BCP SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Feet): SAMPLE MATRIX:			RIGP1_0-2				RIGP1_2-4				RIGP1_4-6				RIGP1_6-8				RIGP1_8-10				RIGP2_6-8							
			L1932200-01				L1932200-02				L1932200-03				L1932200-04				L1932200-05				L1932200-06							
			7/19/2019				7/19/2019				7/19/2019				7/19/2019				7/19/2019				7/19/2019							
			0-2				2-4				4-6				6-8				8-10				6-8							
			SOIL				SOIL				SOIL				SOIL				SOIL				SOIL							
		NY-UNRES ⁽¹⁾																												
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL				
TOTAL METALS																														
Aluminum, Total	7429-90-5	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3290	-	8.26	2.23				
Antimony, Total	7440-36-0	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.322	J	4.13	0.314				
Arsenic, Total	7440-38-2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	0.826	0.172				
Barium, Total	7440-39-3	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.2	-	0.826	0.144				
Beryllium, Total	7440-41-7	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.215	J	0.413	0.027				
Cadmium, Total	7440-43-9	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.165	J	0.826	0.081				
Calcium, Total	7440-70-2	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100	-	8.26	2.89				
Chromium, Total	7440-47-3	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	0.826	0.079				
Cobalt, Total	7440-48-4	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.39	-	1.65	0.137				
Copper, Total	7440-50-8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	0.826	0.213				
Iron, Total	7439-89-6	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9150	-	4.13	0.746				
Lead, Total	7439-92-1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.78	J	4.13	0.221				
Magnesium, Total	7439-95-4	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1360	-	8.26	1.27				
Manganese, Total	7439-96-5	1600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	221	-	0.826	0.131				
Mercury, Total	7439-97-6	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	0.068	0.044				
Nickel, Total	7440-02-0	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.48	-	2.06	0.2				
Potassium, Total	7440-09-7	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	257	-	206	11.9				
Selenium, Total	7782-49-2	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.364	J	1.65	0.213				
Sodium, Total	7440-23-5	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.3	J	165	2.6				
Vanadium, Total	7440-62-2	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.9	-	0.826	0.168				
Zinc, Total	7440-66-6	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.6	-	4.13	0.242				
GENERAL CHEMISTRY																														
Solids, Total	NONE	NS	94.4	0.1	NA	93.4	0.1	NA	93.5	0.1	NA	94.2	0.1	NA	90.7	0.1	NA	93.6	0.1	NA	93.6	0.1	NA							

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

NS denotes No Standard

ND denotes Non Detect

Qualifiers in parantheses are from the data validator

TABLE 5A: SOIL/FILL SAMPLING ANALYTICAL SUMMARY RESULTS (EXCLUDING 1,4-DIOXANE AND PFAS)
SUPPLEMENTAL REMEDIAL INVESTIGATION
HAMILTON HILL II - TARGET AREA 1 BCP SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE DEPTH (Feet): SAMPLE MATRIX:			FD01_190719 (RICPG2_6-8)				RIGP2_8-12				RIGP3_6-8				RIGP3_8-10				RIGP4_2-4				RIGP5_0-2				
			L1932200-08				L1932200-07				L1932200-09				L1932200-10				L1932200-11				L1932200-15				
			7/19/2019				7/19/2019				7/19/2019				7/19/2019				7/19/2019				7/19/2019				
			6-8				8-12				6-8				8-10				2-4				0-2				
			SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				
		NY-UNRES ⁽¹⁾																									
ANALYTE	CAS	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	
TOTAL METALS																											
Aluminum, Total	7429-90-5	NS	3310		8.29	2.24	2670		8.72	2.35	-	-	-	-	-	-	-	-	3490		8.42	2.27	2730		8.24	2.22	
Antimony, Total	7440-36-0	NS	ND		4.14	0.315	0.358	J	4.36	0.331	-	-	-	-	-	-	-	-	ND		4.21	0.32	ND		4.12	0.313	
Arsenic, Total	7440-38-2	13	2.66		0.829	0.172	2.14		0.872	0.181	-	-	-	-	-	-	-	-	2.13		0.842	0.175	1.85		0.824	0.171	
Barium, Total	7440-39-3	350	11.2		0.829	0.144	10.9		0.872	0.152	-	-	-	-	-	-	-	-	8.81		0.842	0.146	16.5		0.824	0.143	
Beryllium, Total	7440-41-7	7.2	0.257	J	0.414	0.027	0.192	J	0.436	0.029	-	-	-	-	-	-	-	-	0.227	J	0.421	0.028	0.19	J	0.412	0.027	
Cadmium, Total	7440-43-9	2.5	0.182	J	0.829	0.081	0.174	J	0.872	0.086	-	-	-	-	-	-	-	-	0.152	J	0.842	0.083	0.239	J	0.824	0.081	
Calcium, Total	7440-70-2	NS	922		8.29	2.9	12300		8.72	3.05	-	-	-	-	-	-	-	-	537		8.42	2.95	1380		8.24	2.88	
Chromium, Total	7440-47-3	30	3.83		0.829	0.08	3.03		0.872	0.084	-	-	-	-	-	-	-	-	3.03		0.842	0.081	3.35		0.824	0.079	
Cobalt, Total	7440-48-4	NS	3.32		1.66	0.138	2.92		1.74	0.145	-	-	-	-	-	-	-	-	3.21		1.68	0.14	2.93		1.65	0.137	
Copper, Total	7440-50-8	50	10.2		0.829	0.214	8.54		0.872	0.225	-	-	-	-	-	-	-	-	8.3		0.842	0.217	10.2		0.824	0.213	
Iron, Total	7439-89-6	NS	9800		4.14	0.748	8560		4.36	0.787	-	-	-	-	-	-	-	-	8910		4.21	0.761	8020		4.12	0.744	
Lead, Total	7439-92-1	63	3.72	J	4.14	0.222	3.46	J	4.36	0.234	-	-	-	-	-	-	-	-	2.58	J	4.21	0.226	32.9		4.12	0.221	
Magnesium, Total	7439-95-4	NS	1200		8.29	1.28	1470		8.72	1.34	-	-	-	-	-	-	-	-	1220		8.42	1.3	1170		8.24	1.27	
Manganese, Total	7439-96-5	1600	240		0.829	0.132	219		0.872	0.139	-	-	-	-	-	-	-	-	186		0.842	0.134	200		0.824	0.131	
Mercury, Total	7439-97-6	0.18	ND		0.067	0.044	ND		0.069	0.045	-	-	-	-	-	-	-	-	ND		0.068	0.044	0.061	J	0.066	0.043	
Nickel, Total	7440-02-0	30	7.45		2.07	0.2	6.77		2.18	0.211	-	-	-	-	-	-	-	-	6.85		2.1	0.204	6.59		2.06	0.199	
Potassium, Total	7440-09-7	NS	267		207	11.9	243		218	12.6	-	-	-	-	-	-	-	-	237		210	12.1	230		206	11.9	
Selenium, Total	7782-49-2	3.9	0.522	J	1.66	0.214	0.418	J	1.74	0.225	-	-	-	-	-	-	-	-	0.371	J	1.68	0.217	0.363	J	1.65	0.213	
Sodium, Total	7440-23-5	NS	34.1	J	166	2.61	57	J	174	2.75	-	-	-	-	-	-	-	-	99.8	J	168	2.65	37.1	J	165	2.6	
Vanadium, Total	7440-62-2	NS	10.1		0.829	0.168	8.74		0.872	0.177	-	-	-	-	-	-	-	-	9.28		0.842	0.171	8.46		0.824	0.167	
Zinc, Total	7440-66-6	109	23		4.14	0.243	19.2		4.36	0.256	-	-	-	-	-	-	-	-	18.5		4.21	0.247	74.5		4.12	0.242	
GENERAL CHEMISTRY																											
Solids, Total	NONE	NS	93.6		0.1	NA	91.3		0.1	NA	92.3		0.1	NA	92.8		0.1	NA	93.7		0.1	NA	95.9		0.1	NA	

(1) Soil Cleanup Objectives (SCOs) for Unrestricted Use Sites promulgated at 6 NYCRR Part 375.

NS denotes No Standard

ND denotes Non Detect

**TABLE 5B: SOIL SAMPLING ANALYTICAL RESULTS SUMMARY (EMERGING CONTAMINANTS)
SUPPLEMENTAL REMEDIAL INVESTIGATION
HAMILTON HILL II - TARGET AREA I BCP SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY**

ANALYTE	SAMPLE ID:	RIGP2_6-8				FD01_190719 (RIGP2_6-8)				RIGP2_8-12			
	LAB ID:	L1932200-06				L1932200-08				L1932200-07			
	COLLECTION DATE:	7/19/2019				7/19/2019				7/19/2019			
	SAMPLE DEPTH (Feet):	6-8				6-8				8-12			
	SAMPLE MATRIX:	SOIL				SOIL				SOIL			
	CAS	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION													
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2)	39108-34-4	ND		1.04	0.298	ND		0.929	0.267	ND		0.984	0.282
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2)	27619-97-2	ND		1.04	0.186	ND		0.929	0.167	ND		0.984	0.177
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	2991-50-6	0.145	J	1.04	0.088	ND		0.929	0.079	0.084	J	0.984	0.083
N-Methyl Perfluorooctanesulfonamidoacetic Ac	2355-31-9	0.239	J	1.04	0.209	ND		0.929	0.187	ND		0.984	0.198
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	ND		1.04	0.04	ND		0.929	0.036	ND		0.984	0.038
Perfluorobutanoic Acid (PFBA)	375-22-4	ND		1.04	0.024	ND		0.929	0.021	ND		0.984	0.022
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	ND		1.04	0.159	ND		0.929	0.142	ND		0.984	0.151
Perfluorodecanoic Acid (PFDA)	335-76-2	ND		1.04	0.07	ND		0.929	0.062	ND		0.984	0.066
Perfluorododecanoic Acid (PFDoA)	307-55-1	ND		1.04	0.073	ND		0.929	0.065	ND		0.984	0.069
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	ND		1.04	0.142	ND		0.929	0.127	ND		0.984	0.134
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ND		1.04	0.047	ND		0.929	0.042	ND		0.984	0.044
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	ND		1.04	0.063	ND		0.929	0.056	ND		0.984	0.06
Perfluorohexanoic Acid (PFHxA)	307-24-4	ND		1.04	0.054	ND		0.929	0.049	ND		0.984	0.052
Perfluorononanoic Acid (PFNA)	375-95-1	ND		1.04	0.078	ND		0.929	0.07	ND		0.984	0.074
Perfluorooctanesulfonamide (FOSA)	754-91-6	ND	(R)	1.04	0.102	ND		0.929	0.091	ND		0.984	0.097
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ND		1.04	0.048	ND		0.929	0.043	ND		0.984	0.045
Perfluorotetradecanoic Acid (PFTA)	376-06-7	ND		1.04	0.056	ND		0.929	0.05	ND		0.984	0.053
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	ND		1.04	0.212	ND		0.929	0.19	ND		0.984	0.201
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ND		1.04	0.049	ND		0.929	0.044	ND		0.984	0.046
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.206	J	1.04	0.135	0.385	J	0.929	0.121	0.234	J	0.984	0.128
Perfluorooctanoic Acid (PFOA)	335-67-1	0.079	J	1.04	0.044	0.146	J	0.929	0.039	ND		0.984	0.041
PFOA/PFOS, Total		0.285	J	1.04	0.044	0.531	J	0.929	0.039	0.234	J	0.984	0.041
PFAS, Total		0.669				0.531				0.318			
SEMIVOLATILE ORGANICS BY GC/MS													
1,4-Dioxane	123-91-1	ND		26	8.1	ND		26	8.1	ND		27	8.4
GENERAL CHEMISTRY													
Solids, Total	NONE	93.6		0.1	NA	93.6		0.1	NA	91.3		0.1	NA

ND denoted Non-Detect

Concentrations are in ug/kg or parts per billion (ppb)

Qualifiers in parantheses are from the data validator.

TABLE 7: PREVIOUS INVESTIGATION SUBSURFACE SOIL ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

Data Not Validated

Parameter	Unrestricted Use SCOs ⁽¹⁾	GP-8 (0-2' bgs)	GP-9 (0-2' bgs)	GP-11 (4'-6' bgs)	GP-12 (2'-4' bgs)
		8/9/2018	8/9/2018	8/9/2018	8/9/2018
Semi-Volatile Organic Compounds					
2-Methylnaphthalene	NS	2	ND	ND	ND
2-Methylphenol	0.33	0.046 J	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	0.17 J	ND	ND	ND
Acenaphthene	20	3.9	ND	ND	0.11 J
Acenaphthylene	100	0.3	ND	0.041 J	0.087 J
Anthracene	100	9.1	ND	0.064 J	0.7
Benzo(a)anthracene	1	24	0.038 J	0.32	3.1
Benzo(a)pyrene	1	20	ND	0.29	2.8
Benzo(b)fluoranthene	1	27	0.056 J	0.42	4.2
Benzo(ghi)perylene	100	13	0.027 J	0.19	1.9
Benzo(k)fluoranthene	0.8	2.7	ND	0.14	1.2
Biphenyl	NS	0.52	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	ND	ND	0.071 J	ND
Carbazole	NS	5.1	ND	0.03 J	0.35
Chrysene	1	25	0.047 J	0.36	3.5
Dibenzo(a,h)anthracene	0.33	2.4	ND	0.056 J	0.5
Dibenzofuran	7	3.9	ND	ND	0.075 J
Fluoranthene	100	62	0.074 J	0.63	8
Fluorene	30	3.7	ND	0.02 J	0.18
Indeno(1,2,3-cd)pyrene	0.5	13	0.03 J	0.21	2.2
Naphthalene	12	5	ND	ND	0.025 J
Phenanthrene	100	60	0.032 J	0.28	3.9
Phenol	0.33	0.074 J	ND	ND	ND
Pyrene	100	50	0.07 J	0.55	5.7
Metals					
Aluminum, Total	NS	5790	5320	4590	6360
Antimony, Total	NS	2.02 J	ND	0.876 J	ND
Arsenic, Total	13	31.7	8.96	5.63	4.95
Barium, Total	350	93.7	49.4	450	48.3
Beryllium, Total	72	0.359 J	0.298 J	0.214 J	0.314 J
Cadmium, Total	2.5	1.9	0.368 J	0.593 J	0.281 J
Calcium, Total	NS	14300	12100	14000	42300
Chromium, Total	30	5.52	7.1	8.04	8.01
Cobalt, Total	NS	3.58	4.64	4.09	4.8
Copper, Total	50	18.1	21.6	21	14.4
Iron, Total	NS	9530	13200	13900	13400
Lead, Total	63	566	122	486	40.1
Magnesium, Total	NS	3640	5010	2260	9630
Manganese, Total	1600	205	307	233	418
Mercury, Total	0.18	0.217	0.219	0.134	0.159
Nickel, Total	30	6.76	9.84	7.87	10.2
Potassium, Total	NS	409	486	465	864
Selenium, Total	3.9	0.308 J	0.358 J	ND	ND
Sodium, Total	NS	189	52.8 J	163 J	202
Vanadium, Total	NS	11.2	13.2	13.5	14
Zinc, Total	109	811	92.7	82.4	52.7

(1) NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs)

All values are shown in parts per million.

Shaded values exceed their Unrestricted Use SCOs.

ND=Not detected above the laboratory method detection limit.

NS=No Standard

Only the compounds and analytes that were detected are listed

TABLE 8: RI GROUNDWATER ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTEDY, SCENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			834 MW2_190402				MW1_190402				MW2_190402				MW5_190401				RIMW1_190329			
			L1913113-01				L1913113-02				L1913113-03				L1912981-03				L1912755-01			
			4/2/2019				4/2/2019				4/2/2019				4/1/2019				3/29/2019			
			WATER				WATER				WATER				WATER				WATER			
		NY-AWQS ⁽¹⁾																				
ANALYTE	CAS	(ug/l)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY GC/MS																						
Acetone	67-64-1	50 (GV)	ND		5	1.5	2.8	J	5	1.5	3.9	J	5	1.5	3.6	J	5	1.5	2.6	J (U)	5	1.5
Bromodichloromethane	75-27-4	50 (GV)	ND		0.5	0.19	3.4		0.5	0.19	1.7		0.5	0.19	3		0.5	0.19	ND		0.5	0.19
Bromomethane	74-83-9	5	ND	(UJ)	2.5	0.7	ND	(UJ)	2.5	0.7	ND	(UJ)	2.5	0.7	ND		2.5	0.7	ND	(UJ)	2.5	0.7
Chloroform	67-66-3	7	ND		2.5	0.7	10		2.5	0.7	9.8		2.5	0.7	11		2.5	0.7	3.2		2.5	0.7
cis-1,2-Dichloroethene	156-59-2	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	2.4	J	2.5	0.7
Dibromochloromethane	124-48-1	50 (GV)	ND		0.5	0.15	1.1		0.5	0.15	ND		0.5	0.15	0.86		0.5	0.15	ND		0.5	0.15
Methyl Acetate	79-20-9	NS	ND		2	0.23	ND		2	0.23	ND		2	0.23	ND		2	0.23	ND		2	0.23
Tetrachloroethene	127-18-4	5	1.3		0.5	0.18	1.9		0.5	0.18	4.2		0.5	0.18	2.1		0.5	0.18	ND		0.5	0.18
trans-1,2-Dichloroethene	156-60-5	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	2	J	2.5	0.7
Trichloroethene	79-01-6	5	ND		0.5	0.18	ND		0.5	0.18	0.56		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18
Total VOCs			1.3	-	-	-	19.2	-	-	-	20.16	-	-	-	20.56	-	-	-	10.2	-	-	-
VOLATILE ORGANICS BY GC/MS-TIC																						
Sulfur Dioxide	007446-09-5	NA	-		-	-	-		-	-	-		-	-	2.75	NJ	0	0	-		-	-
Unknown		NA	-		-	-	-		-	-	-		-	-	-		-	-	1.06	J	0	0
Total TIC Compounds		NA	-		-	-	-		-	-	-		-	-	2.75	J	0	0	1.06	J	0	0
SEMIVOLATILE ORGANICS BY GC/MS																						
Biphenyl	92-52-4	5	ND		2	0.46	ND		2	0.46	ND		2	0.46	ND		2	0.46	ND		2	0.46
Caprolactam	105-60-2	NS	ND		10	3.3	ND		10	3.3	ND		10	3.3	ND		10	3.3	ND		10	3.3
Dimethyl phthalate	131-11-3	50 (GV)	1.9	J (UJ)	5	1.8	1.9	J (UJ)	5	1.8	1.8	J (UJ)	5	1.8	ND		5	1.8	ND		5	1.8
Total SVOCs		NA	1.9	-	-	-	1.9	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-SIM																						
2-Chloronaphthalene	91-58-7	10	ND		0.2	0.02	ND		0.2	0.02	0.21		0.2	0.02	ND		0.2	0.02	ND		0.2	0.02
2-Methylnaphthalene	91-57-6	NS	ND		0.1	0.02	ND		0.1	0.02	0.2		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Acenaphthene	83-32-9	20 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.08	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Acenaphthylene	208-96-8	NS	ND		0.1	0.01	ND		0.1	0.01	0.08	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Anthracene	120-12-7	50 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.1	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Benzo(a)anthracene	56-55-3	0.002 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.03	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Benzo(a)pyrene	50-32-8	Non Detect	ND		0.1	0.02	ND		0.1	0.02	0.04	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Benzo(b)fluoranthene	205-99-2	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.04	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Benzo(ghi)perylene	191-24-2	NS	ND		0.1	0.01	ND		0.1	0.01	0.04	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Benzo(k)fluoranthene	207-08-9	0.002 (GV)	0.01	J	0.1	0.01	ND		0.1	0.01	0.04	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Chrysene	218-01-9	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.06	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Dibenzo(a,h)anthracene	53-70-3	NS	ND		0.1	0.01	ND		0.1	0.01	0.04	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Fluoranthene	206-44-0	50 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.06	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Fluorene	86-73-7	50 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.12		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Hexachlorobenzene	118-74-1	0.04	ND		0.8	0.01	ND		0.8	0.01	0.11	J	0.8	0.01	ND		0.8	0.01	ND		0.8	0.01
Hexachlorobutadiene	87-68-3	0.5	ND		0.5	0.05	ND		0.5	0.05	0.1	J	0.5	0.05	ND		0.5	0.05	ND		0.5	0.05
Indeno(1,2,3-cd)pyrene	193-39-5	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.04	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Naphthalene	91-20-3	10 (GV)	ND		0.1	0.05	ND		0.1	0.05	0.1	J	0.1	0.05	ND		0.1	0.05	ND		0.1	0.05
Pentachlorophenol	87-86-5	1	ND		0.8	0.01	ND		0.8	0.01	0.16	J	0.8	0.01	ND		0.8	0.01	0.11	J	0.8	0.01
Phenanthrene	85-01-8	50 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.1	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Pyrene	129-00-0	50 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.07	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Total SVOCs			0.01	-	-	-	-	-	-	-	1.82	-	-	-	-	-	-	-	0.11	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																						
Aldol Condensates		NA	15.9	J	0	0	14.5	J	0	0	18.7	J	0	0	5.24	J	0	0	29.7	J	0	0
Tetrachloroethene	000127-18-4	NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown		NA	-		-	-	2.11	J	0	0	1.53	J	0	0	3.2	J	0	0	-		-	-
Unknown Organic Acid		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Organic Acid		NA	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-
Unknown Phenol		NA	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	15.9	J	0	0	16.6	J	0	0	20.2	J	0	0	8.44	J	0	0	29.7	J	0	0
ORGANOCHLORINE PESTICIDES BY GC																						
4,4'-DDD	72-54-8	0.3	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003
4,4'-DDT	50-29-3	0.2	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003
cis-Chlordane	5103-71-9	NS	ND		0.014	0.005	ND		0.014	0.005	ND		0.014	0.005	ND		0.014	0.005	ND		0.014	0.005
Dieldrin	60-57-1	0.004	ND		0.029	0.003	ND		0.029	0.003	0.004	J	0.029	0.003	ND		0.029	0.003	ND		0.029	0.003
POLYCHLORINATED BIPHENYLS BY GC																						
Aroclor 1260	11096-82-5	0.09	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	0.036	J	0.082	0.032
PCBs, Total	1336-36-3	0.09	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	0.036	J	0.082	0.032

TABLE 8: RI GROUNDWATER ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTEDY, SCENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			834 MW2_ 190402				MW1_ 190402				MW2_ 190402				MW5_ 190401				RIMW1_ 190329					
			L1913113-01				L1913113-02				L1913113-03				L1912981-03				L1912755-01					
			4/2/2019				4/2/2019				4/2/2019				4/1/2019				3/29/2019					
			WATER				WATER				WATER				WATER				WATER					
		NY-AWQS ⁽¹⁾																						
ANALYTE	CAS	(ug/l)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
TOTAL METALS																								
Aluminum, Total	7429-90-5	NS	26		10	3.27	ND		10	3.27	ND		10	3.27	8.14	J	10	3.27	6.82	J	10	3.27		
Antimony, Total	7440-36-0	3	0.95	J (U)	4	0.42	ND		4	0.42	ND		4	0.42	ND		4	0.42	2.56	J (U)	4	0.42		
Arsenic, Total	7440-38-2	25	0.61	(J)	0.5	0.16	0.27	J	0.5	0.16	ND		0.5	0.16	0.21	J	0.5	0.16	ND		0.5	0.16		
Barium, Total	7440-39-3	1000	20.38		0.5	0.17	14.01		0.5	0.17	20.79		0.5	0.17	17.43		0.5	0.17	16.35		0.5	0.17		
Cadmium, Total	7440-43-9	5	ND		0.2	0.05	0.07	J	0.2	0.05	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05		
Calcium, Total	7440-70-2	NS	97300		100	39.4	76500		100	39.4	85900		100	39.4	74300		100	39.4	81300		100	39.4		
Chromium, Total	7440-47-3	50	3.06		1	0.17	0.29	J	1	0.17	0.24	J	1	0.17	0.38	J	1	0.17	0.5	J	1	0.17		
Cobalt, Total	7440-48-4	NS	0.17	J	0.5	0.16	0.31	J	0.5	0.16	0.29	J	0.5	0.16	ND		0.5	0.16	ND		0.5	0.16		
Copper, Total	7440-50-8	200	0.64	J	1	0.38	0.82	J	1	0.38	0.93	J	1	0.38	0.66	J	1	0.38	ND		1	0.38		
Iron, Total	7439-89-6	300	47.4	J (U)	55	19.1	61.7	(U)	50	19.1	70.3	(U)	50	19.1	40.5	J (U)	50	19.1	27.4	J	50	19.1		
Lead, Total	7439-92-1	25	ND		1	0.34	ND		1	0.34	ND		1	0.34	ND		1	0.34	ND		1	0.34		
Magnesium, Total	7439-95-4	35,000 (GV)	10300		70	24.2	6320		70	24.2	6650		70	24.2	5980		70	24.2	5620		70	24.2		
Manganese, Total	7439-96-5	300	5.87		1	0.44	933.8		1	0.44	735.3		1	0.44	267.4		1	0.44	15.13		1	0.44		
Nickel, Total	7440-02-0	100	0.59	J	2	0.55	0.92	J	2	0.55	0.81	J	2	0.55	ND		2	0.55	ND		2	0.55		
Potassium, Total	7440-09-7	NS	4740		100	30.9	4790		100	30.9	2990		100	30.9	6050		100	30.9	2330	(U)	100	30.9		
Selenium, Total	7782-49-2	10	2.01	J	5	1.73	ND		5	1.73	ND		5	1.73	ND		5	1.73	ND		5	1.73		
Sodium, Total	7440-23-5	20,000	207,000		100	29.3	34,600		100	29.3	37,300		100	29.3	36,500		100	29.3	28,600		100	29.3		
Thallium, Total	7440-28-0	0.5 (GV)	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14		
GENERAL CHEMISTRY																								
Chromium, Hexavalent	18540-29-9	50	4	J	10	3	ND		10	3	ND		10	3	ND		10	3	ND		10	3		
Cyanide, Total	57-12-5	200	1	J	5	1	3	J	5	1	2	J	5	1	ND		5	1	ND		5	1		
1,4 DIOXANE BY 8270D-SIM (None Detected Above the Laboratory's Method Detection Limit)																								
PERFLUORINATED ALKYL ACIDS																								
EPA PFOS/PFOA ⁽²⁾ (ng/l)																								
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	NA	-		-	-	-		-	-	-		-	-	-		-	-	4.78		1.86	0.18		
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NA	-		-	-	-		-	-	-		-	-	-		-	-	1.32	J (U)	1.86	0.346		
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NA	-		-	-	-		-	-	-		-	-	-		-	-	0.974	J	1.86	0.233		
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NA	-		-	-	-		-	-	-		-	-	-		-	-	1.45	J	1.86	0.353		
Perfluorobutanoic Acid (PFBA)	375-22-4	NA	-		-	-	-		-	-	-		-	-	-		-	-	5.26		1.86	0.347		
Perfluoroheptanoic Acid (PFHpA)	375-85-9	NA	-		-	-	-		-	-	-		-	-	-		-	-	2.39		1.86	0.346		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NA	-		-	-	-		-	-	-		-	-	-		-	-	1.31	J	1.86	0.405		
Perfluorohexanoic Acid (PFHxA)	307-24-4	NA	-		-	-	-		-	-	-		-	-	-		-	-	3.65		1.86	0.457		
Perfluorononanoic Acid (PFNA)	375-95-1	NA	-		-	-	-		-	-	-		-	-	-		-	-	ND		1.86	0.405		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	70	-		-	-	-		-	-	-		-	-	-		-	-	1.59	J	1.86	0.52		
Perfluorooctanoic Acid (PFOA)	335-67-1	70	-		-	-	-		-	-	-		-	-	-		-	-	6.55		1.86	0.428		
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NA	-		-	-	-		-	-	-		-	-	-		-	-	3.74		1.86	0.431		
PFOA/PFOS, Total		70	-		-	-	-		-	-	-		-	-	-		-	-	8.14	J	1.86	0.428		

(1) New York Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values. June 1998 and Addendums.

(2) NYSDEC has not established a regulatory standard or guidance value for perfluorooctanoic acid (PFOA) or perfluorooctane sulfonic acid (PFOS), so the PFOA and PFOS chemical constituents of the PFAS list are compared to the November 2016 USEPA PFOA and PFOS Drinking Water Health Advisory of 70 ppt or 0.07 ppb.

(GV) denotes Guidance Value

Qualifiers in parantheses are from the data validator.

TABLE 8: RI GROUNDWATER ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTEDY, SCENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RIMW2_190402				RIMW3_190401				RIMW3D_190401				RIMW4_190329				RIMW4D_190402			
			L1913113-04				L1912981-01				L1912981-02				L1912755-02				L1913113-06			
			4/2/2019				4/1/2019				4/1/2019				3/29/2019				4/2/2019			
			WATER				WATER				WATER				WATER				WATER			
		NY-AWQS ⁽¹⁾																				
ANALYTE	CAS	(ug/l)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS BY GC/MS																						
Acetone	67-64-1	50 (GV)	4.6	J	5	1.5	2.7	J	5	1.5	4.6	J	5	1.5	2.2	J (U)	5	1.5	5.3		5	1.5
Bromodichloromethane	75-27-4	50 (GV)	2.4		0.5	0.19	ND		0.5	0.19	ND		0.5	0.19	3.2		0.5	0.19	ND		0.5	0.19
Bromomethane	74-83-9	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND	(UJ)	2.5	0.7	ND		2.5	0.7
Chloroform	67-66-3	7	8		2.5	0.7	2.3	J	2.5	0.7	ND		2.5	0.7	8.9		2.5	0.7	ND		2.5	0.7
cis-1,2-Dichloroethene	156-59-2	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Dibromochloromethane	124-48-1	50 (GV)	0.6		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15	1.2		0.5	0.15	ND		0.5	0.15
Methyl Acetate	79-20-9	NS	ND		2	0.23	ND		2	0.23	ND		2	0.23	ND		2	0.23	ND		2	0.23
Tetrachloroethene	127-18-4	5	6.1		0.5	0.18	7.2		0.5	0.18	ND		0.5	0.18	0.6		0.5	0.18	ND		0.5	0.18
trans-1,2-Dichloroethene	156-60-5	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Trichloroethene	79-01-6	5	2		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18
Total VOCs			23.7	-	-	-	12.2	-	-	-	4.6	-	-	-	16.1	-	-	-	5.3	-	-	-
VOLATILE ORGANICS BY GC/MS-TIC																						
Sulfur Dioxide	007446-09-5	NA	-		-	-	3.14	NJ	0	0	2.82	NJ	0	0	-	-	-	-	-	-	-	-
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	-		-	-	3.14	J	0	0	2.82	J	0	0	-	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS																						
Biphenyl	92-52-4	5	ND		2	0.46	ND		2	0.46	ND		2	0.46	ND		2	0.46	ND		2	0.46
Caprolactam	105-60-2	NS	ND		10	3.3	ND		10	3.3	14		10	3.3	ND		10	3.3	ND		10	3.3
Dimethyl phthalate	131-11-3	50 (GV)	ND	(UJ)	5	1.8	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND	(UJ)	5	1.8
Total SVOCs		NA	-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-SIM																						
2-Chloronaphthalene	91-58-7	10	ND		0.2	0.02	ND		0.2	0.02	ND		0.2	0.02	ND		0.2	0.02	ND		0.2	0.02
2-Methylnaphthalene	91-57-6	NS	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Acenaphthene	83-32-9	20 (GV)	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Acenaphthylene	208-96-8	NS	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Anthracene	120-12-7	50 (GV)	0.02	J	0.1	0.01	ND		0.1	0.01	0.02	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Benzo(a)anthracene	56-55-3	0.002 (GV)	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Benzo(a)pyrene	50-32-8	Non Detect	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02
Benzo(b)fluoranthene	205-99-2	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Benzo(ghi)perylene	191-24-2	NS	ND		0.1	0.01	0.05	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Benzo(k)fluoranthene	207-08-9	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Chrysene	218-01-9	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Dibenzo(a,h)anthracene	53-70-3	NS	ND		0.1	0.01	0.02	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Fluoranthene	206-44-0	50 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.03	J	0.1	0.02	0.04	J (U)	0.1	0.02	ND		0.1	0.02
Fluorene	86-73-7	50 (GV)	ND		0.1	0.01	ND		0.1	0.01	0.02	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Hexachlorobenzene	118-74-1	0.04	ND		0.8	0.01	ND		0.8	0.01	0.03	J	0.8	0.01	ND		0.8	0.01	ND		0.8	0.01
Hexachlorobutadiene	87-68-3	0.5	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05
Indeno(1,2,3-cd)pyrene	193-39-5	0.002 (GV)	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01
Naphthalene	91-20-3	10 (GV)	ND		0.1	0.05	ND		0.1	0.05	ND		0.1	0.05	ND		0.1	0.05	ND		0.1	0.05
Pentachlorophenol	87-86-5	1	ND		0.8	0.01	ND		0.8	0.01	ND		0.8	0.01	ND		0.8	0.01	ND		0.8	0.01
Phenanthrene	85-01-8	50 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.04	J	0.1	0.02	0.05	J (U)	0.1	0.02	ND		0.1	0.02
Pyrene	129-00-0	50 (GV)	ND		0.1	0.02	ND		0.1	0.02	0.03	J	0.1	0.02	0.02	J (U)	0.1	0.02	ND		0.1	0.02
Total SVOCs			0.02	-	-	-	0.07	-	-	-	0.17	-	-	-	0.11	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS BY GC/MS-TIC																						
Aldol Condensates		NA	18.5	J	0	0	4.62	J	0	0	3.74	J	0	0	54.8	J	0	0	15.4	J	0	0
Tetrachloroethene	000127-18-4	NA	-		-	-	1.53	NJ	0	0	-		-	-	-	-	-	-	-	-	-	-
Unknown		NA	1.53	J	0	0	-		-	-	-		-	-	-	-	-	-	2.65	J	0	0
Unknown Organic Acid		NA	-		-	-	-		-	-	-		-	-	-	-	-	-	11.4	J	0	0
Unknown Organic Acid		NA	-		-	-	-		-	-	-		-	-	-	-	-	-	10.8	J	0	0
Unknown Phenol		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds		NA	20	J	0	0	6.15	J	0	0	3.74	J	0	0	54.8	J	0	0	40.3	J	0	0
ORGANOCHLORINE PESTICIDES BY GC																						
4,4'-DDD	72-54-8	0.3	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003
4,4'-DDT	50-29-3	0.2	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003
cis-Chlordane	5103-71-9	NS	ND		0.014	0.005	ND		0.014	0.005	ND		0.014	0.005	0.007	J	0.014	0.005	ND		0.014	0.005
Dieldrin	60-57-1	0.004	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003
POLYCHLORINATED BIPHENYLS BY GC																						
Aroclor 1260	11096-82-5	0.09	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032
PCBs, Total	1336-36-3	0.09	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032

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830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTEDY, SCENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RIMW2_190402				RIMW3_190401				RIMW3D_190401				RIMW4_190329				RIMW4D_190402				
			L1913113-04				L1912981-01				L1912981-02				L1912755-02				L1913113-06				
			4/2/2019				4/1/2019				4/1/2019				3/29/2019				4/2/2019				
			WATER				WATER				WATER				WATER				WATER				
		NY-AWQS ⁽¹⁾																					
ANALYTE	CAS	(ug/l)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	
TOTAL METALS																							
Aluminum, Total	7429-90-5	NS	21.9		10	3.27	42.8		10	3.27	25		10	3.27	37.6		10	3.27	9.76	J	10	3.27	
Antimony, Total	7440-36-0	3	ND		4	0.42	0.85	J (U)	4	0.42	0.52	J (U)	4	0.42	4.24	4	0.42		ND		4	0.42	
Arsenic, Total	7440-38-2	25	0.26	J	0.5	0.16	0.35	J	0.5	0.16	2.03	(J)	0.5	0.16	0.56	0.5	0.16		4.54	(J)	0.5	0.16	
Barium, Total	7440-39-3	1000	31.34		0.5	0.17	22.83		0.5	0.17	130.4		0.5	0.17	35.83	0.5	0.17		169.9		0.5	0.17	
Cadmium, Total	7440-43-9	5	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05	ND	0.2	0.05		ND		0.2	0.05	
Calcium, Total	7440-70-2	NS	114000		100	39.4	43100		100	39.4	122000		100	39.4	72000	100	39.4		141000		100	39.4	
Chromium, Total	7440-47-3	50	0.79	J	1	0.17	0.66	J	1	0.17	0.35	J	1	0.17	0.72	J	1	0.17		0.31	J	1	0.17
Cobalt, Total	7440-48-4	NS	ND		0.5	0.16	0.18	J	0.5	0.16	0.79		0.5	0.16	ND	0.5	0.16		0.38	J	0.5	0.16	
Copper, Total	7440-50-8	200	0.63	J	1	0.38	0.79	J	1	0.38	ND		1	0.38	0.74	J	1	0.38		ND		1	0.38
Iron, Total	7439-89-6	300	47.8	J (U)	50	19.1	94.1	(U)	50	19.1	215		50	19.1	103	(U)	50	19.1		1390		50	19.1
Lead, Total	7439-92-1	25	ND		1	0.34	ND		1	0.34	ND		1	0.34	0.37	J	1	0.34		ND		1	0.34
Magnesium, Total	7439-95-4	35,000 (GV)	13300		70	24.2	5450		70	24.2	21300		70	24.2	5610	70	24.2		21400		70	24.2	
Manganese, Total	7439-96-5	300	5.49		1	0.44	24.36		1	0.44	414		1	0.44	9.67		1	0.44		295.3		1	0.44
Nickel, Total	7440-02-0	100	ND		2	0.55	0.6	J	2	0.55	0.77	J	2	0.55	ND	2	0.55		ND		2	0.55	
Potassium, Total	7440-09-7	NS	5740		100	30.9	7080		100	30.9	4860		100	30.9	5890	100	30.9		7970		100	30.9	
Selenium, Total	7782-49-2	10	ND		5	1.73	3.07	J	5	1.73	ND		5	1.73	ND	5	1.73		ND		5	1.73	
Sodium, Total	7440-23-5	20,000	43,100		100	29.3	74,100		100	29.3	83,500		100	29.3	31,500	100	29.3		125,000		100	29.3	
Thallium, Total	7440-28-0	0.5 (GV)	ND		0.5	0.14	0.14	J	0.5	0.14	ND		0.5	0.14	0.37	J	0.5	0.14		ND		0.5	0.14
GENERAL CHEMISTRY																							
Chromium, Hexavalent	18540-29-9	50	ND		10	3	ND		10	3	ND		10	3	ND		10	3		ND		10	3
Cyanide, Total	57-12-5	200	ND		5	1	ND		5	1	ND		5	1	ND		5	1		ND		5	1
1,4 DIOXANE BY 8270D-SIM (None Detected Above the Laboratory's Method Detection Limit)																							
PERFLUORINATED ALKYL ACIDS																							
EPA PFOS/PFOA ⁽²⁾ (ng/l)																							
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	NA	-		-	-	-		-	-	-		-	-	0.709	J	1.86	0.181	-		-	-	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NA	-		-	-	-		-	-	-		-	-	1.61	J (U)	1.86	0.348	-		-	-	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NA	-		-	-	-		-	-	-		-	-	1.1	J	1.86	0.234	-		-	-	
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NA	-		-	-	-		-	-	-		-	-	0.877	J	1.86	0.354	-		-	-	
Perfluorobutanoic Acid (PFBA)	375-22-4	NA	-		-	-	-		-	-	-		-	-	1.88		1.86	0.348	-		-	-	
Perfluoroheptanoic Acid (PFHpA)	375-85-9	NA	-		-	-	-		-	-	-		-	-	0.601	J	1.86	0.347	-		-	-	
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NA	-		-	-	-		-	-	-		-	-	0.642	J	1.86	0.407	-		-	-	
Perfluorohexanoic Acid (PFHxA)	307-24-4	NA	-		-	-	-		-	-	-		-	-	0.604	J	1.86	0.459	-		-	-	
Perfluorononanoic Acid (PFNA)	375-95-1	NA	-		-	-	-		-	-	-		-	-	ND		1.86	0.407	-		-	-	
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	70	-		-	-	-		-	-	-		-	-	45.2		1.86	0.522	-		-	-	
Perfluorooctanoic Acid (PFOA)	335-67-1	70	-		-	-	-		-	-	-		-	-	2.94		1.86	0.429	-		-	-	
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NA	-		-	-	-		-	-	-		-	-	0.757	J	1.86	0.433	-		-	-	
PFOA/PFOS, Total		70	-		-	-	-		-	-	-		-	-	48.14		1.86	0.429	-		-	-	

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(2) NYSDEC has not established a regulatory standard or guidance value for perfluorooctanoic acid (PFOA) or perfluorooctane sulfonic acid (PFOS), so the PFOA and PFOS chemical constituents of the PFAS list are compared to the November 2016 USEPA PFOA and PFOS Drinking Water Health Advisory of 70 ppt or 0.07 ppb.
(GV) denotes Guidance Value
Qualifiers in parantheses are from the data validator.

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CITY OF SCHENECTEDY, SCENECTADY COUNTY

			SAMPLE ID:		RIMW5_190329				RIMW6_190329				FD01_190329 (RIMW6_190329)				RIMW6D_190402			
			LAB ID:		L1912755-04				L1912755-03				L1912755-05				L1913113-05			
			COLLECTION DATE:		3/29/2019				3/29/2019				3/29/2019				4/2/2019			
			SAMPLE MATRIX:		WATER				WATER				WATER				WATER			
			NY-AWQS ⁽¹⁾																	
ANALYTE	CAS	(ug/l)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		
VOLATILE ORGANICS BY GC/MS																				
Acetone	67-64-1	50 (GV)	3.2	J (U)	5	1.5	ND		5	1.5	3	J (U)	5	1.5	4.6	J	5	1.5		
Bromodichloromethane	75-27-4	50 (GV)	ND		0.5	0.19	ND		0.5	0.19	ND		0.5	0.19	ND		0.5	0.19		
Bromomethane	74-83-9	5	ND	(UJ)	2.5	0.7	ND	(UJ)	2.5	0.7	ND	(UJ)	2.5	0.7	ND		2.5	0.7		
Chloroform	67-66-3	7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		
cis-1,2-Dichloroethene	156-59-2	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		
Dibromochloromethane	124-48-1	50 (GV)	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15		
Methyl Acetate	79-20-9	NS	ND		2	0.23	ND		2	0.23	ND		2	0.23	ND		2	0.23		
Tetrachloroethene	127-18-4	5	0.18	J	0.5	0.18	0.27	J	0.5	0.18	0.23	J	0.5	0.18	ND		0.5	0.18		
trans-1,2-Dichloroethene	156-60-5	5	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		
Trichloroethene	79-01-6	5	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18		
Total VOCs			3.38	-	-	-	0.27	-	-	-	3.23	-	-	-	4.6	-	-	-		
VOLATILE ORGANICS BY GC/MS-TIC																				
Sulfur Dioxide	007446-09-5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total TIC Compounds		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SEMIVOLATILE ORGANICS BY GC/MS																				
Biphenyl	92-52-4	5	ND		2	0.46	ND		2	0.46	ND		2	0.46	ND		2	0.46		
Caprolactam	105-60-2	NS	ND		10	3.3	ND		10	3.3	ND		10	3.3	14		10	3.3		
Dimethyl phthalate	131-11-3	50 (GV)	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND	(UJ)	5	1.8		
Total SVOCs		NA	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-		
SEMIVOLATILE ORGANICS BY GC/MS-SIM																				
2-Chloronaphthalene	91-58-7	10	0.05	J	0.2	0.02	ND		0.2	0.02	ND		0.2	0.02	ND		0.2	0.02		
2-Methylnaphthalene	91-57-6	NS	0.04	J (U)	0.1	0.02	ND		0.1	0.02	0.06	J (U)	0.1	0.02	ND		0.1	0.02		
Acenaphthene	83-32-9	20 (GV)	0.02	J (U)	0.1	0.01	ND		0.1	0.01	0.02	J (U)	0.1	0.01	ND		0.1	0.01		
Acenaphthylene	208-96-8	NS	0.01	J (U)	0.1	0.01	ND		0.1	0.01	0.02	J (U)	0.1	0.01	ND		0.1	0.01		
Anthracene	120-12-7	50 (GV)	0.02	J (U)	0.1	0.01	ND		0.1	0.01	0.01	J (U)	0.1	0.01	ND		0.1	0.01		
Benzo(a)anthracene	56-55-3	0.002 (GV)	ND	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02		
Benzo(a)pyrene	50-32-8	Non Detect	ND	J	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02		
Benzo(b)fluoranthene	205-99-2	0.002 (GV)	0.02	J (U)	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01		
Benzo(ghi)perylene	191-24-2	NS	0.06	J (U)	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01		
Benzo(k)fluoranthene	207-08-9	0.002 (GV)	0.02	J (U)	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01		
Chrysene	218-01-9	0.002 (GV)	ND	J	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01		
Dibenzo(a,h)anthracene	53-70-3	NS	0.07	J (U)	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01		
Fluoranthene	206-44-0	50 (GV)	0.03	J (U)	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02		
Fluorene	86-73-7	50 (GV)	0.04	J (U)	0.1	0.01	ND		0.1	0.01	0.03	J (U)	0.1	0.01	ND		0.1	0.01		
Hexachlorobenzene	118-74-1	0.04	0.03	J (U)	0.8	0.01	ND		0.8	0.01	ND		0.8	0.01	ND		0.8	0.01		
Hexachlorobutadiene	87-68-3	0.5	ND	J	0.5	0.05	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05		
Indeno(1,2,3-cd)pyrene	193-39-5	0.002 (GV)	0.06	J (U)	0.1	0.01	ND		0.1	0.01	ND		0.1	0.01	ND		0.1	0.01		
Naphthalene	91-20-3	10 (GV)	ND	J	0.1	0.05	ND		0.1	0.05	ND		0.1	0.05	ND		0.1	0.05		
Pentachlorophenol	87-86-5	1	0.12	J	0.8	0.01	0.11	J	0.8	0.01	0.11	J	0.8	0.01	ND		0.8	0.01		
Phenanthrene	85-01-8	50 (GV)	0.04	J (U)	0.1	0.02	ND		0.1	0.02	0.03	J (U)	0.1	0.02	ND		0.1	0.02		
Pyrene	129-00-0	50 (GV)	0.03	J (U)	0.1	0.02	ND		0.1	0.02	ND		0.1	0.02	ND		0.1	0.02		
Total SVOCs			0.66	J	-	-	0.11	-	-	-	0.28	-	-	-	-	-	-	-		
SEMIVOLATILE ORGANICS BY GC/MS-TIC																				
Aldol Condensates		NA	28.4	J	0	0	43	J	0	0	50.1	J	0	0	18	J	0	0		
Tetrachloroethene	000127-18-4	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unknown		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unknown Organic Acid		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unknown Organic Acid		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unknown Phenol		NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total TIC Compounds		NA	28.4	J	0	0	43	J	0	0	50.1	J	0	0	18	J	0	0		
ORGANOCHLORINE PESTICIDES BY GC																				
4,4'-DDD	72-54-8	0.3	0.006	J	0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003		
4,4'-DDT	50-29-3	0.2	0.031	(J)	0.029	0.003	ND		0.029	0.003	ND	(U)	0.029	0.003	ND		0.029	0.003		
cis-Chlordane	5103-71-9	NS	ND		0.014	0.005	ND		0.014	0.005	ND		0.014	0.005	ND		0.014	0.005		
Dieldrin	60-57-1	0.004	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003	ND		0.029	0.003		
POLYCHLORINATED BIPHENYLS BY GC																				
Aroclor 1260	11096-82-5	0.09	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032		
PCBs, Total	1336-36-3	0.09	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032	ND		0.082	0.032		

TABLE 8: RI GROUNDWATER ANALYTICAL RESULTS SUMMARY
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTEDY, SCENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RIMW5_190329				RIMW6_190329				FD01_190329 (RIMW6_190329)				RIMW6D_190402			
			L1912755-04				L1912755-03				L1912755-05				L1913113-05			
			3/29/2019				3/29/2019				3/29/2019				4/2/2019			
			WATER				WATER				WATER				WATER			
		NY-AWQS ⁽¹⁾																
ANALYTE	CAS	(ug/l)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
TOTAL METALS																		
Aluminum, Total	7429-90-5	NS	40.8		10	3.27	90.8		10	3.27	84.2		10	3.27	191		10	3.27
Antimony, Total	7440-36-0	3	1.06	J	4	0.42	1.32	J	4	0.42	0.76	J	4	0.42	ND		4	0.42
Arsenic, Total	7440-38-2	25	0.33	J	0.5	0.16	0.46	J	0.5	0.16	0.38	J	0.5	0.16	1.47	(J)	0.5	0.16
Barium, Total	7440-39-3	1000	22.73		0.5	0.17	36.28		0.5	0.17	35.64		0.5	0.17	114.2		0.5	0.17
Cadmium, Total	7440-43-9	5	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05
Calcium, Total	7440-70-2	NS	89600		100	39.4	112000		100	39.4	116000		100	39.4	97200		100	39.4
Chromium, Total	7440-47-3	50	1.18		1	0.17	3.4		1	0.17	3.55		1	0.17	0.55	J	1	0.17
Cobalt, Total	7440-48-4	NS	0.18	J	0.5	0.16	0.26	J	0.5	0.16	0.22	J	0.5	0.16	0.61		0.5	0.16
Copper, Total	7440-50-8	200	0.78	J	1	0.38	1.13		1	0.38	1.08		1	0.38	0.58	J	1	0.38
Iron, Total	7439-89-6	300	131	(U)	50	19.1	225		50	19.1	192	(U)	50	19.1	490		50	19.1
Lead, Total	7439-92-1	25	ND		1	0.34	ND		1	0.34	ND		1	0.34	ND		1	0.34
Magnesium, Total	7439-95-4	35,000 (GV)	7600		70	24.2	10300		70	24.2	10500		70	24.2	18300		70	24.2
Manganese, Total	7439-96-5	300	14.79		1	0.44	11.36		1	0.44	9.99		1	0.44	362.9		1	0.44
Nickel, Total	7440-02-0	100	0.61	J	2	0.55	0.85	J	2	0.55	0.78	J	2	0.55	0.88	J	2	0.55
Potassium, Total	7440-09-7	NS	9870		100	30.9	7320		100	30.9	7540		100	30.9	4940		100	30.9
Selenium, Total	7782-49-2	10	3.19	J	5	1.73	1.83	J	5	1.73	ND		5	1.73	ND		5	1.73
Sodium, Total	7440-23-5	20,000	150,000		100	29.3	203,000		100	29.3	202,000		100	29.3	43,800		100	29.3
Thallium, Total	7440-28-0	0.5 (GV)	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
GENERAL CHEMISTRY																		
Chromium, Hexavalent	18540-29-9	50	ND		10	3	4	J	10	3	4	J	10	3	ND		10	3
Cyanide, Total	57-12-5	200	ND		5	1	ND		5	1	ND		5	1	ND		5	1
1,4 DIOXANE BY 8270D-SIM (None Detected Above the Laboratory's Method Detection Limit)																		
PERFLUORINATED ALKYL ACIDS			EPA PFOS/PFOA ⁽²⁾ (ng/l)															
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	NA	-		-	-	1.5	J	1.87	0.182	6.9		1.85	0.18	-		-	-
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NA	-		-	-	0.756	J (U)	1.87	0.349	ND		1.85	0.345	-		-	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NA	-		-	-	0.592	J	1.87	0.234	ND		1.85	0.232	-		-	-
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NA	-		-	-	7.12		1.87	0.356	6.61		1.85	0.352	-		-	-
Perfluorobutanoic Acid (PFBA)	375-22-4	NA	-		-	-	7.36		1.87	0.349	7.38		1.85	0.346	-		-	-
Perfluoroheptanoic Acid (PFHpA)	375-85-9	NA	-		-	-	4.03		1.87	0.348	3.95		1.85	0.344	-		-	-
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NA	-		-	-	4.17		1.87	0.408	3.92		1.85	0.404	-		-	-
Perfluorohexanoic Acid (PFHxA)	307-24-4	NA	-		-	-	5.46		1.87	0.461	5.25		1.85	0.456	-		-	-
Perfluorononanoic Acid (PFNA)	375-95-1	NA	-		-	-	ND		1.87	0.408	0.478	J	1.85	0.404	-		-	-
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	70	-		-	-	18		1.87	0.524	18.2		1.85	0.518	-		-	-
Perfluorooctanoic Acid (PFOA)	335-67-1	70	-		-	-	11.1		1.87	0.431	11.2		1.85	0.426	-		-	-
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NA	-		-	-	7.2		1.87	0.434	6.83		1.85	0.43	-		-	-
PFOA/PFOS, Total		70	-		-	-	29.1		1.87	0.431	29.4		1.85	0.426	-		-	-

(1) New York Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values. June 1998 and Addendums.

(2) NYSDEC has not established a regulatory standard or guidance value for perfluorooctanoic acid (PFOA) or perfluorooctane sulfonic acid (PFOS), so the PFOA and PFOS chemical constituents of the PFAS list are compared to the November 2016 USEPA PFOA and PFOS Drinking Water Health Advisory of 70 ppt or 0.07 ppb.

(GV) denotes Guidance Value

Qualifiers in parantheses are from the data validator.

TABLE 8A: GROUNDWATER SAMPLING ANALYTICAL SUMMARY RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION
HAMILTON HILL II - TARGET AREA 1 BCP SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RIGP1_190723				RIGP2_190723				FD01__190723 (RIGP2)				RIGP3_190723				RIGP4_190723				RIGP5_190723			
			L1932554-01				L1932554-02				L1932554-09				L1932554-03				L1932554-04				L1932554-05			
			7/23/2019				7/23/2019				7/23/2019				7/23/2019				7/23/2019				7/23/2019			
			WATER				WATER				WATER				WATER				WATER				WATER			
		NY-AWQS ⁽¹⁾																								
ANALYTE	CAS	(ug/l) ⁽²⁾	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Potassium, Total	7440-09-7	NS	-	-	-		5960		100	30.9	5870		100	30.9	-	-	-		4960		100	30.9	5420		100	30.9
Selenium, Total	7782-49-2	10	-	-	-		ND		5	1.73	ND		5	1.73	-	-	-		ND		5	1.73	2.79	J	5	1.73
Sodium, Total	7440-23-5	20,000	-	-	-		39,600	(J)	100	29.3	38,800	(J)	100	29.3	-	-	-		149,000	(J)	100	29.3	176,000	(J)	100	29.3
GENERAL CHEMISTRY																										
Chromium, Hexavalent	18540-29-9	50	-	-	-		ND		10	3	ND		10	3	-	-	-		4	J	10	3	4	J	10	3
1,4 DIOXANE BY 8270D-SIM (None Detected Above the Laboratory's Method Detection Limits)																										
PERFLUORINATED ALKYL ACIDS		(ng/l) ⁽³⁾																								
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NS	-	-	-		1.26	J	1.78	0.212	1.19	J	1.77	0.21	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorobutanoic Acid (PFBA)	375-22-4	NS	-	-	-		2.3		1.78	0.364	2.24		1.77	0.36	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptanoic Acid (PFHpA)	375-85-9	NS	-	-	-		1	J	1.78	0.201	0.989	J	1.77	0.199	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NS	-	-	-		1	J	1.78	0.336	1.27	J	1.77	0.332	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorohexanoic Acid (PFHxA)	307-24-4	NS	-	-	-		2.66	(U)	1.78	0.293	2.49		1.77	0.29	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorononanoic Acid (PFNA)	375-95-1	NS	-	-	-		ND		1.78	0.278	0.293	(U)	1.77	0.276	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NS	-	-	-		2.74		1.78	0.354	2.77		1.77	0.35	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	70	-	-	-		5.21		1.78	0.45	5.8		1.77	0.445	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic Acid (PFOA)	335-67-1	70	-	-	-		2.99		1.78	0.211	2.94		1.77	0.208	-	-	-	-	-	-	-	-	-	-	-	-
PFOA/PFOS, Total		70	-	-	-		8.2		1.78	0.211	8.74		1.77	0.208	-	-	-	-	-	-	-	-	-	-	-	-
PFAS, Total		NS					19.16				19.98															

(1) New York Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values. June 1998 and Addendums.
(2) Analyte standards and concentrations expressed in ug/l (parts per billion) with the exception of Perfluorinated Alkyl Acids, which are expressed in ng/l (parts per trillion).
(3) NYSDEC has not established a regulatory standard or guidance value for perfluorooctanoic acid (PFOA) or perfluorooctane sulfonic acid (PFOS), so the PFOA and PFOS chemical constituents of the PFAS list are compared to the November 2016 USEPA PFOA and PFOS Drinking Water Health Advisory of 70 ng/l (parts per trillion).
NS denotes No Standard
GV denotes Guidance Value
ND denotes Non Detect
Qualifiers in parantheses are from the data validator.

TABLE 9: RI SOIL VAPOR ANALYTICAL RESULTS
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RIOA1				FD01_190403 (RIOA1)				RISV1				RISV2				RISV3			
			L1913486-08				L1913486-09				L1913486-01				L1913486-02				L1913486-03			
			4/3/2019				4/3/2019				4/3/2019				4/3/2019				4/3/2019			
			AIR				AIR				SOIL_VAPOR				SOIL_VAPOR				SOIL_VAPOR			
ANALYTE	CAS	(ug/m3)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS IN AIR																						
1,1,1-Trichloroethane	71-55-6		-		-	-	-		-	-	ND		1.09	-	ND		1.09	-	ND		1.09	-
1,1,2,2-Tetrachloroethane	79-34-5		ND		1.37	-	ND		1.37	-	ND		1.37	-	ND		1.37	-	ND		1.37	-
1,1,2-Trichloroethane	79-00-5		ND		1.09	-	ND		1.09	-	ND		1.09	-	ND		1.09	-	ND		1.09	-
1,1-Dichloroethane	75-34-3		ND		0.809	-	ND		0.809	-	ND		0.809	-	ND		0.809	-	ND		0.809	-
1,1-Dichloroethene	75-35-4		-		-	-	-		-	-	ND		0.793	-	ND		0.793	-	ND		0.793	-
1,2,4-Trichlorobenzene	120-82-1		ND		1.48	-	ND		1.48	-	ND		1.48	-	ND		1.48	-	ND		1.48	-
1,2,4-Trimethylbenzene	95-63-6		ND		0.983	-	ND		0.983	-	1.1		0.983	-	1.91		0.983	-	5.65		0.983	-
1,2-Dibromoethane	106-93-4		ND		1.54	-	ND		1.54	-	ND		1.54	-	ND		1.54	-	ND		1.54	-
1,2-Dichlorobenzene	95-50-1		ND		1.2	-	ND		1.2	-	ND		1.2	-	ND		1.2	-	ND		1.2	-
1,2-Dichloroethane	107-06-2		ND		0.809	-	ND		0.809	-	ND		0.809	-	ND		0.809	-	ND		0.809	-
1,2-Dichloropropane	78-87-5		ND		0.924	-	ND		0.924	-	ND		0.924	-	ND		0.924	-	ND		0.924	-
1,3,5-Trimethylbenzene	108-67-8		ND		0.983	-	ND		0.983	-	ND		0.983	-	ND		0.983	-	2.81		0.983	-
1,3-Butadiene	106-99-0		ND		0.442	-	ND		0.442	-	ND		0.442	-	ND		0.442	-	ND		0.442	-
1,3-Dichlorobenzene	541-73-1		ND		1.2	-	ND		1.2	-	13.5		1.2	-	ND		1.2	-	ND		1.2	-
1,4-Dichlorobenzene	106-46-7		ND		1.2	-	ND		1.2	-	ND		1.2	-	ND		1.2	-	ND		1.2	-
1,4-Dioxane	123-91-1		ND		0.721	-	ND		0.721	-	ND		0.721	-	ND		0.721	-	ND		0.721	-
2,2,4-Trimethylpentane	540-84-1		ND		0.934	-	ND		0.934	-	ND		0.934	-	ND		0.934	-	ND		0.934	-
2-Butanone	78-93-3		ND		1.47	-	ND		1.47	-	7.52		1.47	-	6.37		1.47	-	2.44		1.47	-
2-Hexanone	591-78-6		ND		0.82	-	ND		0.82	-	ND		0.82	-	ND		0.82	-	ND		0.82	-
3-Chloropropene	107-05-1		ND		0.626	-	ND		0.626	-	ND		0.626	-	ND		0.626	-	ND		0.626	-
4-Ethyltoluene	622-96-8		ND		0.983	-	ND		0.983	-	ND		0.983	-	ND		0.983	-	1.52		0.983	-
4-Methyl-2-pentanone	108-10-1		ND		2.05	-	ND		2.05	-	ND		2.05	-	ND		2.05	-	ND		2.05	-
Acetone	67-64-1		6.06		2.38	-	6.51		2.38	-	10.5		2.38	-	33		2.38	-	11.1		2.38	-
Benzene	71-43-2		ND		0.639	-	ND		0.639	-	ND		0.639	-	0.818		0.639	-	ND		0.639	-
Benzyl chloride	100-44-7		ND		1.04	-	ND		1.04	-	ND		1.04	-	ND		1.04	-	ND		1.04	-
Bromodichloromethane	75-27-4		ND		1.34	-	ND		1.34	-	ND		1.34	-	ND		1.34	-	ND		1.34	-
Bromoform	75-25-2		ND		2.07	-	ND		2.07	-	ND		2.07	-	ND		2.07	-	ND		2.07	-
Bromomethane	74-83-9		ND		0.777	-	ND		0.777	-	ND		0.777	-	ND		0.777	-	ND		0.777	-
Carbon disulfide	75-15-0		ND		0.623	-	ND		0.623	-	3.71		0.623	-	9.84		0.623	-	6.57		0.623	-
Carbon tetrachloride	56-23-5		-		-	-	-		-	-	ND		1.26	-	ND		1.26	-	ND		1.26	-
Chlorobenzene	108-90-7		ND		0.921	-	ND		0.921	-	ND		0.921	-	ND		0.921	-	ND		0.921	-
Chloroethane	75-00-3		ND		0.528	-	ND		0.528	-	ND		0.528	-	ND		0.528	-	ND		0.528	-
Chloroform	67-66-3		ND		0.977	-	ND		0.977	-	34.3		0.977	-	1.22		0.977	-	ND		0.977	-
Chloromethane	74-87-3		1.36		0.413	-	1.38		0.413	-	ND		0.413	-	ND		0.413	-	ND		0.413	-
cis-1,2-Dichloroethene	156-59-2		-		-	-	-		-	-	ND		0.793	-	ND		0.793	-	ND		0.793	-
cis-1,3-Dichloropropene	10061-01-5		ND		0.908	-	ND		0.908	-	ND		0.908	-	ND		0.908	-	ND		0.908	-
Cyclohexane	110-82-7		0.74		0.688	-	ND		0.688	-	1.17		0.688	-	2.93		0.688	-	1.61		0.688	-
Dibromochloromethane	124-48-1		ND		1.7	-	ND		1.7	-	ND		1.7	-	ND		1.7	-	ND		1.7	-
Dichlorodifluoromethane	75-71-8		2.62		0.989	-	2.73		0.989	-	3.34		0.989	-	2.55		0.989	-	3.15		0.989	-
Ethanol	64-17-5		ND		9.42	-	ND		9.42	-	67.8		9.42	-	71.4		9.42	-	10.2		9.42	-
Ethyl Acetate	141-78-6		ND		1.8	-	ND		1.8	-	ND		1.8	-	ND		1.8	-	ND		1.8	-
Ethylbenzene	100-41-4		ND		0.869	-	ND		0.869	-	ND		0.869	-	1.22		0.869	-	2.08		0.869	-
Freon-113	76-13-1		ND		1.53	-	ND		1.53	-	ND		1.53	-	ND		1.53	-	ND		1.53	-
Freon-114	76-14-2		ND		1.4	-	ND		1.4	-	ND		1.4	-	ND		1.4	-	ND		1.4	-
Heptane	142-82-5		ND		0.82	-	ND		0.82	-	ND		0.82	-	ND		0.82	-	ND		0.82	-
Hexachlorobutadiene	87-68-3		ND		2.13	-	ND		2.13	-	ND		2.13	-	ND		2.13	-	ND		2.13	-
Isopropanol	67-63-0		ND		1.23	-	ND		1.23	-	147		1.23	-	164		1.23	-	ND		1.23	-
Methyl tert butyl ether	1634-04-4		ND		0.721	-	ND		0.721	-	ND		0.721	-	ND		0.721	-	ND		0.721	-
Methylene chloride	75-09-2		ND		1.74	-	ND		1.74	-	ND		1.74	-	3.4		1.74	-	ND		1.74	-
n-Hexane	110-54-3		ND		0.705	-	ND		0.705	-	0.98		0.705	-	0.804		0.705	-	ND		0.705	-
o-Xylene	95-47-6		ND		0.869	-	ND		0.869	-	ND		0.869	-	1.53		0.869	-	4.18		0.869	-
p/m-Xylene	179601-23-1		ND		1.74	-	ND		1.74	-	1.78		1.74	-	4.78		1.74	-	7.12		1.74	-
Styrene	100-42-5		ND		0.852	-	ND		0.852	-	ND		0.852	-	ND		0.852	-	ND		0.852	-
Tertiary butyl Alcohol	75-65-0		ND		1.52	-	ND		1.52	-	ND		1.52	-	ND		1.52	-	ND		1.52	-
Tetrachloroethene	127-18-4		-		-	-	-		-	-	426		1.36	-	ND		1.36	-	3.53		1.36	-
Tetrahydrofuran	109-99-9		ND		1.47	-	ND		1.47	-	2.92		1.47	-	ND		1.47	-	ND		1.47	-

TABLE 9: RI SOIL VAPOR ANALYTICAL RESULTS
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RIOA1				FD01_190403 (RIOA1)				RISV1				RISV2				RISV3			
			L1913486-08				L1913486-09				L1913486-01				L1913486-02				L1913486-03			
			4/3/2019				4/3/2019				4/3/2019				4/3/2019				4/3/2019			
			AIR				AIR				SOIL_VAPOR				SOIL_VAPOR				SOIL_VAPOR			
ANALYTE	CAS	(ug/m3)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Toluene	108-88-3		ND		0.754	-	ND		0.754	-	7.31		0.754	-	4.9		0.754	-	3.14		0.754	-
trans-1,2-Dichloroethene	156-60-5		ND		0.793	-	ND		0.793	-	ND		0.793	-	ND		0.793	-	ND		0.793	-
trans-1,3-Dichloropropene	10061-02-6		ND		0.908	-	ND		0.908	-	ND		0.908	-	ND		0.908	-	ND		0.908	-
Trichloroethene	79-01-6		-		-	-	-		-	-	2.34		1.07	-	ND		1.07	-	ND		1.07	-
Trichlorofluoromethane	75-69-4		1.23		1.12	-	1.33		1.12	-	10.3		1.12	-	1.66		1.12	-	5.46		1.12	-
Vinyl bromide	593-60-2		ND		0.874	-	ND		0.874	-	ND		0.874	-	ND		0.874	-	ND		0.874	-
Vinyl chloride	75-01-4		-		-	-	-		-	-	ND		0.511	-	ND		0.511	-	ND		0.511	-
VOLATILE ORGANICS IN AIR BY SIM																						
1,1,1-Trichloroethane	71-55-6		ND		0.109	-	ND		0.109	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	75-35-4		ND		0.079	-	ND		0.079	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (total)	540-59-0		ND		0.079	-	ND		0.079	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	56-23-5		0.459		0.126	-	0.465		0.126	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	156-59-2		ND		0.079	-	ND		0.079	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	127-18-4		7.87		0.136	-	5.27		0.136	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	79-01-6		ND		0.107	-	ND		0.107	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	75-01-4		ND		0.051	-	ND		0.051	-	-	-	-	-	-	-	-	-	-	-	-	-

Qualifiers in parantheses are from the data validator

TABLE 9: RI SOIL VAPOR ANALYTICAL RESULTS
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RISV4				RISV5				RISV6				RISV7			
			L1913486-04				L1913486-05				L1913486-06				L1913486-07			
			4/3/2019				4/3/2019				4/3/2019				4/3/2019			
			SOIL_VAPOR				SOIL_VAPOR				SOIL_VAPOR				SOIL_VAPOR			
ANALYTE	CAS	(ug/m3)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
VOLATILE ORGANICS IN AIR																		
1,1,1-Trichloroethane	71-55-6		ND		1.09	-	ND		1.09	-	ND		1.09	-	ND		1.09	-
1,1,2,2-Tetrachloroethane	79-34-5		ND		1.37	-	ND		1.37	-	ND		1.37	-	ND		1.37	-
1,1,2-Trichloroethane	79-00-5		ND		1.09	-	ND		1.09	-	ND		1.09	-	ND		1.09	-
1,1-Dichloroethane	75-34-3		ND		0.809	-	ND		0.809	-	ND		0.809	-	ND		0.809	-
1,1-Dichloroethene	75-35-4		ND		0.793	-	ND		0.793	-	ND		0.793	-	ND		0.793	-
1,2,4-Trichlorobenzene	120-82-1		ND		1.48	-	ND		1.48	-	ND		1.48	-	ND		1.48	-
1,2,4-Trimethylbenzene	95-63-6		2.27		0.983	-	1.71		0.983	-	2.79		0.983	-	3.94		0.983	-
1,2-Dibromoethane	106-93-4		ND		1.54	-	ND		1.54	-	ND		1.54	-	ND		1.54	-
1,2-Dichlorobenzene	95-50-1		ND		1.2	-	ND		1.2	-	ND		1.2	-	2.42		1.2	-
1,2-Dichloroethane	107-06-2		ND		0.809	-	ND		0.809	-	ND		0.809	-	ND		0.809	-
1,2-Dichloropropane	78-87-5		ND		0.924	-	ND		0.924	-	ND		0.924	-	ND		0.924	-
1,3,5-Trimethylbenzene	108-67-8		1.04		0.983	-	ND		0.983	-	ND		0.983	-	1.13		0.983	-
1,3-Butadiene	106-99-0		ND		0.442	-	ND		0.442	-	ND		0.442	-	ND		0.442	-
1,3-Dichlorobenzene	541-73-1		1.29		1.2	-	ND		1.2	-	ND		1.2	-	3.31		1.2	-
1,4-Dichlorobenzene	106-46-7		ND		1.2	-	ND		1.2	-	ND		1.2	-	ND		1.2	-
1,4-Dioxane	123-91-1		ND		0.721	-	ND		0.721	-	ND		0.721	-	ND		0.721	-
2,2,4-Trimethylpentane	540-84-1		ND		0.934	-	ND		0.934	-	ND		0.934	-	ND		0.934	-
2-Butanone	78-93-3		2.26		1.47	-	2.04		1.47	-	5.46		1.47	-	2.58		1.47	-
2-Hexanone	591-78-6		ND		0.82	-	ND		0.82	-	ND		0.82	-	ND		0.82	-
3-Chloropropene	107-05-1		ND		0.626	-	ND		0.626	-	ND		0.626	-	ND		0.626	-
4-Ethyltoluene	622-96-8		ND		0.983	-	ND		0.983	-	ND		0.983	-	ND		0.983	-
4-Methyl-2-pentanone	108-10-1		ND		2.05	-	ND		2.05	-	3.11		2.05	-	ND		2.05	-
Acetone	67-64-1		7.36		2.38	-	5.63		2.38	-	17.3		2.38	-	12.9		2.38	-
Benzene	71-43-2		ND		0.639	-	ND		0.639	-	ND		0.639	-	0.863		0.639	-
Benzyl chloride	100-44-7		ND		1.04	-	ND		1.04	-	ND		1.04	-	ND		1.04	-
Bromodichloromethane	75-27-4		ND		1.34	-	ND		1.34	-	11.3		1.34	-	ND		1.34	-
Bromoform	75-25-2		ND		2.07	-	ND		2.07	-	ND		2.07	-	ND		2.07	-
Bromomethane	74-83-9		ND		0.777	-	ND		0.777	-	ND		0.777	-	ND		0.777	-
Carbon disulfide	75-15-0		4.11		0.623	-	3.18		0.623	-	3.24		0.623	-	12.7		0.623	-
Carbon tetrachloride	56-23-5		ND		1.26	-	ND		1.26	-	ND		1.26	-	ND		1.26	-
Chlorobenzene	108-90-7		ND		0.921	-	ND		0.921	-	ND		0.921	-	ND		0.921	-
Chloroethane	75-00-3		ND		0.528	-	ND		0.528	-	ND		0.528	-	ND		0.528	-
Chloroform	67-66-3		ND		0.977	-	11.2		0.977	-	129		0.977	-	4		0.977	-
Chloromethane	74-87-3		ND		0.413	-	ND		0.413	-	ND		0.413	-	ND		0.413	-
cis-1,2-Dichloroethene	156-59-2		ND		0.793	-	ND		0.793	-	ND		0.793	-	ND		0.793	-
cis-1,3-Dichloropropene	10061-01-5		ND		0.908	-	ND		0.908	-	ND		0.908	-	ND		0.908	-
Cyclohexane	110-82-7		0.781		0.688	-	ND		0.688	-	3.37		0.688	-	1.77		0.688	-
Dibromochloromethane	124-48-1		ND		1.7	-	ND		1.7	-	ND		1.7	-	ND		1.7	-
Dichlorodifluoromethane	75-71-8		2.72		0.989	-	2.69		0.989	-	2.81		0.989	-	18.3		0.989	-
Ethanol	64-17-5		9.44		9.42	-	ND		9.42	-	19.6		9.42	-	15.6		9.42	-
Ethyl Acetate	141-78-6		ND		1.8	-	ND		1.8	-	ND		1.8	-	ND		1.8	-
Ethylbenzene	100-41-4		ND		0.869	-	ND		0.869	-	0.899		0.869	-	4.11		0.869	-
Freon-113	76-13-1		ND		1.53	-	ND		1.53	-	ND		1.53	-	ND		1.53	-
Freon-114	76-14-2		ND		1.4	-	ND		1.4	-	ND		1.4	-	ND		1.4	-
Heptane	142-82-5		ND		0.82	-	ND		0.82	-	ND		0.82	-	ND		0.82	-
Hexachlorobutadiene	87-68-3		ND		2.13	-	ND		2.13	-	ND		2.13	-	ND		2.13	-
Isopropanol	67-63-0		3.2		1.23	-	2		1.23	-	6.15		1.23	-	4.23		1.23	-
Methyl tert butyl ether	1634-04-4		ND		0.721	-	ND		0.721	-	ND		0.721	-	ND		0.721	-
Methylene chloride	75-09-2		ND		1.74	-	ND		1.74	-	ND		1.74	-	ND		1.74	-
n-Hexane	110-54-3		ND		0.705	-	ND		0.705	-	ND		0.705	-	1.29		0.705	-
o-Xylene	95-47-6		2.74		0.869	-	0.912		0.869	-	1.43		0.869	-	2.99		0.869	-
p/m-Xylene	179601-23-1		2.96		1.74	-	ND		1.74	-	3.74		1.74	-	20.9		1.74	-
Styrene	100-42-5		ND		0.852	-	ND		0.852	-	ND		0.852	-	ND		0.852	-
Tertiary butyl Alcohol	75-65-0		ND		1.52	-	ND		1.52	-	ND		1.52	-	ND		1.52	-
Tetrachloroethene	127-18-4		5.28		1.36	-	130		1.36	-	23.3		1.36	-	15.9		1.36	-
Tetrahydrofuran	109-99-9		ND		1.47	-	ND		1.47	-	ND		1.47	-	ND		1.47	-

TABLE 9: RI SOIL VAPOR ANALYTICAL RESULTS
830 AND 834 ALBANY STREET PARCELS
HAMILTON HILL II - TARGET AREA 1 SITE
CITY OF SCHENECTADY, SCHENECTADY COUNTY

SAMPLE ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX:			RISV4				RISV5				RISV6				RISV7			
			L1913486-04				L1913486-05				L1913486-06				L1913486-07			
			4/3/2019				4/3/2019				4/3/2019				4/3/2019			
			SOIL_VAPOR				SOIL_VAPOR				SOIL_VAPOR				SOIL_VAPOR			
ANALYTE	CAS	(ug/m3)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Toluene	108-88-3		1.21		0.754	-	0.961		0.754	-	2.86		0.754	-	4.64		0.754	-
trans-1,2-Dichloroethene	156-60-5		ND		0.793	-	ND		0.793	-	ND		0.793	-	ND		0.793	-
trans-1,3-Dichloropropene	10061-02-6		ND		0.908	-	ND		0.908	-	ND		0.908	-	ND		0.908	-
Trichloroethene	79-01-6		ND		1.07	-	ND		1.07	-	1.16		1.07	-	ND		1.07	-
Trichlorofluoromethane	75-69-4		1.37		1.12	-	34.7		1.12	-	13.7		1.12	-	248		1.12	-
Vinyl bromide	593-60-2		ND		0.874	-	ND		0.874	-	ND		0.874	-	ND		0.874	-
Vinyl chloride	75-01-4		ND		0.511	-	ND		0.511	-	ND		0.511	-	ND		0.511	-
VOLATILE ORGANICS IN AIR BY SIM																		
1,1,1-Trichloroethane	71-55-6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	75-35-4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (total)	540-59-0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	56-23-5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	156-59-2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	127-18-4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	79-01-6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	75-01-4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Qualifiers in parantheses are from the data validator

APPENDIX C
ORGANIC VAPOR HEADSPACE ANALYSIS
LOGS



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/12/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/12/2019 BY: BW						ANALYZED: 3/12/2019
TEMPERATURE OF SOIL: ambient						ANALYST: RL, BW
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE	BACKGROUND	
NUMBER	NUMBER	(FT.)***	TYPE	READING	READING	REMARKS
				(PPM)**	(PPM)**	
RIMW5	1	0-2	Soil	0.1	0.0	No odors / No staining
RIMW5	2	2-4	Soil	0.3	0.0	No odors / No staining
RIWM5	3	4-6	Soil	0.5	0.0	No odors / No staining
RIWM5	4	6-8	Soil	0.3	0.0	No odors / No staining
RIWM5	5	8-10	Soil	0.6	0.0	No odors / No staining
RIWM5	6	10-12	Soil	0.5	0.0	No odors / No staining
RIWM5	7	12-14	Soil	0.5	0.0	No odors / No staining
RIWM5	8	14-16	Soil	0.7	0.0	No odors / No staining
RIWM5	9	16-18	Soil	0.4	0.0	No odors / No staining
RIWM5	10	18-20	Soil	0.7	0.0	No odors / No staining
RISB15	1	0-2	Soil	0.5	0.0	No odors / No staining
RISB15	2	2-4	Soil	0.5	0.0	No odors / No staining
RISB15	3	4-6	Soil	0.5	0.0	No odors / No staining
RISB15	4	6-8	Soil	0.5	0.0	No odors / No staining
RIMW6	1	0-2	Soil	0.7	0.0	No odors / No staining
RIMW6	2	2-4	Soil	1.0	0.0	No odors / No staining
RIMW6	3	4-6	Soil	0.7	0.0	No odors / No staining
RIMW6	4	6-8	Soil	0.8	0.0	No odors / No staining
RIMW6	5	8-10	Soil	0.5	0.0	No odors / No staining
RIMW6	6	10-12	Soil	0.6	0.0	No odors / No staining
RIMW6	7	12-14	Soil	0.4	0.0	No odors / No staining
RIMW6	8	14-16	Soil	0.5	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 1
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/13/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/13/2019 BY: RL						ANALYZED: 3/13/2019
TEMPERATURE OF SOIL: ambient						ANALYST: RL
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RISV7	1	0-2	Soil	0.6	0.0	No odors / No staining
RISV7	2	2-4	Soil	0.9	0.0	No odors / No staining
RISV7	3	4-6	Soil	1.1	0.0	No odors / No staining
RISV7	4	6-8	Soil	0.5	0.0	No odors / No staining
RISV7	1	0-2	Soil	1.1	0.0	No odors / No staining
RISV7	2	2-4	Soil	1.5	0.0	No odors / No staining
RISV7	3	4-6	Soil	1.5	0.0	No odors / No staining
RISV7	4	6-8	Soil	1.6	0.0	No odors / No staining
RISB16	1	0-2	Soil	1	0.0	No odors / No staining
RISB16	2	2-4	Soil	0.8	0.0	No odors / No staining
RISB16	3	4-6	Soil	1.4	0.0	No odors / No staining
RISVB16	4	6-8	Soil	0.9	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

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*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/14/2019
INSTRUMENT USED:		MiniRae 3000	LAMP	10.6	eV	DATE
DATE INSTRUMENT CALIBRATED: 3/14/2019				BY: DA		ANALYZED: 3/14/2019
TEMPERATURE OF SOIL: ambient						ANALYST: RL, BW
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE READING	BACKGROUND READING	
NUMBER	NUMBER	(FT.)***	TYPE	(PPM)**	(PPM)**	REMARKS
RIMW6D	1	0-2	Soil	32.0	0.0	No odors / No staining
RIMW6D	2	2-4	Soil	6.0	0.0	No odors / No staining
RIMW6D	3	4-6	Soil	1.1	0.2	No odors / No staining
RIMW6D	4	6-8	Soil	2.0	0.1	No odors / No staining
RIMW6D	5	8-10	Soil	1.3	0.1	No odors / No staining
RIMW6D	6	10-12	Soil	1.2	0.1	No odors / No staining
RIMW6D	7	12-14	Soil	0.9	0.1	No odors / No staining
RIMW6D	8	14-16	Soil	1.2	0.1	No odors / No staining
RIMW6D	9	16-18	Soil	1.7	0.1	No odors / No staining
RIMW6D	10	18-20	Soil	0.9	0.1	No odors / No staining
RIMW6D	11	20-22	Soil	1.1	0.1	No odors / No staining
RIMW6D	12	22-24	Soil	0.9	0.2	No odors / No staining
RIMW6D	13	24-26	Soil	1.3	0.2	No odors / No staining
RIMW6D	14	26-28	Soil	1.8	0.2	No odors / No staining
RIMW6D	15	28-30	Soil	1.4	0.2	No odors / No staining
RIMW6D	16	30-32	Soil	1.4	0.2	No odors / No staining
RIMW6D	17	32-34	Soil	1.8	0.2	No odors / No staining
RIMW6D	18	34-36	Soil	2.0	0.1	No odors / No staining
RIMW6D	19	36-38	Soil	1.6	0.1	No odors / No staining
RIMW6D	-	38-40	-	-	-	No sample
RIMW6D	20	40-42	Soil	1.3	0.1	No odors / No staining
RIMW6D	21	42-44	Soil	2.5	0.2	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 1
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/15/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/15/2019 BY: RL						ANALYZED: 3/15/2019
TEMPERATURE OF SOIL: ambient						ANALYST: RL
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RISB8	1	0-2	Soil	7.7	0.0	No odors / No staining
RISB8	2	2-4	Soil	4.1	0.0	No odors / No staining
RISB8	3	4-6	Soil	15.8	0.0	No odors / No staining
RISB8	4	6-8	Soil	12.5	0.0	No odors / No staining
RISV3	1	0-2	Soil	0.2	0.0	No odors / No staining
RISV3	2	2-4	Soil	0.2	0.0	No odors / No staining
RISV3	3	4-6	Soil	0.2	0.0	No odors / No staining
RISB11	1	0-2	Soil	0.2	0.0	No odors / No staining
RISB11	2	2-4	Soil	0.2	0.0	No odors / No staining
RISB11	3	4-6	Soil	0.5	0.0	No odors / No staining
RISB11	4	6-8	Soil	0.6	0.0	No odors / No staining
RISB11	5	8-10	Soil	0.4	0.0	No odors / No staining
RISB11	6	10-12	Soil	0.3	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

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ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 1
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/18/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/18/2019 BY: RL						ANALYZED: 3/18/2019
TEMPERATURE OF SOIL: ambient						ANALYST: RL
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RISV4	1	0-2	Soil	0.5	0.0	No odors / No staining
RISV4	2	2-4	Soil	0.4	0.1	No odors / No staining
RISV4	3	4-6	Soil	0.9	0.1	No odors / No staining
RISV4	4	6-8	Soil	0.8	0.1	No odors / No staining
RISB1	1	0-2	Soil	0.8	0.1	No odors / No staining
RISB1	2	2-4	Soil	1.2	0.1	No odors / No staining
RISB1	3	4-6	Soil	0.8	0.1	No odors / No staining
RISB1	4	6-8	Soil	2.6	0.1	No odors / No staining
RISB1	5	0-2	Soil	1.1	0.1	No odors / No staining
RISB1	6	2-4	Soil	1.1	0.1	No odors / No staining
RISB1	7	4-6	Soil	1.2	0.1	No odors / No staining
RISB5	1	6-8	Soil	0.6	0.2	No odors / No staining
RISB5	2	8-10	Soil	0.6	0.2	No odors / No staining
RISB5	3	10-12	Soil	1.2	0.0	No odors / No staining
RISB5	4	12-14	Soil	0.9	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

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ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/19/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/19/2019 BY: KC						ANALYZED: 3/19/2019
TEMPERATURE OF SOIL: ambient						ANALYST: KC
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE	BACKGROUND	
NUMBER	NUMBER	(FT.)***	TYPE	READING	READING	REMARKS
				(PPM)**	(PPM)**	
RIMW1	1	0-2	Soil	0.2	0.1	No odors / No staining
RIMW1	2	2-4	Soil	0.9	0.1	No odors / No staining
RIMW1	3	4-6	Soil	0.4	0.2	No odors / No staining
RIMW1	4	6-8	Soil	0.5	0.2	No odors / No staining
RIMW1	5	8-10	Soil	0.2	0.1	No odors / No staining
RIMW1	6	10-12	Soil	0.2	0.2	No odors / No staining
RIMW1	7	12-14	Soil	0.2	0.2	No odors / No staining
RIMW1	8	14-16	Soil	0.6	0.2	No odors / No staining
RIMW1	9	16-18	Soil	0.5	0.2	No odors / No staining
RIMW1	10	18-20	Soil	0.2	0.2	No odors / No staining
RISV2	1	0-2	Soil	0.6	0.2	No odors / No staining
RISV2	2	2-4	Soil	0.4	0.1	No odors / No staining
RISV2	3	4-6	Soil	0.9	0.1	No odors / No staining
RISV2	4	6-8	Soil	1.2	0.1	No odors / No staining
RISB4	1	0-2	Soil	3.4	0.1	No odors / No staining
RISB4	2	2-4	Soil	1.5	0.1	No odors / No staining
RISB4	3	4-6	Soil	0.7	0.2	No odors / No staining
RISB4	4	6-8	Soil	0.7	0.1	No odors / No staining
RISB12	1	0-2	Soil	0.5	0.0	No odors / No staining
RISB12	2	2-4	Soil	0.7	0.0	No odors / No staining
RISB12	3	4-6	Soil	0.5	0.1	No odors / No staining
RISB12	4	6-8	Soil	0.5	0.2	No odors / No staining

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*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 2 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/19/2019
INSTRUMENT USED:		MiniRae 3000	LAMP	10.6	eV	DATE
DATE INSTRUMENT CALIBRATED: 3/19/2019				BY: KC		ANALYZED: 3/19/2019
TEMPERATURE OF SOIL: ambient						ANALYST: KC
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE	BACKGROUND	
NUMBER	NUMBER	(FT.)***	TYPE	READING	READING	
				(PPM)**	(PPM)**	REMARKS
RISB3	1	0-2	Soil	1.3	0.2	No odors / No staining
RISB3	2	2-4	Soil	0.8	0.2	No odors / No staining
RISB3	3	4-6	Soil	0.6	0.1	No odors / No staining
RISB3	4	6-8	Soil	0.5	0.1	No odors / No staining
RISB2	1	0-2	Soil	2.7	0.1	No odors / No staining
RISB2	2	2-4	Soil	0.6	0.1	No odors / No staining
RISB2	3	4-6	Soil	2.7	0.1	No odors / No staining
RISB2	4	6-8	Soil	1.2	0.3	No odors / No staining
RISB9	1	0-2	Soil	0.1	0.1	No odors / No staining
RISB9	2	2-4	Soil	0.4	0.1	No odors / No staining
RISB9	3	4-6	Soil	0.1	0.3	No odors / No staining
RISB9	4	6-8	Soil	0.1	0.1	No odors / No staining
RISB7	1	0-2	Soil	3.0	0.1	No odors / No staining
RISB7	2	2-4	Soil	0.6	0.3	No odors / No staining
RISB7	3	4-6	Soil	0.1	0.1	No odors / No staining
RISB7	4	6-8	Soil	1.4	0.1	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

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ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #:	16.6334	PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership				DATE		
LOCATION: 830 & 834 Albany Street, Schenectady, NY				COLLECTED: 3/20/2019		
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV				DATE		
DATE INSTRUMENT CALIBRATED: 3/20/2019				BY: KC		
TEMPERATURE OF SOIL: ambient				ANALYZED: 3/20/2019		
				ANALYST: KC		
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE	BACKGROUND	
NUMBER	NUMBER	(FT.)***	TYPE	READING	READING	REMARKS
				(PPM)**	(PPM)**	
RISV5	1	0-2	Soil	0.2	0.0	No odors / No staining
RISV5	2	2-4	Soil	0.2	0.1	No odors / No staining
RISV5	3	4-6	Soil	0.3	0.1	No odors / No staining
RISV5	4	6-8	Soil	0.5	0.1	No odors / No staining
RISV1	1	0-2	Soil	33.9	0.1	No odors / No staining
RISV1	2	2-4	Soil	0.9	0.1	No odors / No staining
RISV1	3	4-6	Soil	1.0	0.2	No odors / No staining
RISV1	4	6-8	Soil	1.4	0.1	No odors / No staining
RISV6	1	0-2	Soil	2.4	0.1	No odors / No staining
RISV6	2	2-4	Soil	0.6	0.1	No odors / No staining
RISV6	3	4-6	Soil	0.2	0.0	No odors / No staining
RISV6	4	6-8	Soil	0.4	0.0	No odors / No staining
RISB14	1	0-2	Soil	2.0	0.0	No odors / No staining
RISB14	2	2-4	Soil	1.6	0.0	No odors / No staining
RISB14	3	5-7	Soil	1.2	0.0	No odors / No staining
RISB14	4	7-9	Soil	1.0	0.0	No odors / No staining
RISB14	5	9-11	Soil	1.3	0.0	No odors / No staining
RISB14	6	11-13	Soil	5.4	0.0	No odors / No staining
RISB10	1	0-2	Soil	1.8	0.0	No odors / No staining
RISB10	2	2-4	Soil	1.8	0.0	No odors / No staining
RISB10	3	4-6	Soil	4.6	0.0	No odors / No staining
RISB10	4	6-8	Soil	3.4	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

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*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 2 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/20/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/20/2019 BY: KC						ANALYZED: 3/20/2019
TEMPERATURE OF SOIL: ambient						ANALYST: KC
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RISB10	5	8-10	Soil	2.6	0.0	No odors / No staining
RISB10	6	10-12	Soil	3.1	0.0	No odors / No staining
RISB6	1	0-2	Soil	2.7	0.0	No odors / No staining
RISB6	2	2-4	Soil	1.2	0.0	No odors / No staining
RISB6	3	4-6	Soil	0.7	0.0	No odors / No staining
RISB6	4	6-8	Soil	1.2	0.0	No odors / No staining
RISB13	1	0-2	Soil	0.0	0.0	No odors / No staining
RISB13	2	2-4	Soil	0.9	0.0	No odors / No staining
RISB13	3	4-6	Soil	1.4	0.0	No odors / No staining
RISB13	4	6-8	Soil	0.2	0.0	No odors / No staining
RISB13	5	8-10	Soil	0.4	0.0	No odors / No staining
RISB13	6	10-12	Soil	0.6	0.0	No odors / No staining
RIMW2	1	0-2	Soil	1.1	0.0	No odors / No staining
RIMW2	2	2-4	Soil	0.7	0.0	No odors / No staining
RIMW2	3	4-6	Soil	0.5	0.0	No odors / No staining
RIMW2	4	6-8	Soil	1.7	0.0	No odors / No staining
RIMW2	5	8-10	Soil	1.3	0.0	No odors / No staining
RIMW2	6	10-12	Soil	1.1	0.0	No odors / No staining
RIMW2	7	12-14	Soil	0.2	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/21/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/21/2019 BY: DA						ANALYZED: 3/21/2019
TEMPERATURE OF SOIL: ambient						ANALYST: DA
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE	BACKGROUND	
NUMBER	NUMBER	(FT.)***	TYPE	READING	READING	REMARKS
				(PPM)**	(PPM)**	
RIMW2	8	14-16	Soil	1.3	0.0	No odors / No staining
RIMW2	9	16-18	Soil	2.1	0.0	No odors / No staining
RIMW2	10	18-20	Soil	2.4	0.0	No odors / No staining
RIMW3D	1	0-2	Soil	0.9	0.1	No odors / No staining
RIMW3D	2	2-4	Soil	2.1	0.1	No odors / No staining
RIMW3D	3	4-6	Soil	2.5	0.1	No odors / No staining
RIMW3D	4	6-8	Soil	1.6	0.1	No odors / No staining
RIMW3D	5	8-10	Soil	2.9	0.1	No odors / No staining
RIMW3D	6	10-12	Soil	3.1	0.1	No odors / No staining
RIMW3D	7	12-14	Soil	2.6	0.1	No odors / No staining
RIMW3D	8	14-16	Soil	2.0	0.1	No odors / No staining
RIMW3D	9	16-18	Soil	1.9	0.1	No odors / No staining
RIMW3D	10	18-20	Soil	1.0	0.1	No odors / No staining
RIMW3D	11	20-22	Soil	2.3	0.1	No odors / No staining
RIMW3D	12	22-24	Soil	2.7	0.1	No odors / No staining
RIMW3D	13	24-26	Soil	2.5	0.1	No odors / No staining
RIMW3D	14	26-28	Soil	3.1	0.1	No odors / No staining
RIMW3D	15	28-30	Soil	2.9	0.1	No odors / No staining
RIMW3D	16	30-32	Soil	2.5	0.1	No odors / No staining
RIMW3D	17	32-34	Soil	2.6	0.1	No odors / No staining
RIMW3D	18	34-36	Soil	1.2	0.1	No odors / No staining
RIMW3D	19	36-38	Soil	1.4	0.1	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 1
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/22/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/22/2019 BY: DA						ANALYZED: 3/22/2019
TEMPERATURE OF SOIL: ambient						ANALYST: DA
EXPLORATION	SAMPLE	DEPTH	SAMPLE	SAMPLE	BACKGROUND	
NUMBER	NUMBER	(FT.)***	TYPE	READING	READING	REMARKS
				(PPM)**	(PPM)**	
RIMW3	1	0-2	Soil	1.3	0.1	No odors / No staining
RIMW3	2	2-4	Soil	1.2	0.1	No odors / No staining
RIMW3	3	4-6	Soil	0.8	0.1	No odors / No staining
RIMW3	4	6-8	Soil	1.5	0.1	No odors / No staining
RIMW3	5	8-10	Soil	1.5	0.1	No odors / No staining
RIMW3	6	10-12	Soil	0.7	0.1	No odors / No staining
RIMW3	7	12-14	Soil	1.2	0.1	No odors / No staining
RIMW3	8	14-16	Soil	0.6	0.1	No odors / No staining
RIMW3	9	16-18	Soil	0.9	0.1	No odors / No staining
RIMW3	10	18-20	Soil	1.1	0.1	No odors / No staining
RIMW4	1	0-2	Soil	1.3	0.1	No odors / No staining
RIMW4	2	2-4	Soil	1.1	0.1	No odors / No staining
RIMW4	3	4-6	Soil	1.4	0.1	No odors / No staining
RIMW4	4	6-8	Soil	1.9	0.1	No odors / No staining
RIMW4	5	8-10	Soil	1.5	0.1	No odors / No staining
RIMW4	6	10-12	Soil	1.9	0.1	No odors / No staining
RIMW4	7	12-14	Soil	1.2	0.1	No odors / No staining
RIMW4	8	14-16	Soil	1.3	0.1	No odors / No staining
RIMW4	9	16-18	Soil	1.3	0.1	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/25/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/25/2019 BY: DA						ANALYZED: 3/25/2019
TEMPERATURE OF SOIL: ambient						ANALYST: DA
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RIMW4D	1	0-2	Soil	1.1	0.0	No odors / No staining
RIMW4D	2	2-4	Soil	1.1	0.0	No odors / No staining
RIMW4D	3	4-6	Soil	-	-	No odors / No staining
RIMW4D	4	6-8	Soil	-	-	No recovery
RIMW4D	5	8-10	Soil	0.7	0.0	No odors / No staining
RIMW4D	6	10-12	Soil	0.8	0.0	No odors / No staining
RIMW4D	7	12-14	Soil	1.4	0.0	No odors / No staining
RIMW4D	8	14-16	Soil	1.7	0.0	No odors / No staining
RIMW4D	9	16-18	Soil	0.9	0.0	No odors / No staining
RIMW4D	10	18-20	Soil	1.7	0.0	No odors / No staining
RIMW4D	11	20-22	Soil	1.7	0.0	No odors / No staining
RIMW4D	12	22-24	Soil	1.6	0.0	No odors / No staining
RIMW4D	13	24-26	Soil	1.1	0.0	No odors / No staining
RIMW4D	14	26-28	Soil	2.1	0.0	No odors / No staining
RIMW4D	15	28-30	Soil	1.7	0.0	No odors / No staining
RIMW4D	16	30-32	Soil	2.2	0.0	No odors / No staining
RIMW4D	17	32-34	Soil	4.1	0.0	No odors / No staining
RIMW4D	18	34-36	Soil	3.0	0.0	No odors / No staining
RIMW4D	19	36-38	Soil	3.1	0.0	No odors / No staining
RIMW4D	20	38-40	Soil	3.0	0.0	No odors / No staining
RIMW4D	21	40-42	Soil	3.8	0.0	No odors / No staining
RIMW4D	22	42-44	Soil	3.9	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



*** represents feet below the ground surface



*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 1
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 3/27-28/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 3/28/2019 BY: RL						ANALYZED: 3/28/2019
TEMPERATURE OF SOIL: ambient						ANALYST: RL
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RISS1	1	0-2"	Soil	0.0	0.0	No odors / No staining
RISS2	1	0-2"	Soil	0.0	0.0	No odors / No staining
RISS2	1	0-6"	Soil	0.1	0.0	No odors / No staining
RISS3	1	0-2"	Soil	0.0	0.0	No odors / No staining
RISS3	1	0-6"	Soil	0	0.0	No odors / No staining
RISS4	1	0-2"	Soil	0	0.0	No odors / No staining
RISS4	1	0-6"	Soil	0.0	0.0	No odors / No staining
RIHA4	1	0-2	Soil	0.1	0.0	No odors / No staining
RIHA4	2	2-4	Soil	0	0.0	No odors / No staining
RISS6	1	0-2"	Soil	0.1	0.0	No odors / No staining
RISS5	1	0-2"	Soil	0.0	0.0	No odors / No staining
RISS5	1	0-6"	Soil	2.3	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 1 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 7/19/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 7/19/2019 BY: DA						ANALYZED: 7/19/2019
TEMPERATURE OF SOIL: ambient						ANALYST: DA
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RIGP1	1	0-2	Soil	4.3	0.0	No odors / No staining
RIGP1	1	2-4	Soil	2.1	0.0	No odors / No staining
RIGP1	2	4-6	Soil	2.5	0.0	No odors / No staining
RIGP1	2	6-8	Soil	3.1	0.0	No odors / No staining
RIGP1	3	8-10	Soil	3.2	0.0	No odors / No staining
RIGP1	3	10-12	Soil	2.9	0.0	No odors / No staining
RIGP1	4	12-14	Soil	2.9	0.0	No odors / No staining
RIGP1	4	14-16	Soil	2.8	0.0	No odors / No staining
RIGP2	1	0-2	Soil	2.6	0.0	No odors / No staining
RIGP2	1	2-4	Soil	2.8	0.0	No odors / No staining
RIGP2	2	4-6	Soil	2.1	0.0	No odors / No staining
RIGP2	2	6-8	Soil	3.9	0.0	No odors / No staining
RIGP2	3	8-12	Soil	2.9	0.0	No odors / No staining
RIGP2	4	12-14	Soil	3.2	0.0	No odors / No staining
RIGP2	4	14-16	Soil	3.2	0.0	No odors / No staining
RIGP3	1	0-2	Soil	4.0	0.1	No odors / No staining
RIGP3	1	2-4	Soil	3.8	0.1	No odors / No staining
RIGP3	2	4-6	Soil	4.5	0.3	No odors / No staining
RIGP3	2	6-8	Soil	5.1	0.3	No odors / No staining
RIGP3	3	8-10	Soil	5.9	0.3	No odors / No staining
RIGP3	3	10-12	Soil	5.6	0.3	No odors / No staining
RIGP3	4	12-14	Soil	5.5	0.3	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface



ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Hamilton Hill II - Target Area 1 Site				PROJECT #: 16.6334		PAGE 2 OF 2
CLIENT: Hamilton Hill II Limited Partnership						DATE
LOCATION: 830 & 834 Albany Street, Schenectady, NY						COLLECTED: 7/19/2019
INSTRUMENT USED: MiniRae 3000 LAMP 10.6 eV						DATE
DATE INSTRUMENT CALIBRATED: 7/19/2019 BY: DA						ANALYZED: 7/19/2019
TEMPERATURE OF SOIL: ambient						ANALYST: DA
EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
RIGP3	4	14-16	Soil	5.5	0.3	No odors / No staining
RIGP4	1	0-2	Soil	5.1	0.0	No odors / No staining
RIGP4	1	2-4	Soil	1.5	0.0	No odors / No staining
RIGP4	2	4-6	Soil	2.6	0.0	No odors / No staining
RIGP4	2	6-8	Soil	4.3	0.0	No odors / No staining
RIGP4	3	8-10	Soil	4.1	0.0	No odors / No staining
RIGP4	3	10-12	Soil	3.1	0.0	No odors / No staining
RIGP4	4	12-14	Soil	4.3	0.0	No odors / No staining
RIGP4	4	14-16	Soil	3.1	0.0	No odors / No staining
RIGP5	1	0-2	Soil	3.7	0.0	No odors / No staining
RIGP5	1	2-4	Soil	7.4	0.0	No odors / No staining
RIGP5	2	4-6	Soil	7.2	0.0	No odors / No staining
RIGP5	2	6-8	Soil	7.3	0.0	No odors / No staining
RIGP5	3	8-10	Soil	3.8	0.0	No odors / No staining
RIGP5	3	10-12	Soil	4.1	0.0	No odors / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.

**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

*** represents feet below the ground surface

APPENDIX D
SUBSURFACE EXPLORATION LOGS

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW1
 ELEVATION: 339.31
 LATITUDE: 42.805877
 START DATE: 3/19/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936142
 FINISH DATE: 3/19/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	7	2	1	1	3	1.8	Brown SAND & SILT, trace gravel (Moist)	RIMW1-10-12
		2	2	1	2	1	3	1.8	Brown medium to coarse SAND, trace silt (Moist)	
		3	2	2	1	2	3	2.0	Brown coarse SAND, trace silt (Moist)	
		4	2	3	2	3	5	1.6	Similar	
		5	2	3	4	4	7	2.0	Similar	
10		6	2	3	3	2	6	1.7	Similar	
		7	2	3	3	2	6	1.2	Similar; Wet @ 13.0'	
		8	1	1	1	4	2	0.8	Similar	
15		9	5	5	5	5	10	2.0	Similar	
		10	2	1	2	2	3	2.0	Brown fine SAND, Some Silt (Wet)	
20									End of Boring @ 20.0' bgs	Monitoring well installed. See construction log for RIMW1.
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW2
 ELEVATION: 339.55
 LATITUDE: 42.806125
 START DATE: 3/20/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936146
 FINISH DATE: 3/21/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	3	7	3	4	10	1.8	FILL: Brown medium to coarse SAND, trace gravel, wood, concrete (Moist) +/-2.0'	RIMW2-10-12	
		2	3	1	2	3	3	1.8	Brown medium to coarse SAND, trace silt		
		3	2	3	2	2	5	1.4	Similar		
		4	4	3	4	3	7	1.6	Similar		
		5	2	1	2	2	3	1.8	Similar		
10		6	3	3	2	3	5	1.5	Similar		
		7	1	1	1	3	2	1.8	Similar; Wet		
		8	2	1	2	2	3	2.0	Brown fine SAND, some Silt (Wet)		
15		9	3	2	4	4	3	2.0	Similar		
		10	-	-	-	-	-	1.5	Brown fine SAND, some Silt, trace clay (Wet)		
20		End of Boring @ 20.0' bgs								Monitoring well installed. See construction log for RIMW2.	
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: RL

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW3
 ELEVATION: 337.3
 LATITUDE: 42.806055
 START DATE: 3/22/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935932
 FINISH DATE: 3/22/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	2	1	1	1	2	1	FILL: Brown fine to medium SAND, trace gravel, brick, asphalt (Moist)	RIMW3-8-10 RIMW3-10-12 Monitoring well installed. See construction log for RIMW3.	
		2	1	2	1	1	3	1.4	FILL: Similar		
		3	2	2	3	4	5	1.5	FILL: Brown fine to coarse SAND, trace silt, trace gravel (Moist)		
		4	6	6	5	3	11	1.4	FILL: Similar		
10		5	6	3	2	2	5	1.7	FILL: Brown medium to coarse SAND, trace silt, trace gravel, brick (Moist)		+/-10.0'
		6	2	1	1	2	2	1.8	Brown medium to coarse SAND, trace silt (Moist)		
15		7	3	2	3	4	5	2	Similar (Wet)		
									Brown fine SAND, some Silt (Wet)		
		8	5	2	2	3	4	2	Brown fine SAND & SILT (Wet)		
		9	3	3	4	7	7	2	Similar		
20									Brown SILT & CLAY (Wet)		
		10	5	5	5	9	10	2	Gray SILT & CLAY (Wet)		
									Brown medium to coarse SAND, trace silt (Wet)		
									End of Boring @ 20.0' bgs		
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLCDRILL RIG TYPE: CME-55 Truck MountMETHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL

DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY:

DA

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW3D
 ELEVATION: 337.56
 LATITUDE: 42.806065
 START DATE: 3/21/2019
 SHEET 1 OF 2

DATUM: MSL
 LONGITUDE: -73.935944
 FINISH DATE: 3/21/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	5	6	3	3	9	1.6	FILL: Dark Brown fine to coarse SAND, some Silt, Gravel (Moist)	
		2	3	4	4	2	8	0.7	FILL: Brown medium SAND, trace gravel, trace silt (Moist) Similar (Moist)	
		3	3	4	12	6	16	0.6	FILL: Brown medium SAND, trace silt, brick (Moist)	
		4	6	5	4	3	9	0.4	FILL: Brown medium to coarse SAND, trace silt, concrete (Moist)	
10		5	4	3	3	3	6	0.7	FILL: Brown medium to coarse SAND, trace brick, concrete (Moist)	
		6	2	3	2	3	5	0.1	FILL: Similar +/-12.0'	
15		7	4	2	3	3	5	1.0	Brown fine SAND, some Silt (Wet)	
		8	2	2	2	3	4	2.0	Brown fine to medium SAND, some Silt, trace clay (Wet)	
		9	2	3	3	6	6	2.0	Similar	
20		10	1	2	2	5	4	2.0	Gray fine SAND & SILT, little clay (Wet)	
		11	2	5	7	7	12	2.0	Brownish Gray medium SAND, little silt (Wet)	
25		12	2	3	5	6	8	2.0	Similar	
		13	6	10	15	13	25	2.0	Brown fine to medium SAND, Some Silt, trace gravel (Moist)	
		14	8	8	11	13	19	2.0	Brown fine to medium SAND, little silt (Wet)	
		15	5	6	5	6	11	2.0	Similar	
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY: DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW3D
 ELEVATION: 337.56
 LATITUDE: 42.806065
 START DATE: 3/21/2019
 SHEET 2 OF 2

DATUM: MSL
 LONGITUDE: -73.935944
 FINISH DATE: 3/21/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES																								
	TYPE	NO.	0/6	6/12	12/18	18/24	N																											
35		16	3	4	3	6	7	2	Brown fine to coarse SAND, trace silt (Wet)	RIMW3D-54-56																								
		17	6	11	8	13	19	2	Similar																									
40		18	3	6	9	12	15	2	Brown medium to coarse SAND, trace silt (Wet)																									
		19	6	8	11	11	19	2	Grayish Brown fine SAND, trace silt (Wet)																									
45		20	2	3	5	9	8	2	Gray fine to medium SAND, trace silt (Wet)																									
		21	3	4	5	6	9	2	Gray fine to medium SAND, little silt (Wet)																									
50		22	3	4	5	5	9	2	Similar																									
		23	6	8	10	7	18	2	Brown fine SAND, little silt (Wet)																									
55		24	5	9	11	12	20	2	Similar; trace gravel																									
		25	2	3	5	7	8	2	Grayish Brown fine SAND, Some Silt (Wet)																									
60		26	5	5	5	6	10	2	Similar; trace clay (Wet)																									
		27	3	5	5	6	10	2	Similar (Wet)																									
		28	5	6	8	11	14	2	Gray fine SAND, some Silt (Wet)																									
		29	4	6	6	6	12	2	Gray fine SAND & SILT (Wet)																									
End of Boring @ 58.0' bgs									MW installed. See construction log for RIMW3D.																									
N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u> DRILL RIG TYPE: <u>CME-55 Truck Mount</u> METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>											GROUNDWATER LEVEL <table border="1"> <thead> <tr> <th>DATE</th> <th>LEVEL</th> <th>CASING</th> <th>STABILIZATION TIME</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	DATE	LEVEL	CASING	STABILIZATION TIME																			
DATE	LEVEL	CASING	STABILIZATION TIME																															
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.										SAMPLE CLASSIFICATION BY: RL																								

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW4
 ELEVATION: 335.58
 LATITUDE: 42.806313
 START DATE: 3/22/2019
 SHEET 1 OF 1

DATUM: MSL
 -73.935847
 FINISH DATE: 3/22/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE TYPE	BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
		NO.	0/6	6/12	12/18	18/24	N			
5		1	2	3	3	2	6	1.0	FILL: Dark Brown medium SAND, some Silt, trace brick, concrete (Moist)	MW installed. See construction log for RIMW4.
		2	2	3	3	3	6	0.7	FILL: Similar	
		3	4	6	3	3	9	1.0	FILL: Similar; Some Brick	
		4	2	2	12	4	14	1.0	FILL: Similar	
10		5	4	4	3	3	7	0.2	Little/No Recovery	
		6	2	2	3	2	5	0.2	Little/No Recovery	
15		7	3	3	4	6	7	2.0	Brown coarse SAND, trace silt (Wet)	
									Brown SILT, some Clay (Wet)	
		8	3	3	2	2	5	2.0	Gray SILT & CLAY (Wet)	
		9	6	7	10	11	17	2.0	Brown medium SAND, little silt (Wet)	
20									End of Boring @ 18.0' bgs	
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW4D
 ELEVATION: 335.37
 LATITUDE: 42.806322
 START DATE: 3/25/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935832
 FINISH DATE: 3/25/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	2	2	2	9	4	1.0	FILL: Dark Brown medium SAND & SILT, trace gravel, brick, concrete (Moist)	RIMW4D-8-10
		2	1	5	9	3	14	1.1	FILL: Brown fine to medium SAND, trace gravel, concrete (Moist) +/-4.0'	
	3	6	3	2	1	5	1.2	Brown medium to coarse SAND, trace silt (Moist)		
	4	4	4	3	3	7	0.0	No Recovery		
10		5	6	3	1	1	4	1.4	Brown medium to coarse SAND, trace silt (Moist)	
		6	2	1	2	2	3	2	Similar; Wet @ 10.0' Brown fine SAND, trace silt (Wet)	
		7	3	5	4	4	9	1.5	Brown SILT, little clay, trace fine sand (Wet)	
		8	1	2	4	6	6	1.7	Gray SILT, Some Clay, little fine sand (Wet)	
		9	5	4	6	6	10	2.0	Brown fine to medium SAND, little silt (Wet)	
		10	3	6	8	12	14	2.0	Brown fine to medium SAND, trace silt (Wet)	
20		11	4	5	9	10	14	2.0	Brown fine SAND, little silt (Wet)	
		12	5	7	7	9	14	2.0	Similar	
		13	4	7	8	9	15	2.0	Similar	
		14	6	9	10	11	19	2.0	Brown fine to medium SAND, little silt (Wet)	
25		15	4	6	8	8	14	2.0	Similar	
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY: DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW4D
 ELEVATION: 335.37
 LATITUDE: 42.806322
 START DATE: 3/25/2019
 SHEET 2 OF 2

DATUM: MSL
 LONGITUDE: -73.935832
 FINISH DATE: 3/25/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: D. Achtyl

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
35		16	3	5	6	6	11	2.0	Brown fine SAND, little silt (Wet)	RIMW4D-50-52	
		17	6	7	7	11	14	2.0	Grayish Brown fine to medium SAND, trace silt, trace gravel (Wet)		
		18	5	7	7	8	14	2.0	Gray fine to medium SAND, trace silt (Wet)		
		19	5	4	6	9	10	2.0	Similar		
40									Gray fine SAND, little silt (Wet)		
		20	3	8	3	8	11	2.0	Gray fine to medium SAND, little silt (Wet) +/-39.0'		
									Gray fine SAND & SILT		
		21	2	5	5	6	8	2.0	Similar +/-42.0'		
45		22	5	4	7	11	11	1.8	Gray fine SAND, Some Silt, trace clay (Wet)		
		23	8	10	4	6	14	2.0	Similar		
		24	4	8	8	7	16	2.0	Similar		
50											
		25	3	5	8	8	13	2.0	Similar		
		26	5	5	5	5	10	2.0	Gray fine SAND, Some Silt (Wet)		
		27	4	5	5	9	10	2.0	Gray fine SAND, Some Silt, little clay (Wet)		
55									End of Boring @ 54' bgs	MW installed. See construction log for RIMW4D.	
60											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: **RL**

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW5
 ELEVATION: 337.62
 LATITUDE: 42.805823
 START DATE: 3/12/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935542
 FINISH DATE: 3/12/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: RL, BW

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	10	15	7	11	22	2	FILL: Brown fine to medium SAND & SILT, trace gravel, brick, ash, asphalt (Moist) +/-2.0'	RIMW5-12-14 + FD
		2	5	3	3	3	6	1.4	Brown fine to coarse SAND, trace silt, trace fine gravel (Moist)	
		3	-	-	-	-	-	1.5	Similar	
		4	3	2	3	3	5	1.1	Similar	
10		5	2	3	4	3	7	1.4	Brown coarse SAND, trace gravel (Moist)	
		6	3	2	2	2	4	1.4	Similar	
		7	2	3	3	4	6	1.8	Similar; Wet @ 13.8'	
15		8	3	6	6	6	12	1.4	Brown coarse SAND (Wet)	
		9	5	4	5	4	9	2.0	Similar	
20		10	3	4	3	4	7	1.7	Brown fine SAND & SILT (Wet)	
									Brown fine SAND & SILT, some Clay (Wet)	
25									End of Boring @ 20.0' bgs	MW installed. See construction log for RIMW5.
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLCDRILL RIG TYPE: CME-55 Truck MountMETHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL

DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY:

RL

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW6
 ELEVATION: 336.06
 LATITUDE: 42.805938
 START DATE: 3/12/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935385
 FINISH DATE: 3/12/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: B. Winslow

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	15	37	17	9	54	1.7	FILL: Brown fine to medium SAND & SILT, trace brick, ash, coal and gravel (Moist)	RIMW6-12-14
		2	3	7	12	6	19	0.5	FILL: Brown fine to medium SAND, trace brick and gravel (Moist)	
		3	6	9	3	3	12	0.5	FILL: Gray ROCK FRAGMENTS, trace brown fine sand	
		4	6	3	2	14	5	0.3	FILL: ASPHALT, Some Brick and Concrete	
10		5	3	2	2	3	4	1.6	FILL: Brown fine to coarse SAND, Some Silt (Moist)	
		6	5	3	3	6	6	0.4	FILL: Gray ROCK FRAGMENTS, trace brown medium to coarse sand +/-12.0'	
15		7	5	6	4	6	10	1.4	Brown fine to coarse SAND (Moist)	
		8	3	3	2	2	5	1.9	Brown fine SAND & SILT; grades trace clay (Wet)	
		9	2	3	5	5	8	2.0	Brown fine SAND & SILT, trace clay (Wet)	
20		10	3	3	2	3	5	2.0	Gray CLAY & SILT	
		End of Boring @ 20.0' bgs								
25										MW installed. See construction log for RIMW6.
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY: BW			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RIMW6D
 ELEVATION: 336.07
 LATITUDE: 42.805969
 START DATE: 3/14/2019
 SHEET 1 OF 2

DATUM: MSL
 LONGITUDE: -73.935425
 FINISH DATE: 3/14/2019

PROJECT: Hamilton Hill - Target Area 1 Site

CTM PROJECT NO.: 16.6334

LOCATION: 830 & 834 Albany Street

CTM OBSERVER: RL, DA

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	22	13	6	6	19	1.7	FILL: Brown fine to medium SAND & SILT, trace brick, gravel, ash and asphalt (Moist)	
		2	6	7	5	4	12	1.0	FILL: Similar	
		3	9	5	2	4	7	0.5	FILL: Similar	
		4	1	7	4	3	11	0.3	FILL: Similar	
10		5	31	14	5	5	19	1.2	FILL: Similar +/-9.0'	
		6	3	2	2	3	4	1.2	Brown fine to medium SAND & SILT (Moist) Brown medium to coarse SAND (Moist)	
15		7	3	2	3	3	5	1.4	Similar Brown fine SAND & SILT (Wet @ ~ 13.0')	
		8	2	2	2	4	4	2.0	Similar	
		9	4	2	2	4	4	1.9	Brown fine SAND & SILT, trace clay (Wet) +/-18.0'	
20		10	3	2	5	5	7	1.8	Gray SILT & CLAY, some Sand (Wet) +/-20.0'	
		11	2	1	3	3	4	2.0	Gray medium SAND, some Silt (Wet)	
25		12	3	6	8	10	14	2.0	Gray fine SAND, some Silt (Wet)	
		13	6	7	6	9	13	2.0	Brown medium to fine SAND, little silt (Wet)	
		14	6	6	6	4	12	2.0	Similar	
30		15	3	4	5	8	9	2.0	Brown fine to medium SAND, some Silt, trace gravel (Wet)	

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: RL

BORING NO.:	RIMW6D		
ELEVATION:	336.07	DATUM:	MSL
LATITUDE:	42.805969	LONGITUDE:	-73.935425
START DATE:	3/14/2019	FINISH DATE:	3/14/2019
SHEET 2 OF 2			

CTM PROJECT NO.: 16.6334

CTM OBSERVER: RL, DA

Rev. 6/2016

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB1
 ELEVATION: 339.65
 LATITUDE: 42.806018
 START DATE: 3/18/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936346
 FINISH DATE: 3/18/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: RL

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	6	10	3	2	13	1.5	FILL: Brown fine to medium SAND & SILT, trace gravel, coal and wood (Moist) +/-2.0'	RISB1-2-4 RISB1-4-6 RISB1-6-8 RISB1-10-12
		2	1	2	1	2	3	1.3	Brown medium to coarse SAND, trace gravel (Moist)	
		3	2	2	2	2	4	1.4	Similar	
		4	3	3	3	4	6	1.7	Similar	
		5	6	3	2	2	5	1.9	Similar	
		6	3	2	3	2	5	1.5	Similar	
		7	1	1	1	1	2	1.4	Similar; wet @ 13.0'	
15									End of Boring @ 14.0' bgs	
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

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GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: RL

BORING NO.:	RISB2
ELEVATION:	339.99
LATITUDE:	42.806157
START DATE:	1/8/1900
SHEET 1 OF 1	

DATUM: MSL
LONGITUDE: -73.93623
FINISH DATE: 3/19/2019

CTM PROJECT NO.: 16.6334

CTM OBSERVER: DA, KC

Rev. 6/2016

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB3
 ELEVATION: 337.12
 LATITUDE: 42.806209
 START DATE: 3/19/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936062
 FINISH DATE: 3/19/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	2	2	4	2	6	1.8	Dark Brown fine to medium SAND & SILT (Moist)	RISB3-2-4 RISB3-4-6 RISB3-6-8
		2	3	2	2	2	4	1.5	Brown medium to coarse SAND, trace silt (Moist)	
		3	6	3	2	2	5	1.7	Brown coarse SAND, trace silt, gravel (Moist)	
		4	3	3	4	3	7	1.3	Similar	
10								End of Boring @ 8.0' bgs		
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: DA, KC

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB4
 ELEVATION: 335.74
 LATITUDE: 42.806294
 START DATE: 3/19/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935945
 FINISH DATE: 3/19/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	3	2	3	2	5	2.0	FILL: Brown fine to coarse SAND & SILT, trace brick, wood	RISB4-2-4 RISB4-4-6 RISB4-6-8
		2	3	7	7	9	14	2.0	FILL: Light Brown medium to coarse SAND, trace silt (Moist) FILL: Brown medium to coarse SAND, trace brick, trace silt (Moist)	
		3	3	3	3	4	6	2.0	Brown medium to coarse SAND, trace silt, trace gravel (Moist)	
		4	3	3	3	4	6	2.0	Brown coarse SAND, trace silt (Moist)	
10								End of Boring @ 8.0' bgs		
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY: DA, KC			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB5
 ELEVATION: 339.22
 LATITUDE: 42.805911
 START DATE: 3/18/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936219
 FINISH DATE: 3/18/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: RL

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	5	2	1	1	3	1.7	FILL: Brown fine to medium SAND & SILT, trace gravel, coal and wood (Moist) +/-2.0'	RISB5-2-4 RISB5-4-6 RISB5-6-8
		2	1	1	1	2	2	1.4	Brown medium to coarse SAND (Moist)	
		3	2	2	3	3	5	1.0	Similar	
		4	2	2	2	3	4	1.4	Similar	
10									End of Boring @ 8.0' bgs	
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: RL

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB6
 ELEVATION: 339.33
 LATITUDE: 42.806047
 START DATE: 3/20/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936099
 FINISH DATE: 3/20/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	4	7	9	5	16	1.7	FILL: Dark Brown to Black coarse SAND & GRAVEL, Some Silt, Coal, Asphalt (Moist) +/-2.0'	RISB6-2-4 RISB6-4-6 RISB6-6-8
		2	7	3	3	3	6	1.9	Brown medium to coarse SAND, trace silt (Moist)	
		3	3	3	3	3	6	1.5	Similar	
		4	3	2	3	3	5	1.9	Similar	
10									End of Boring @ 8.0' bgs	
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY: KC, DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB7
 ELEVATION: 337.79
 LATITUDE: 42.80608
 START DATE: 3/19/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935963
 FINISH DATE: 3/19/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	7	10	2	2	12	2	FILL: Brown fine to coarse SAND, trace silt, trace gravel, brick (Moist)	RISB7-2-4 RISB7-4-6 +/-6.0' RISB7-6-8	
		2	10	8	14	14	22	1.5	FILL: Brown fine to coarse SAND, little gravel/rock (Moist)		
		3	4	7	10	4	17	1.6	FILL: Brown fine to coarse SAND, trace brick (Moist)		
		4	3	2	2	3	4	2	Brown medium to coarse SAND, trace silt (Moist)		
10									End of Boring @ 8.0' bgs		
15											
20											
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: DA

BORING NO.:	RISB8	DATUM:	MSL
ELEVATION:	340.15	LONGITUDE:	-73.936249
LATITUDE:	42.805813	FINISH DATE:	3/15/2019
START DATE:	3/15/2019		
SHEET 1 OF 1			

CTM PROJECT NO.: 16.6334

CTM OBSERVER: RL, DA

Rev. 6/2016

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB9
 ELEVATION: 337.75
 LATITUDE: 42.80608
 START DATE: 3/19/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935963
 FINISH DATE: 3/19/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	7	11	7	13	18	1.7	FILL: Brown coarse SAND, some Silt, brick (Moist)	Asphalt at surface.	
		2	8	7	7	4	11	1.5	FILL: Brown medium to coarse SAND, trace silt, brick (Moist)	RISB9-2-4	
		3	13	10	4	4	14	1.4	Brown medium to coarse SAND, trace silt (Moist)	RISB9-4-6	
		4	3	3	3	3	6	1.2	Similar	RISB9-6-8	
10									End of Boring @ 8.0' bgs		
15											
20											
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB10
 ELEVATION: 339.65
 LATITUDE: 42.806018
 START DATE: 3/20/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936346
 FINISH DATE: 3/20/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES	
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	2	9	7	7	16	1.5	FILL: Dark Brown to Black coarse SAND & GRAVEL, Some Silt, asphalt, wood chips (Moist)	RISB10-2-4 RISB10-4-6 RISB10-6-8 RISB10-10-12	
		2	7	5	3	12	8	0.9	FILL: Similar		
		3	16	13	11	8	24	0.5	FILL: Similar		
10		4	3	3	3	2	6	1.5	Brown medium to coarse SAND, trace silt (Moist)		
		5	5	3	3	2	6	0.2	Similar		
		6	3	3	2	1	5	1.8	Similar		
15									End of Boring @ 12.0' bgs		
20											
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY: KC, DA			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB11
 ELEVATION: 338.78
 LATITUDE: 42.80569
 START DATE: 3/15/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936075
 FINISH DATE: 3/15/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: RL, DA

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	15	25	9	5	34	1.8	FILL: Brown fine to medium SAND & SILT, trace gravel, brick, asphalt, concrete (Moist) FILL: Similar +/-5.0'	RISB11-2-4
		2	5	3	1	3	4	0.9		
		3	21	10	5	23	15	0.2	FILL: CONCRETE +/-10.0'	
		4	42	18	5	3	23	0.5		
		5	5	4	3	3	7	0.3		
10		6	10	5	3	2	8	1.3	Brown fine to medium SAND (Moist)	RISB11-10-12
15									End of Boring @ 12.0' bgs	
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: RL

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB12
 ELEVATION: 335.87
 LATITUDE: 42.806259
 START DATE: 3/19/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935876
 FINISH DATE: 3/19/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	1	3	2	3	5	1.6	FILL: Dark Brown fine to coarse SAND & SILT, trace brick, ash, gravel (Moist)	RISB12-2-4 RISB12-4-6 +/-6.0' RISB12-6-8
		2	2	4	4	7	8	1.5	FILL: Brown fine to coarse SAND, little silt, trace brick (Moist)	
		3	4	4	4	7	8	1.5	FILL: Brown fine to coarse SAND, trace brick, ash (Moist)	
		4	7	4	8	7	12	1.5	Brown medium to coarse SAND, trace silt (Moist)	
10									End of Boring @ 8.0' bgs	
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				RL			

BORING NO.:	RISB13		
ELEVATION:	337.03	DATUM:	MSL
LATITUDE:	42.806169	LONGITUDE:	-73.935947
START DATE:	3/20/2019	FINISH DATE:	3/20/2019
SHEET	1 OF 1		

CTM PROJECT NO.: 16.6334

CTM OBSERVER: DA, KC

RISB13-10-12

METHOD OF INVESTIGATION: 2" Split-Spoon

GROUNDWATER LEVEL

DATE	LEVEL	CASING	STABILIZATION TIME

KC, DA

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISB14
 ELEVATION: 336.46
 LATITUDE: 42.806047
 START DATE: 3/20/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935874
 FINISH DATE: 3/20/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES	
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	3	2	9	7	11	1.9	FILL: Brown medium to coarse SAND & SILT, trace gravel, concrete (Moist)	RISB14-9-11	
		2	10	13	7	7	20	1.2	FILL: Similar		
		3	3	5	3	5	8	1.9	FILL: Similar		+/-6.0'
		4	3	3	3	2	6	1.1	Brown medium to coarse SAND, trace gravel (Moist) Similar		
10		5	18	6	1	2	7	2.0	Similar		
		6	4	4	2	4	6	0.3	Brown medium to coarse SAND (Wet) Similar		
15									End of Boring @ 13.0' bgs		
20											
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				DA, KC			

BORING NO.:	RISB15		
ELEVATION:	336.93	DATUM:	MSL
LATITUDE:	42.805843	LONGITUDE:	-73.935576
START DATE:	3/12/2019	FINISH DATE:	3/12/2019
SHEET 1 OF 1			

CTM PROJECT NO.: 16.6334

CTM OBSERVER: B. Winslow

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW					GROUNDWATER LEVEL			
DRILLING CONTRACTOR: NYEG Drilling, LLC					DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: CME-55 Truck Mount								
METHOD OF INVESTIGATION: 2" Split-Spoon								
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.								
					SAMPLE CLASSIFICATION BY:			
					BW			

C.T. MALE ASSOCIATES

TEST BORING LOG



BORING NO.: RISB16
 ELEVATION: 335.69
 LATITUDE: 42.805938
 START DATE: 3/13/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935463
 FINISH DATE: 3/13/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: R. Lewandowski

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	21	19	11	6	30	2	FILL: Brown fine to medium SAND & SILT, trace gravel, ash, asphalt and brick (Moist)	RISB16-6-8	
		2	4	4	1	3	5	0.8	FILL: Similar		
		3	1	2	1	1	3	1.2	FILL: Similar; trace insulation		
		4	20	3	2	2	5	1.4	FILL: Similar; Some Concrete +/-7.0'		
10									Brown medium to coarse SAND (Moist)		
									End of Boring @ 8.0' bgs		
15											
20											
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				RL			

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISV1
 ELEVATION: 336.28
 LATITUDE: 42.806259
 START DATE: 3/20/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935915
 FINISH DATE: 3/20/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: KC, DA

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	2	4	5	5	9	1.3	FILL: Brown fine to medium SAND & SILT, trace gravel, concrete, brick (Moist)	Vapor Point installed. See RISV1 construction log for details.
		2	5	5	6	3	11	1.3	FILL: Brown medium to coarse SAND & SILT, trace gravel, brick, concrete (Moist) +/-4.0'	
		3	5	6	3	5	9	0.6	Brown medium to coarse SAND & SILT (Moist)	
		4	5	5	4	3	9	0.2	Similar	
10									End of Boring @ 8.0' bgs	
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: KC, DA

BORING NO.:	RISV32	DATUM:	MSL
ELEVATION:	338.84	LONGITUDE:	-73.936082
LATITUDE:	42.805839	FINISH DATE:	3/19/2019
START DATE:	3/19/2019		
SHEET	1 OF 1		

CTM PROJECT NO.: 16.6334

CTM OBSERVER: DA, KC

[illegible]

METHOD OF INVESTIGATION: 2" Split-Spoon

GROUNDWATER LEVEL

DATE	LEVEL	CASING	STABILIZATION TIME

DA, KC

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISV3
 ELEVATION: 340.29
 LATITUDE: 42.805757
 START DATE: 3/15/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936236
 FINISH DATE: 3/15/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: RL, DA

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	29	23	15	9	38	1.3	FILL: Brown fine to medium SAND & SILT, trace gravel, brick, asphalt, ash and concrete (Moist)	
		2	3	5	3	2	8	1.4	FILL: Similar; trace coal	
		3	3	2	3	4	7	1.1	Brown medium SAND (Moist) Similar	
10									End of Boring @ 7.0' bgs	Auger from 6-7', no sample.
15									End of Boring @ 7.0' bgs	Auger from 6-7', no sample.
20									End of Boring @ 7.0' bgs	Auger from 6-7', no sample.
25									End of Boring @ 7.0' bgs	Auger from 6-7', no sample.
30									End of Boring @ 7.0' bgs	Auger from 6-7', no sample.

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLCDRILL RIG TYPE: CME-55 Truck MountMETHOD OF INVESTIGATION: 2" Split-Spoon

GROUNDWATER LEVEL

DATE	LEVEL	CASING	STABILIZATION TIME

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:

RL

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISV4
 ELEVATION: 338.99
 LATITUDE: 42.806051
 START DATE: 3/18/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936393
 FINISH DATE: 3/18/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: RL

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	8	2	1	2	3	1.7	FILL: Brown fine to medium SAND & SILT, trace concrete, wood, coal and gravel (Moist)	
		2	1	1	1	2	2	1.8	Brown medium to coarse SAND (Moist)	
		3	2	2	2	3	4	1.9	Similar	
		4	3	3	3	3	6	2	Similar	
10									End of Boring @ 8.0' bgs	
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: RL

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISV5
 ELEVATION: 337.73
 LATITUDE: 42.806247
 START DATE: 3/20/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.936088
 FINISH DATE: 3/20/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: DA, KC

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	2	3	3	4	6	1.8	FILL: Brown fine to medium SAND & SILT, trace coal and gravel (Moist) +/-1.0'	
		2	2	2	3	3	5	1.7	Brown medium to coarse SAND, trace silt (Moist)	
		3	2	2	3	2	5	1.8	Similar	
		4	2	2	2	3	4	2	Similar	
10									End of Boring @ 8.0' bgs	Vapor Point installed. See RISV5 construction log for details.
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW				GROUNDWATER LEVEL			
DRILLING CONTRACTOR: <u>NYEG Drilling, LLC</u>				DATE	LEVEL	CASING	STABILIZATION TIME
DRILL RIG TYPE: <u>CME-55 Truck Mount</u>							
METHOD OF INVESTIGATION: <u>2" Split-Spoon</u>							
THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.				SAMPLE CLASSIFICATION BY:			
				DA, KC			



BORING NO.:	RISV6		
ELEVATION:	335.48	DATUM:	MSL
LATITUDE:	42.806367	LONGITUDE:	-73.935939
START DATE:	3/20/2019	FINISH DATE:	3/20/2019
SHEET	1 OF 1		

CTM PROJECT NO.: 16.6334

CTM OBSERVER: DA, KC

Vapor Point installed. See RISV6 construction log for details.

METHOD OF INVESTIGATION: 2" Split-Spoon

GROUNDWATER LEVEL

DATE	LEVEL	CASING	STABILIZATION TIME

DA, KC

C.T. MALE ASSOCIATES



TEST BORING LOG

BORING NO.: RISV7
 ELEVATION: 336.14
 LATITUDE: 42.805906
 START DATE: 3/13/2019
 SHEET 1 OF 1

DATUM: MSL
 LONGITUDE: -73.935448
 FINISH DATE: 3/13/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: B. Winslow

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER					RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N			
5		1	56	24	14	10	38	1.5	FILL: Brown fine to medium SAND & SILT, trace brick, ash asphalt, gravel and concrete (Moist)	Soil Vapor Point installed. See SV construction log for RISV7.
		2	5	3	2	3	5	0.2	FILL: BRICK, trace fine sand (Moist)	
		3	3	2	1	1	3	1	FILL: Brown fine to medium SAND & SILT, trace brick, asphalt, ash, gravel and concrete (Moist)	
		4	5	2	1	2	3	1.4	FILL: Similar +/-7.0'	
10									Brown medium SAND (Moist)	
15										
20										
25										
30										

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

GROUNDWATER LEVEL			
DATE	LEVEL	CASING	STABILIZATION TIME

SAMPLE CLASSIFICATION BY: **BW**

C.T. MALE ASSOCIATES

TEST BORING LOG



BORING NO.: RISV7 - removed
 ELEVATION:
 LATITUDE:
 START DATE: 3/13/2019
 SHEET 1 OF 1

DATUM:
 LONGITUDE:
 FINISH DATE: 3/13/2019

PROJECT: Hamilton Hill - Target Area 1 SiteCTM PROJECT NO.: 16.6334LOCATION: 830 & 834 Albany StreetCTM OBSERVER: B. Winslow

DEPTH (FT.)	SAMPLE		BLOWS ON SAMPLER						RECOVERY	SAMPLE CLASSIFICATION	NOTES
	TYPE	NO.	0/6	6/12	12/18	18/24	N				
5		1	13	25	13	11	38	1.7	FILL: Brown fine to medium SAND & SILT, trace brick, ash asphalt, gravel (Moist)	Point removed due to void. Moved 10 ft south and redrilled.	
		2	31	7	3	3	10	0.5	FILL: Similar		
		3	3	1	2	4	3	0.6	FILL: Similar		
		4	9	6	2	2	8	1.4	FILL: Similar; trace metal		
10									Brown fine to medium SAND (Moist)		
									End of Boring @ 8.0' bgs		
15											
20											
25											
30											

N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW

DRILLING CONTRACTOR: NYEG Drilling, LLC

DRILL RIG TYPE: CME-55 Truck Mount

METHOD OF INVESTIGATION: 2" Split-Spoon

GROUNDWATER LEVEL

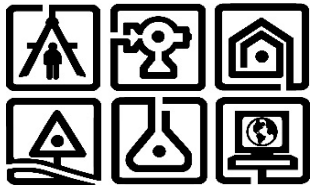
DATE	LEVEL	CASING	STABILIZATION TIME

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:

BW

C.T. MALE ASSOCIATES



DIRECT-PUSH EXPLORATION LOG

BORING NO.:	RIGP1	DATUM:	MSL
ELEV.:	336.47	FINISH DATE:	7/19/2019
START DATE:	7/19/2019		
SHEET	1 of 1		

PROJECT: Hamilton Hill - Target Area 1 Site

CTM PROJECT NO.: 16.6334

LOCATION: 830 & 834 Albany Street

CTM OBSERVER: D. Achtyl

DEPTH (FT)	SAMPLE			SAMPLE CLASSIFICATION	NOTES
	INTERVAL	NUMBER	RECOVERY (FT)		
2		1	2.4	FILL: Brown fine to medium SAND, little silt, trace brick and asphalt (moist)	
4					
6		2	2.6	Brown fine to medium SAND, little silt, trace gravel (moist)	
8					
10		3	2.0	Similar	
12				Similar (Wet)	
14		4	4.0	Grades to light brown fine SAND, Some Silt (Wet)	
16				Light brown SILT, Some Clay and fine Sand, trace gravel (Wet)	
					Monitoring well installed. See construction log for RIGP1.
					End of Boring at 16'

DRILLING CONTRACTOR: NYEG Drilling, LLC

DIRECT-PUSH TYPE: 7822DT Track Mounted Geoprobe

METHOD OF SAMPLING: 4' Macro-Core

GROUNDWATER LEVEL READINGS

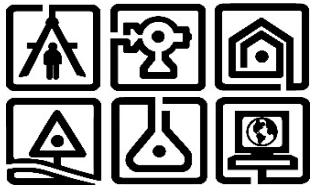
DATE	LEVEL	REFERENCE MEASURING POINT

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SAMPLE CLASSIFICATION BY:

DA

C.T. MALE ASSOCIATES



DIRECT-PUSH EXPLORATION LOG

BORING NO.:	RIGP2	DATUM:	MSL
ELEV.:	336.93	FINISH DATE:	7/19/2019
START DATE:	7/19/2019		
SHEET	1 of 1		

PROJECT: Hamilton Hill - Target Area 1 Site

CTM PROJECT NO.: 16.6334

LOCATION: 830 & 834 Albany Street

CTM OBSERVER: D. Achtyl

DEPTH (FT)	SAMPLE			SAMPLE CLASSIFICATION	NOTES
	INTERVAL	NUMBER	RECOVERY (FT)		
2		1	2.5	FILL: Brown fine to medium SAND, trace brick, gravel (moist)	
4					
6		2	2.0	Brown fine to medium SAND (moist)	
8					
10		3	2.0	Brown fine to coarse SAND, trace silt (moist)	
12				Similar (Wet)	
14		4	3.1		
16				Light brown fine SAND & SILT, trace gravel (wet)	
					Monitoring well installed. See construction log for RIGP2.
					End of Boring at 16'

DRILLING CONTRACTOR: NYEG Drilling, LLC

DIRECT-PUSH TYPE: 7822DT Track Mounted Geoprobe

METHOD OF SAMPLING: 4' Macro-Core

GROUNDWATER LEVEL READINGS

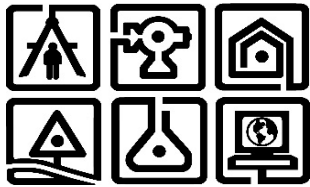
DATE	LEVEL	REFERENCE MEASURING POINT

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SAMPLE CLASSIFICATION BY:

DA

C.T. MALE ASSOCIATES



DIRECT-PUSH EXPLORATION LOG

BORING NO.: RIGP3
ELEV.: 336.66
START DATE: 7/19/2019
SHEET 1 of 1
DATUM: MSL
FINISH DATE: 7/19/2019

PROJECT: Hamilton Hill - Target Area 1 Site

CTM PROJECT NO.: 16.6334

LOCATION: 830 & 834 Albany Street

CTM OBSERVER: D. Achtyl

DEPTH (FT)	SAMPLE			SAMPLE CLASSIFICATION	NOTES
	INTERVAL	NUMBER	RECOVERY (FT)		
2		1	3.1	FILL: Brown fine to medium SAND, little silt, gravel (moist)	
4				FILL: Dark brown fine to medium SAND, Some Concrete & Brick (moist)	
6		2	2.5		
8				+/- 6.0'	
10				Brown fine to coarse SAND, trace silt (moist)	
12		3	4.0	Similar (wet)	Monitoring well installed. See construction log for RIGP3.
14		4	4.0		
16				Brown fine SAND & SILT, trace gravel (wet)	
					End of Boring at 16'

DRILLING CONTRACTOR: NYEG Drilling, LLC

DIRECT-PUSH TYPE: 7822DT Track Mounted Geoprobe

METHOD OF SAMPLING: 4' Macro-Core

GROUNDWATER LEVEL READINGS

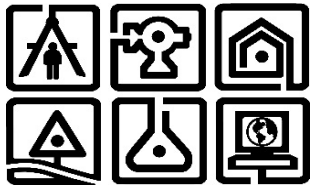
DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:

DA

C.T. MALE ASSOCIATES



DIRECT-PUSH EXPLORATION LOG

BORING NO.:	RIGP4	DATUM:	MSL
ELEV.:	336.04	FINISH DATE:	7/19/2019
START DATE:	7/19/2019		
SHEET	1 of 1		

PROJECT: Hamilton Hill - Target Area 1 Site

CTM PROJECT NO.: 16.6334

LOCATION: 830 & 834 Albany Street

CTM OBSERVER: D. Achtyl

DEPTH (FT)	SAMPLE			SAMPLE CLASSIFICATION	NOTES
	INTERVAL	NUMBER	RECOVERY (FT)		
2		1	3.1	ASPHALT FILL: Brown fine to medium SAND, trace silt (Moist) +/- 2.0'	
4		2	3.5	Similar	
6					
8		3	4.0	Similar	
10					
12		4	4.0	Similar (wet)	Monitoring well installed. See construction log for RIGP4. End of Boring at 16'
14					
16				Light brown fine SAND & SILT, trace gravel (wet)	

DRILLING CONTRACTOR: NYEG Drilling, LLC

DIRECT-PUSH TYPE: 7822DT Track Mounted Geoprobe

METHOD OF SAMPLING: 4' Macro-Core

GROUNDWATER LEVEL READINGS

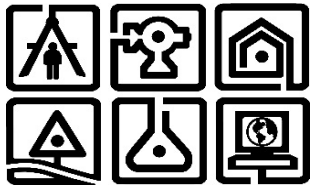
DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:

DA

C.T. MALE ASSOCIATES



DIRECT-PUSH EXPLORATION LOG

BORING NO.: RIGP5
ELEV.: 332.72
START DATE: 7/19/2019
SHEET 1 of 1
DATUM: MSL
FINISH DATE: 7/19/2019

PROJECT: Hamilton Hill - Target Area 1 Site

CTM PROJECT NO.: 16.6334

LOCATION: 830 & 834 Albany Street

CTM OBSERVER: D. Achtyl

DEPTH (FT)	SAMPLE			SAMPLE CLASSIFICATION	NOTES
	INTERVAL	NUMBER	RECOVERY (FT)		
2		1	3.6	Brown fine to coarse SAND, trace silt (Moist)	Monitoring well installed. See construction log for RIGP5. End of Boring at 12'
4		2	4.0	Brown fine to coarse SAND, little silt (Moist)	
6				Brown medium to coarse SAND, trace silt (Wet)	
8		3	4.0	Similar	
10				Brown fine SAND & SILT, trace gravel (Wet)	
12					
14					
16					

DRILLING CONTRACTOR: NYEG Drilling, LLC

DIRECT-PUSH TYPE: 7822DT Track Mounted Geoprobe

METHOD OF SAMPLING: 4' Macro-Core

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE EVALUATION. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T. MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:

DA

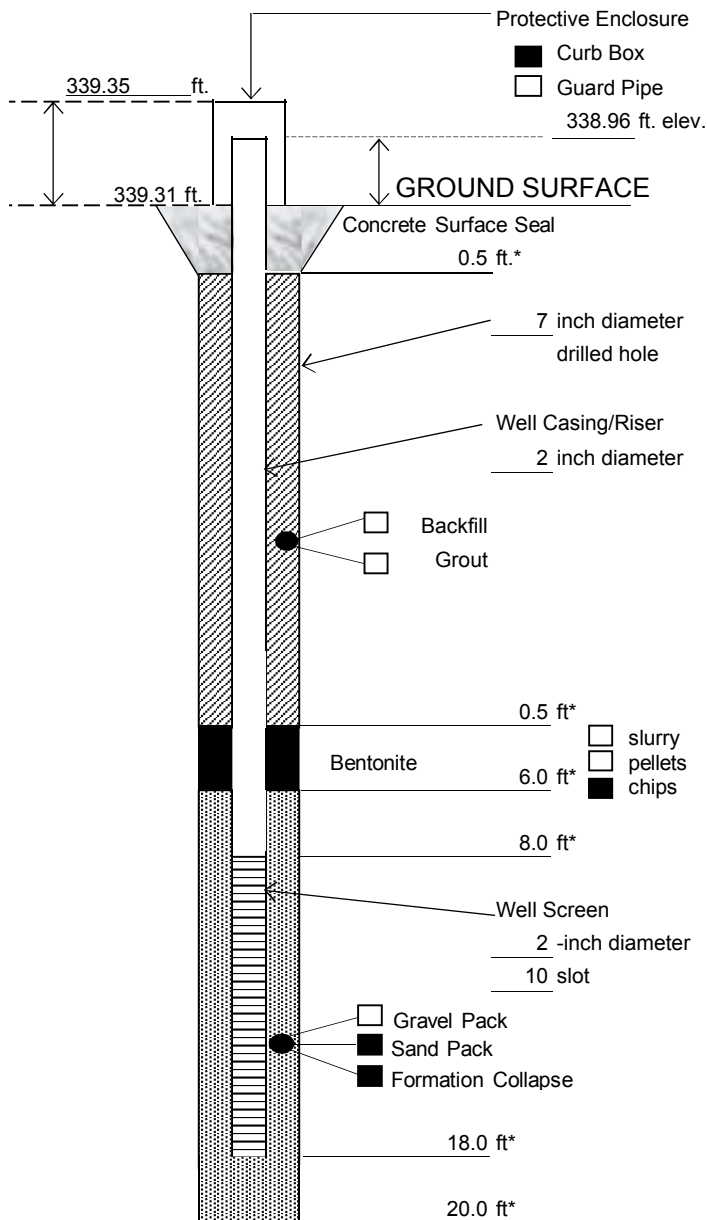
APPENDIX E
MONITORING WELL CONSTRUCTION LOGS



C.T. MALE ASSOCIATES

Well No. RIMW1

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW1 Boring No.: RIMW1

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/19/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 12.54 ft 4/9/19
Date

C.T. Male Observer: D. Achty

Materials Used:

5	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
2	Bags of Bentonite	(50 lb. bags)
	Brand: PDS	
10	ft. of PVC	well screen
8	ft. of PVC	well riser
2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Quikrete	

Grout Mixture:

-	Bags of Cement	(- lb. bags)
-	Lbs. of Bentonite	
-	Gallons of Water	
-	Grout Batches	

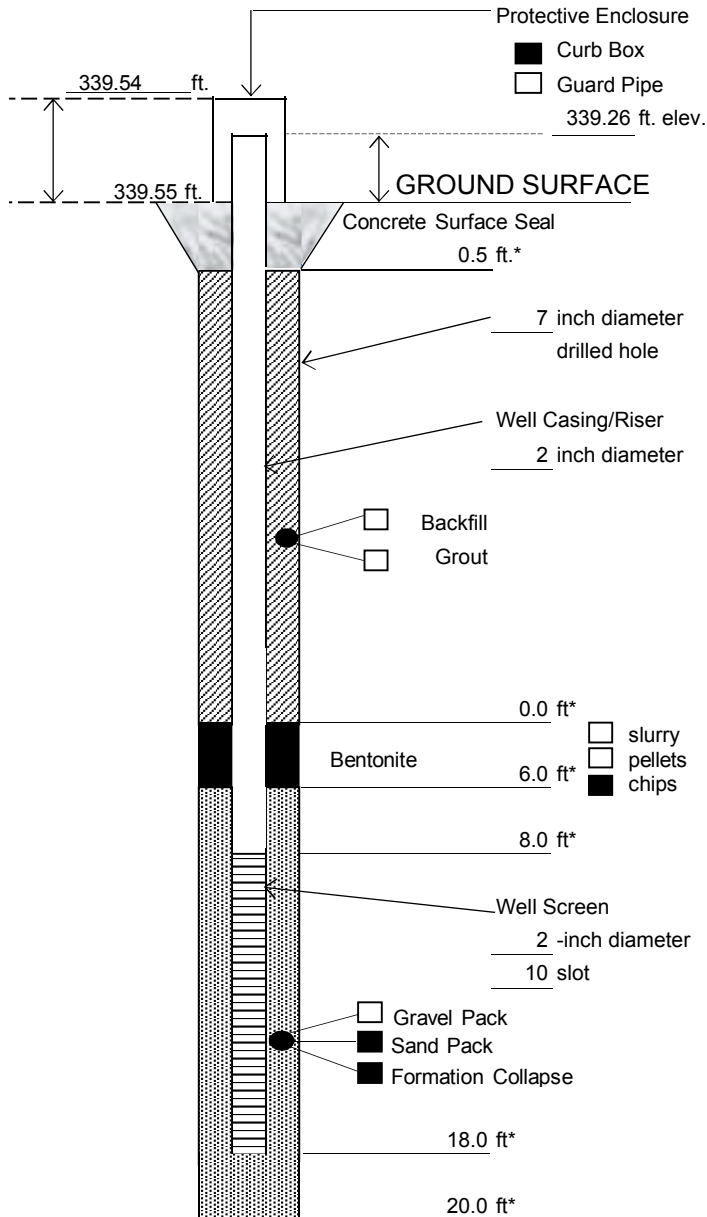
Notes:



C.T. MALE ASSOCIATES

Well No. RIMW2

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW2 Boring No.: RIMW2

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/21/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 11.94 ft 4/9/19
Date

C.T. Male Observer: D. Achtyl

Materials Used:

5.5	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
2	Bags of Bentonite	(50 lb. bags)
	Brand: PDS	
10	ft. of PVC	well screen
8	ft. of PVC	well riser
2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Quikrete	

Grout Mixture:

-	Bags of Cement	(- lb. bags)
-	Lbs. of Bentonite	
-	Gallons of Water	
-	Grout Batches	

Notes:

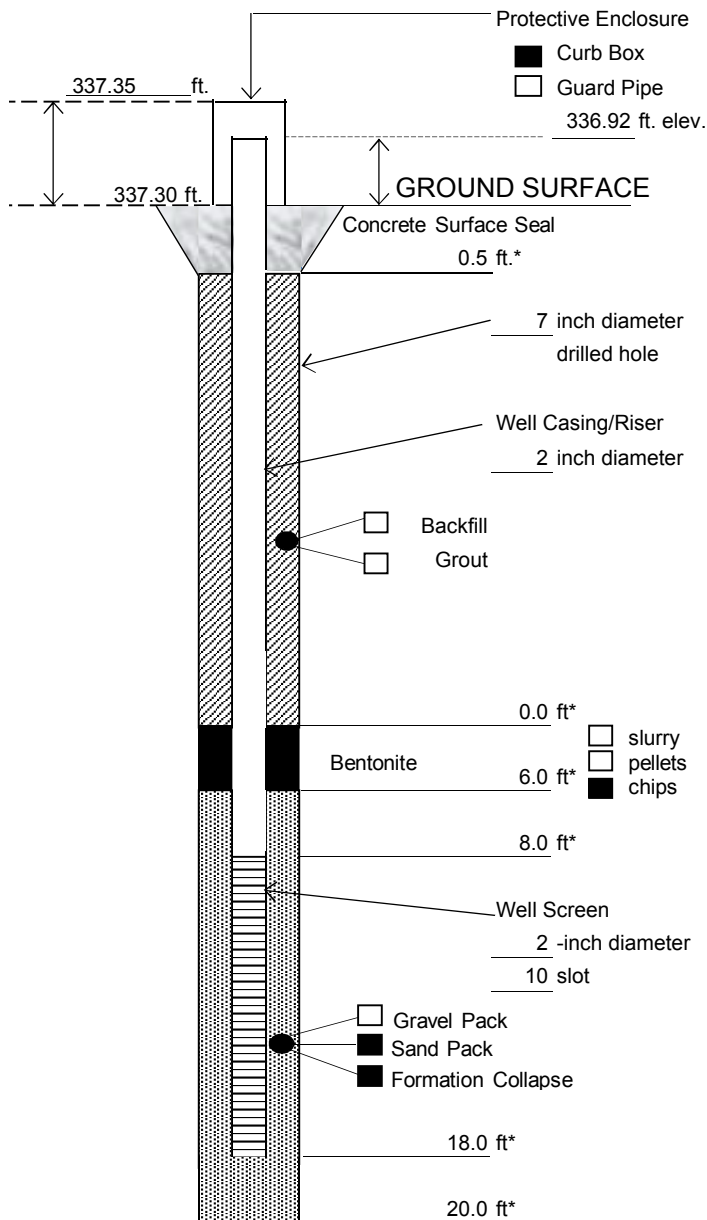
Curb box installed 3/15/19.



C.T. MALE ASSOCIATES

Well No. RIMW3

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW3 Boring No.: RIMW3

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/22/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 10.80 ft 4/9/19
Date

C.T. Male Observer: D. Achtyl

Materials Used:

6	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
2	Bags of Bentonite	(50 lb. bags)
	Brand: PDS	
10	ft. of PVC	well screen
8	ft. of PVC	well riser
2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Quikrete	

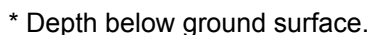
Grout Mixture:

-	Bags of Cement	(- lb. bags)
-	Lbs. of Bentonite	
-	Gallons of Water	
-	Grout Batches	

Notes:



MONITORING WELL CONSTRUCTION LOG

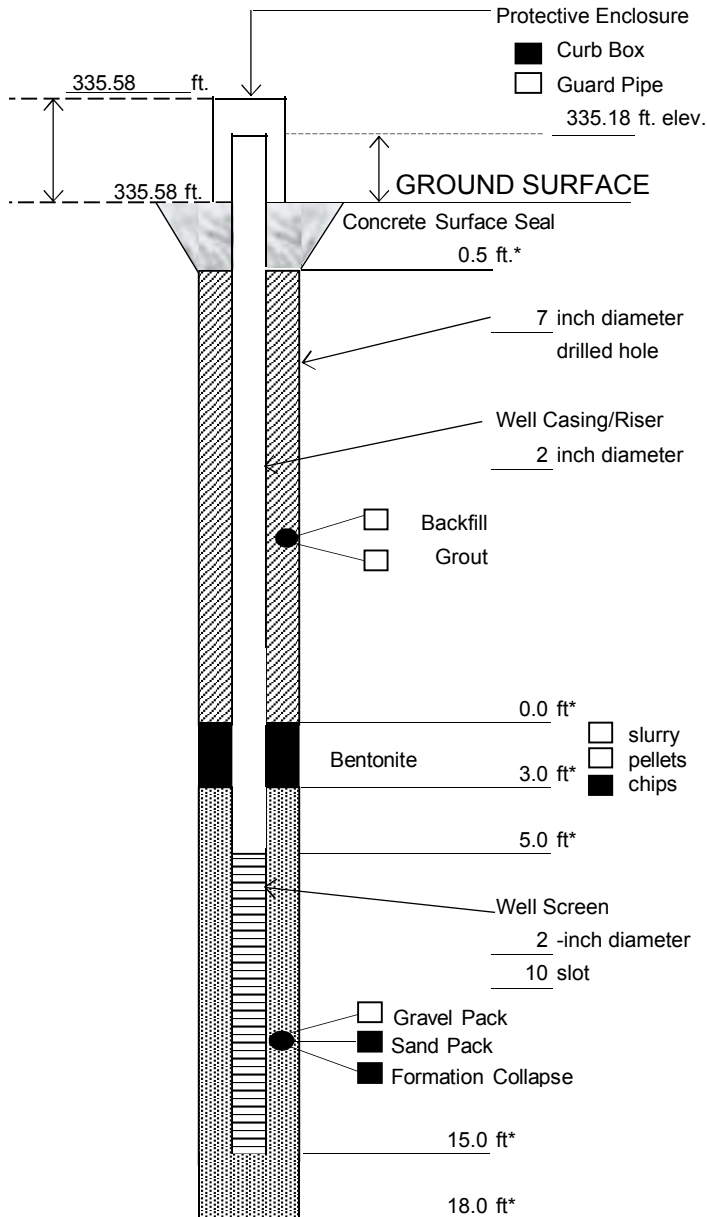




C.T. MALE ASSOCIATES

Well No. RIMW4

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW4 Boring No.: RIMW4

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/22/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 8.93 ft 4/9/19
Date

C.T. Male Observer: D. Achtyl

Materials Used:

5	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
2	Bags of Bentonite	(50 lb. bags)
	Brand: PDS	
10	ft. of PVC	well screen
5	ft. of PVC	well riser
2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Quikrete	

Grout Mixture:

-	Bags of Cement	(- lb. bags)
-	Lbs. of Bentonite	
-	Gallons of Water	
-	Grout Batches	

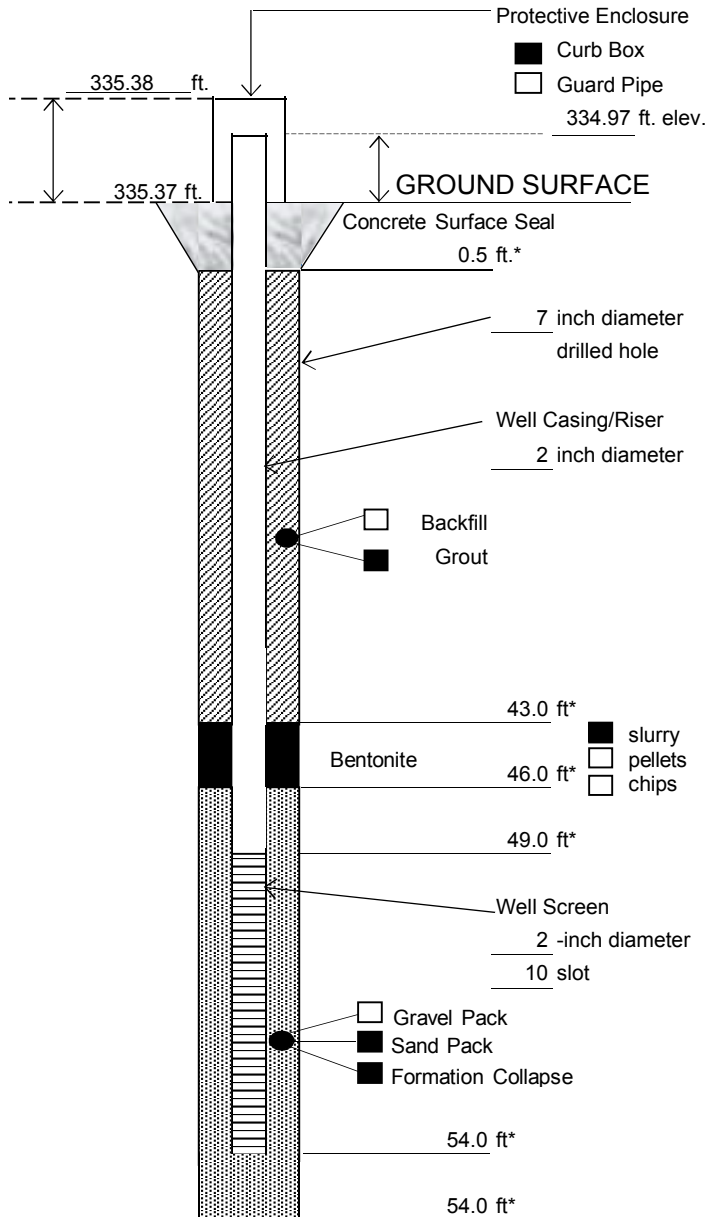
Notes:



C.T. MALE ASSOCIATES

Well No. RIMW4D

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW4D Boring No.: RIMW4D

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/25/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 29.36 ft 4/9/19
Date

C.T. Male Observer: D. Achtyl

Materials Used:

<u>5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.5</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco CS Granular</u>	
<u>5</u>	ft. of <u>PVC</u>	well screen
<u>49</u>	ft. of <u>PVC</u>	well riser
<u>2</u>	Bags of Cement/Concrete	(<u> </u> lb. bags)
	Brand: <u>Quickrete</u>	

Grout Mixture:

<u>1</u>	Bags of Cement	(<u>47</u> lb. bags)
<u>2.5</u>	Lbs. of Bentonite	
<u>4</u>	Gallons of Water	
<u>16</u>	Grout Batches	

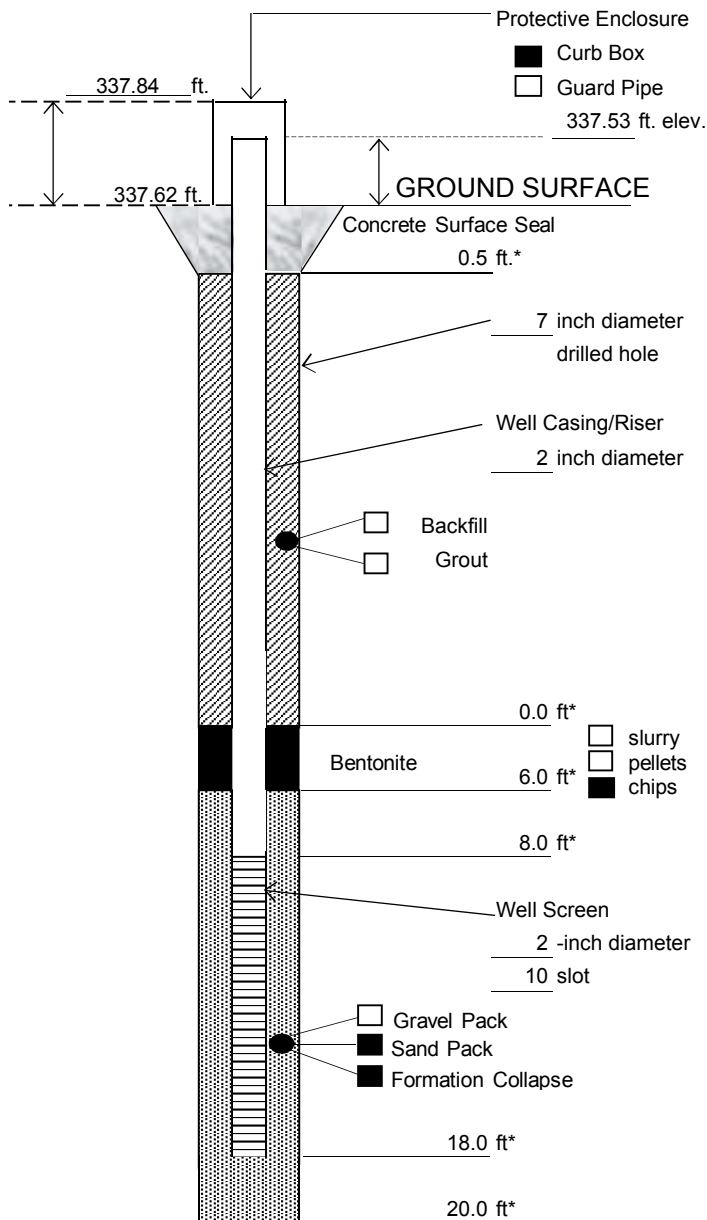
Notes:



C.T. MALE ASSOCIATES

Well No. RIMW5

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW5 Boring No.: RIMW5

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/12/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 12.89 ft 4/9/19
Date

C.T. Male Observer: B. Winslow

Materials Used:

6	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
2	Bags of Bentonite	(50 lb. bags)
	Brand: PDS	
10	ft. of PVC	well screen
8	ft. of PVC	well riser
2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Quikrete High Strength	

Grout Mixture:

-	Bags of Cement	(- lb. bags)
-	Lbs. of Bentonite	
-	Gallons of Water	
-	Grout Batches	

Notes:

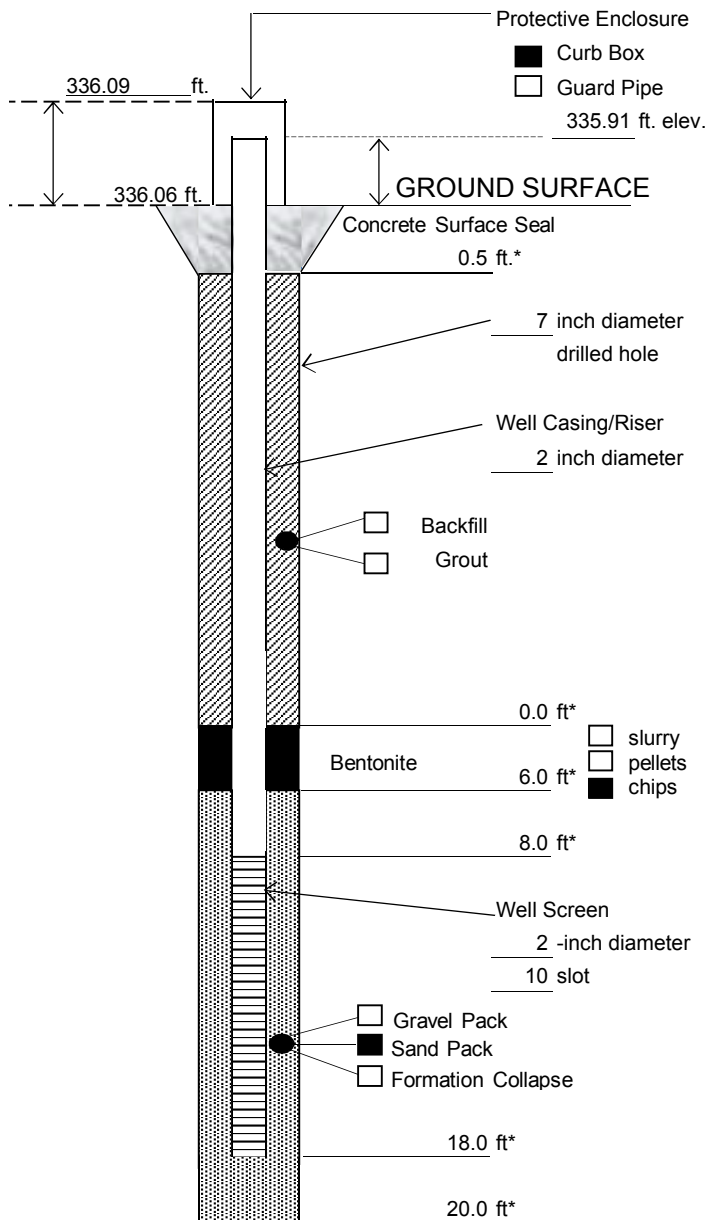
Curb box installed 3/15/19.



C.T. MALE ASSOCIATES

Well No. RIMW6

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW6 Boring No.: RIMW6

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/12/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 11.76 ft 4/9/19
Date

C.T. Male Observer: B. Winslow

Materials Used:

6	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
2	Bags of Bentonite	(50 lb. bags)
	Brand: PDS	
10	ft. of PVC	well screen
8	ft. of PVC	well riser
2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Quikrete	

Grout Mixture:

-	Bags of Cement	(- lb. bags)
-	Lbs. of Bentonite	
-	Gallons of Water	
-	Grout Batches	

Notes:

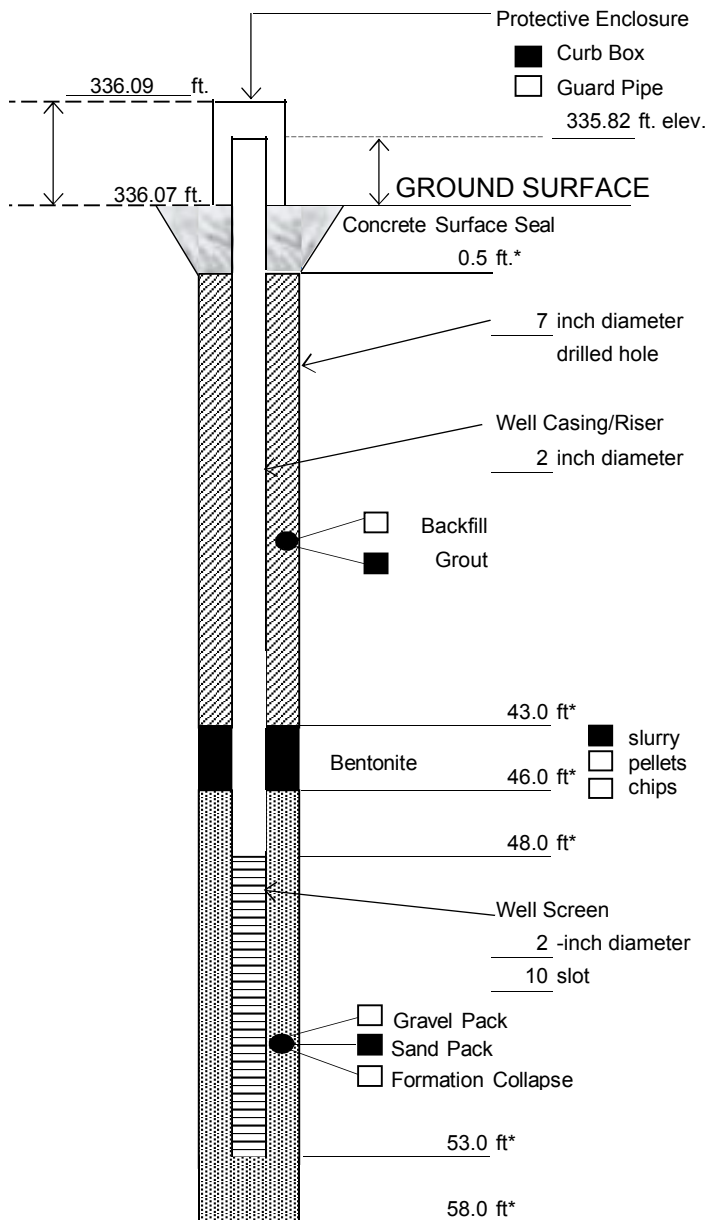
Curb box installed 3/15/19.



C.T. MALE ASSOCIATES

Well No. RIMW6D

MONITORING WELL CONSTRUCTION LOG



Project Name: Hamilton Hill II - Target Area 1 Site

Project Number: 16.6334

Well No.: RIMW6D Boring No.: RIMW6D

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/14/2019

Drilling Contractor: NYEG Drilling, LLC

Drilling Method: Hollow Stem Auger

Water Depth From Top of Riser: 33.42 ft 4/9/19
Date

C.T. Male Observer: RL, DA

Materials Used:

<u>6</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.5</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s granular</u>	
<u>5</u>	ft. of <u>PVC</u>	well screen
<u>48</u>	ft. of <u>PVC</u>	well riser
<u>2</u>	Bags of Cement/Concrete	(<u>80</u> lb. bags)
	Brand: <u>Quikrete</u>	

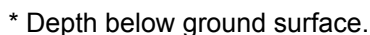
Grout Mixture:

<u>1</u>	Bags of Cement	(<u>94</u> lb. bags)
<u>5</u>	Lbs. of Bentonite	
<u>8</u>	Gallons of Water	
<u>6</u>	Grout Batches	

Notes:

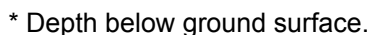


MONITORING WELL CONSTRUCTION LOG



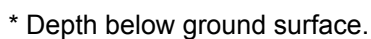


MONITORING WELL CONSTRUCTION LOG





MONITORING WELL CONSTRUCTION LOG



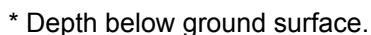


MONITORING WELL CONSTRUCTION LOG





MONITORING WELL CONSTRUCTION LOG



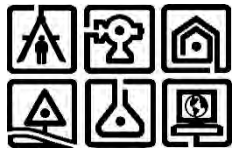
C.T. Male Observer: B. Winslow

0.5	Bags of Sand	(50 lb. bags)
	Sand Size: #0	Brand: Filpro
0.2	Bags of Bentonite	(50 lb. bags)
	Brand:	Cetco C/S
10	ft. of	PVC well screen
2	ft. of	PVC well riser
1	Bags of Cement/Concrete	(80 lb. bags)
	Brand:	Quikrete High Strength

<u> </u> -	Bags of Cement	(<u> </u> lb. bags)
<u> </u> -	Lbs. of Bentonite	
<u> </u> -	Gallons of Water	
<u> </u> -	Grout Batches	

Notes:

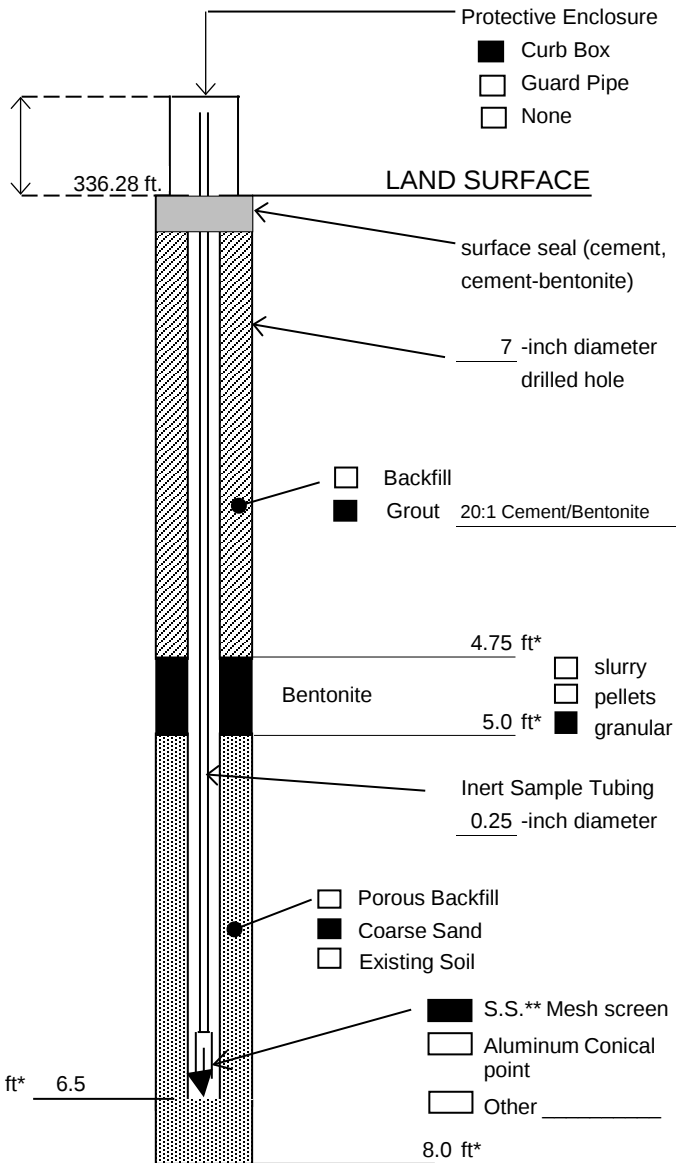
APPENDIX F
SOIL VAPOR PROBE CONSTRUCTION LOGS



C.T. MALE ASSOCIATES

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG

Point No. RISV1



* Depth below land surface
** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV1 Boring No.: RISV1

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/20/2019

Drilling Contractor: NYEG

Drilling Method: Hollow Stem Auger

C.T. Male Observer: K. Cietek

Materials Used:

<u>2</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.25</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u> vapor point/screen	
<u>7</u>	ft. of <u>Nylaflow</u> sample tubing	
<u>2</u>	Bags of Cement/Concrete	(<u>47</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>8-10</u>	Gallons of Grout	

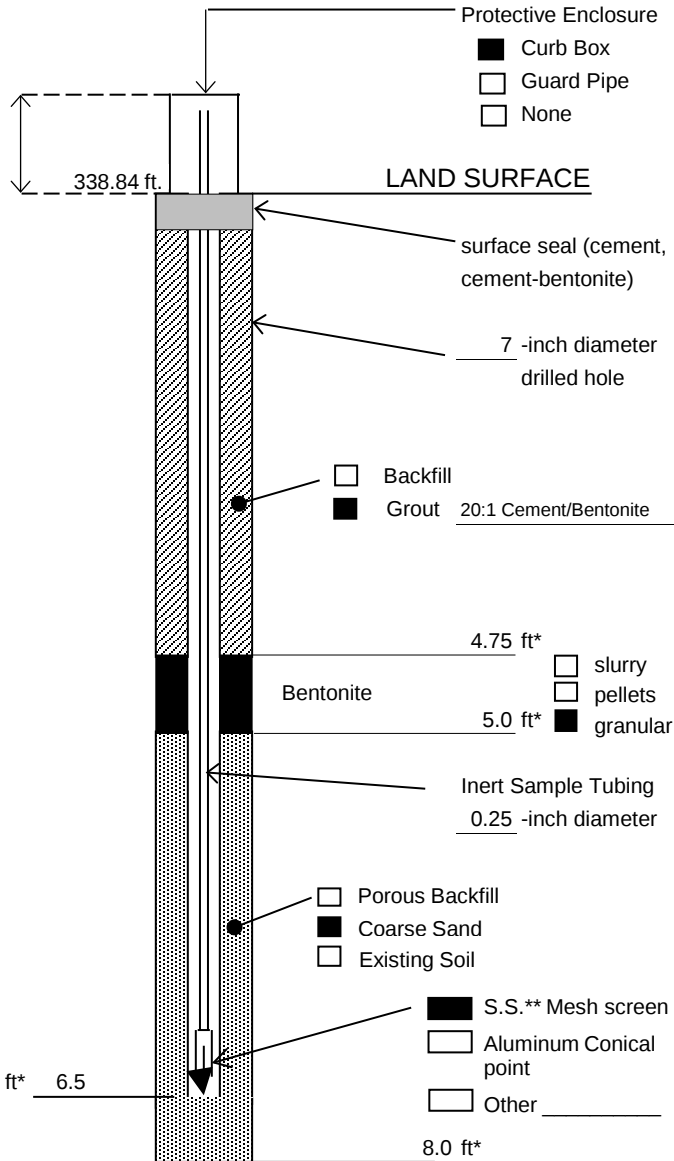
Notes:



C.T. MALE ASSOCIATES

Point No. RISV2

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG



* Depth below land surface

** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV2 Boring No.: RISV2

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/19/2019

Drilling Contractor: NYEG

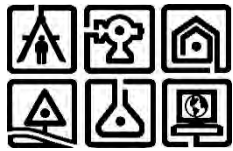
Drilling Method: Hollow Stem Auger

C.T. Male Observer: D. Achtyl

Materials Used:

<u>1.5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.33</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u> vapor point/screen	
<u>7</u>	ft. of <u>Nylaflow</u> sample tubing	
<u>2</u>	Bags of Cement/Concrete	(<u>47</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>8-10</u>	Gallons of Grout	

Notes:

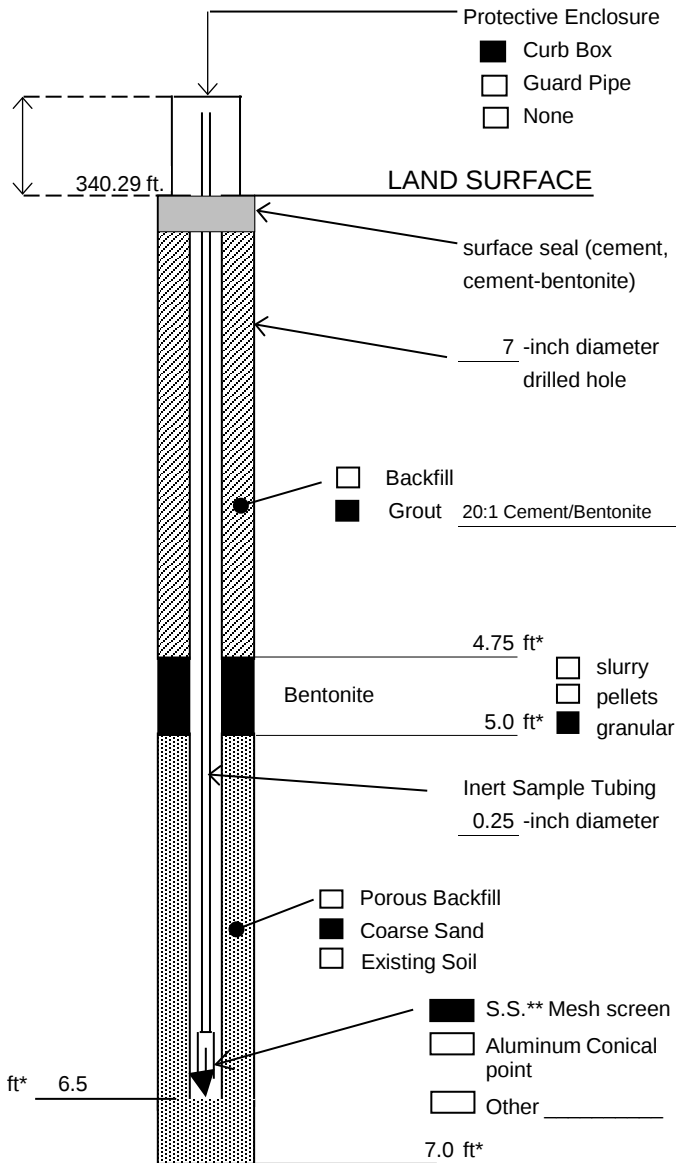


C.T. MALE ASSOCIATES

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG

Point No.

RISV3



* Depth below land surface

** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV3 Boring No.: RISV3

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/15/2019

Drilling Contractor: NYEG

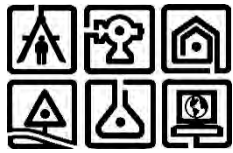
Drilling Method: Hollow Stem Auger

C.T. Male Observer: D. Achtyl

Materials Used:

<u>1.5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.33</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u> vapor point/screen	
<u>7</u>	ft. of <u>Nylaflo</u> sample tubing	
<u>1</u>	Bags of Cement/Concrete	(<u>94</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>10</u>	Gallons of Grout	

Notes:

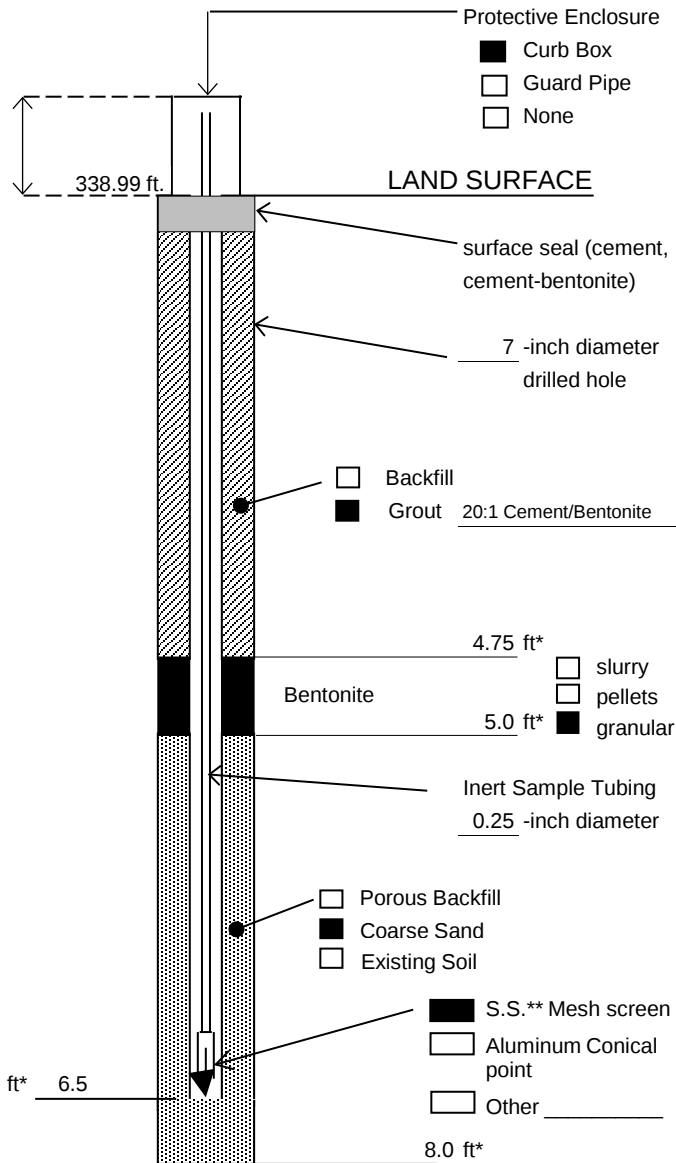


C.T. MALE ASSOCIATES

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG

Point No.

RISV4



* Depth below land surface

** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV4 Boring No.: RISV4

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/18/2019

Drilling Contractor: NYEG

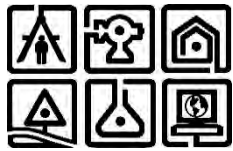
Drilling Method: Hollow Stem Auger

C.T. Male Observer: D. Achtyl

Materials Used:

<u>1.5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.3</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u> vapor point/screen	
<u>7</u>	ft. of <u>Nylaflo</u> sample tubing	
<u>2</u>	Bags of Cement/Concrete	(<u>47</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>10</u>	Gallons of Grout	

Notes:

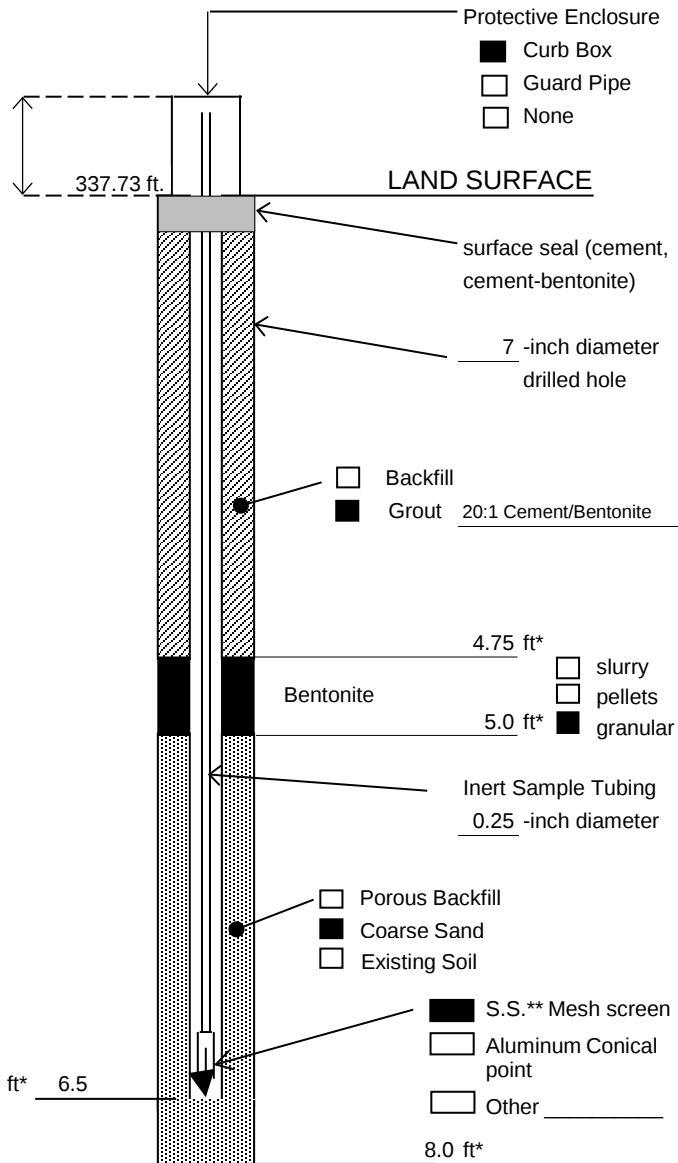


C.T. MALE ASSOCIATES

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG

Point No.

RISV5



* Depth below land surface

** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV5 Boring No.: RISV5

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/20/2019

Drilling Contractor: NYEG

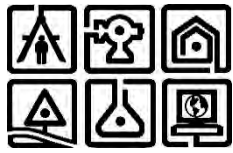
Drilling Method: Hollow Stem Auger

C.T. Male Observer: K. Cietek

Materials Used:

<u>1.5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.25</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u> vapor point/screen	
<u>7</u>	ft. of <u>Nylaflo</u> sample tubing	
<u>2</u>	Bags of Cement/Concrete	(<u>47</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>8-10</u>	Gallons of Grout	

Notes:

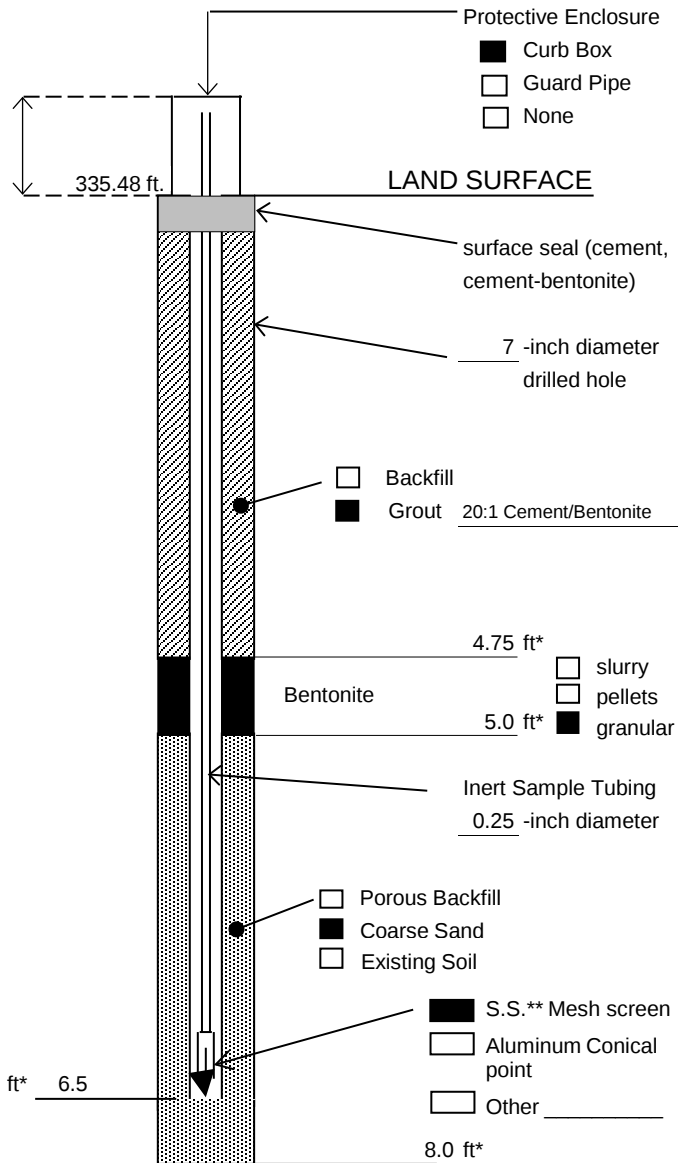


C.T. MALE ASSOCIATES

Point No.

RISV6

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG



* Depth below land surface

** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV6 Boring No.: RISV6

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/20/2019

Drilling Contractor: NYEG

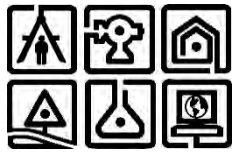
Drilling Method: Hollow Stem Auger

C.T. Male Observer: K. Cietek

Materials Used:

<u>1.5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.25</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u> vapor point/screen	
<u>7</u>	ft. of <u>Nylaflo</u> sample tubing	
<u>2</u>	Bags of Cement/Concrete	(<u>47</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>8-10</u>	Gallons of Grout	

Notes:

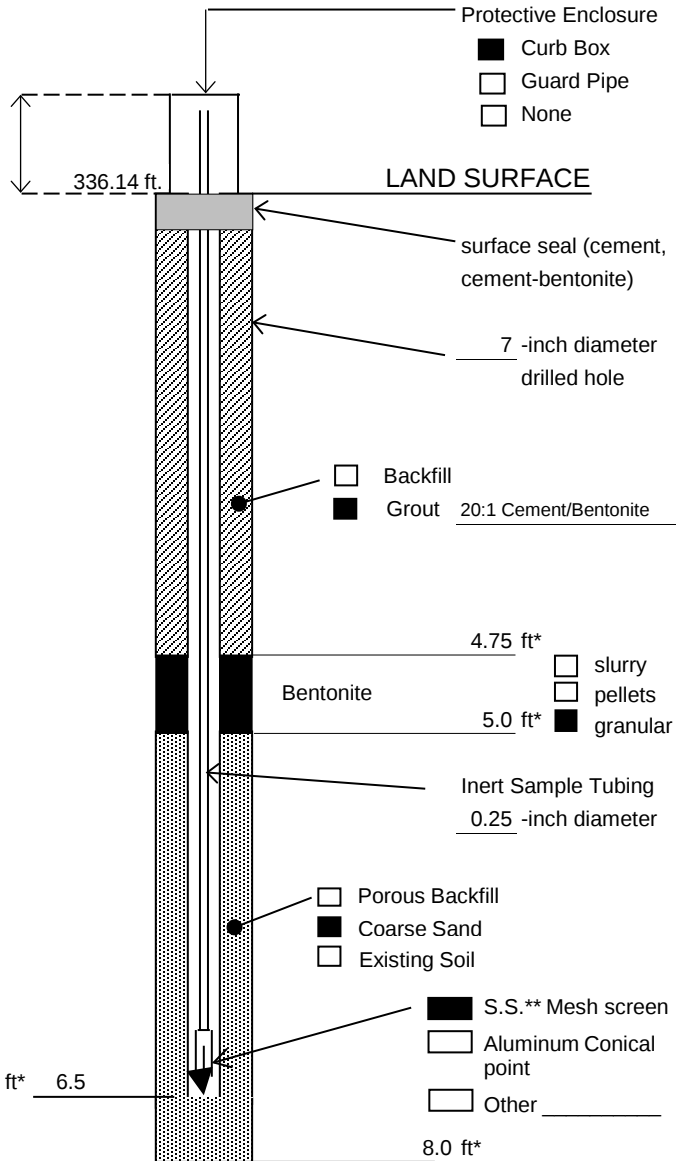


C.T. MALE ASSOCIATES

Point No.

RISV7

SOIL VAPOR (SV) SAMPLING POINT CONSTRUCTION LOG



* Depth below land surface

** S.S. denotes Stainless Steel

Project Name: Hamilton Hill II - TA1 Site

Project Number: 16.6334

Point No.: RISV7 Boring No.: RISV7

Town/City: Schenectady

County: Schenectady State: NY

Installation Date(s): 3/13/2019

Drilling Contractor: NYEG

Drilling Method: Hollow Stem Auger

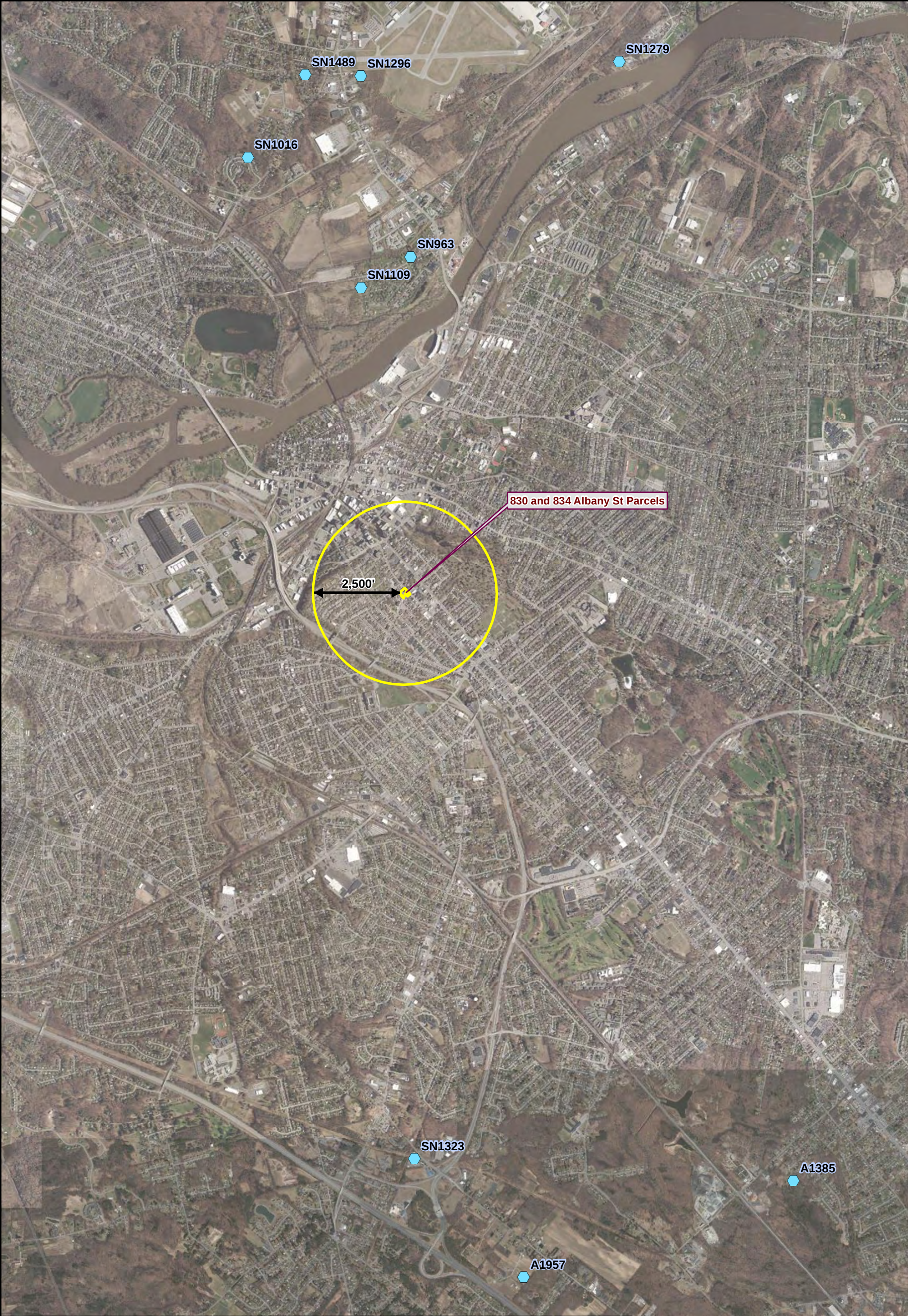
C.T. Male Observer: B. Winslow

Materials Used:

<u>1.5</u>	Bags of Sand	(<u>50</u> lb. bags)
	Sand Size: <u>#0</u>	Brand: <u>Filpro</u>
<u>0.3</u>	Bags of Bentonite	(<u>50</u> lb. bags)
	Brand: <u>Cetco c/s Granular</u>	
<u>6</u>	inch <u>Stainless Steel</u>	vapor point/screen
<u>7</u>	ft. of <u>Nylaflo</u>	sample tubing
<u>1</u>	Bags of Cement/Concrete	(<u>94</u> lb. bags)
	Brand: <u>Quikrete Portland</u>	
<u>12</u>	Gallons of Grout	

Notes:

APPENDIX G
WELL SEARCH



01,2502,5005,000

FT

1 inch = 2,500 feet

N

W

E

Legend

Water Wells

Project Site

Map Notes:

1. The locations and features depicted on this map are approximate and do not represent a field survey.

2. Water wells were collected since April 2000 by NYS Dept of Environmental Conservation (NYS DEC), Bureau of Water Resource Management.

WELLS LOCATION MAP

830 AND 834 ALBANY STREET PARCELS

HAMILTON HILL II TARGET AREA 1

City of Schenectady

Schenectady County, New York

FOUNDED IN 1910

C.T. MALE ASSOCIATES

ENGINEERING, SURVEYING, ARCHITECTURE & LANDSCAPE ARCHITECTURE, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110

(518) 786-7400 * FAX (518) 786-7299 * WWW.CTMALE.COM

APPENDIX H
DATA USABILITY SUMMARY REPORTS

APPENDIX I
ANALYTICAL REPORTS
(SURFACE SOIL)

APPENDIX I
ANALYTICAL REPORTS
(SUB-SLAB SOIL)

APPENDIX K
ANALYTICAL REPORTS
(SUBSURFACE FILL/SOIL)

APPENDIX L
ANALYTICAL REPORTS
(GROUNDWATER)

APPENDIX M
ANALYTICAL REPORTS
(SOIL VAPOR)

EXHIBIT 1
NYLD FIELD REPORTS

Date(s) on site: 3/12/19**Technician:** Sonny Kentile**Other Technicians on site:****Customer:** NYEG Drilling LLC**Site Address:** Intersection of: Craig St. & Albany St. Schenectady, NY**Contact Person:** Jeff Lyon**Phone:** 315-559-7249**Scope of Work:** Utility Location Services - Site is ~ 1 acre. Clear for ~ 25 borings. See provided mapping below for scope updates given to NYLD upon arrival.**Type of Service:** *mark all that apply*

- | | | |
|--|--|--|
| ☐ Leak Detection | ☐ Comprehensive Leak Survey | ☐ Pressurized Pipe Inspection |
| ☐ Infrastructure Assessment | ☒ Utility Location/GPR | ☐ Utility Mapping/AutoCAD |
| ☐ EM Survey | ☐ Video Inspection | ☐ Valve Exercising |

Type of Equipment Used:*mark all that apply*

- | | | |
|--|---|--|
| ☐ Profiler EMP 400 | ☒ RD8000 Pipe & Cable Locator | ☐ MetroTech vLocPro2 |
| ☐ LC2500 Leak Correlator | ☒ Noggin 250 MHz | ☐ PosiTector UTG G3 |
| ☐ S-30 Surveyor | ☐ Noggin 500 MHz | ☐ Video Inspection Camera |
| ☐ Sonde / Locatable Rodder | ☐ Conquest 1000 MHz | ☐ Helium # Bottles |
| ☐ Leica Robotic Total Station | ☐ Leica RTK GPS | ☐ JD7 Investigator |
| ☐ Valve Maintenance Trailer | ☐ Thermal Imaging Camera | ☐ ZCorr Data Loggers |

Marking Used: *mark all that apply*

- | | | |
|---|---|---------------------------------------|
| ☒ Paint | ☐ Flags | ☐ Chalk/Marker |
| ☐ Tape | ☐ Updated Onsite Mapping | ☐ Other _____ |

Field Report – Utility Location

Site Access/Safety Training: N/A**Expiration Date:** N/A**Ground Cover/Weather Conditions:** Snow, Ice, Asphalt & Soil / 30's & Overcast

Instructions from Onsite Contact: Please clear boring locations of all utilities, also there are two sections added to the scope (see Google overview below). These two sections do not have specific boring locations chosen so we will have you clear them completely.

Information Transfer:

In addition to this field report,
mark all that apply:

☒ Information relayed on site to:

Brittany (CT Male)

☐ *Hand drawn sketch*☐ *Maps updated onsite*☐ *Photographs*☐ *Surveyed by others*☐ *Surveyed and AutoCAD Mapping by NYLD***Notes/Testing Results:**

A visual inspection was performed in the area of concern to assess for utility structures. Utilizing the RD8000 in conductive, inductive, and power/radio modes, located and marked out utilities as shown in the area below. Sonde/Locatable Rodder was used within applicable utilities. Additional confirmation performed with the Noggin using the 250 and/or 500 MHz antenna. GPR signal reception varies depending upon soil conditions. Therefore, it is utilized in combination with various other geophysical tools for the most accurate verification of known/unknown utilities and/or structures.

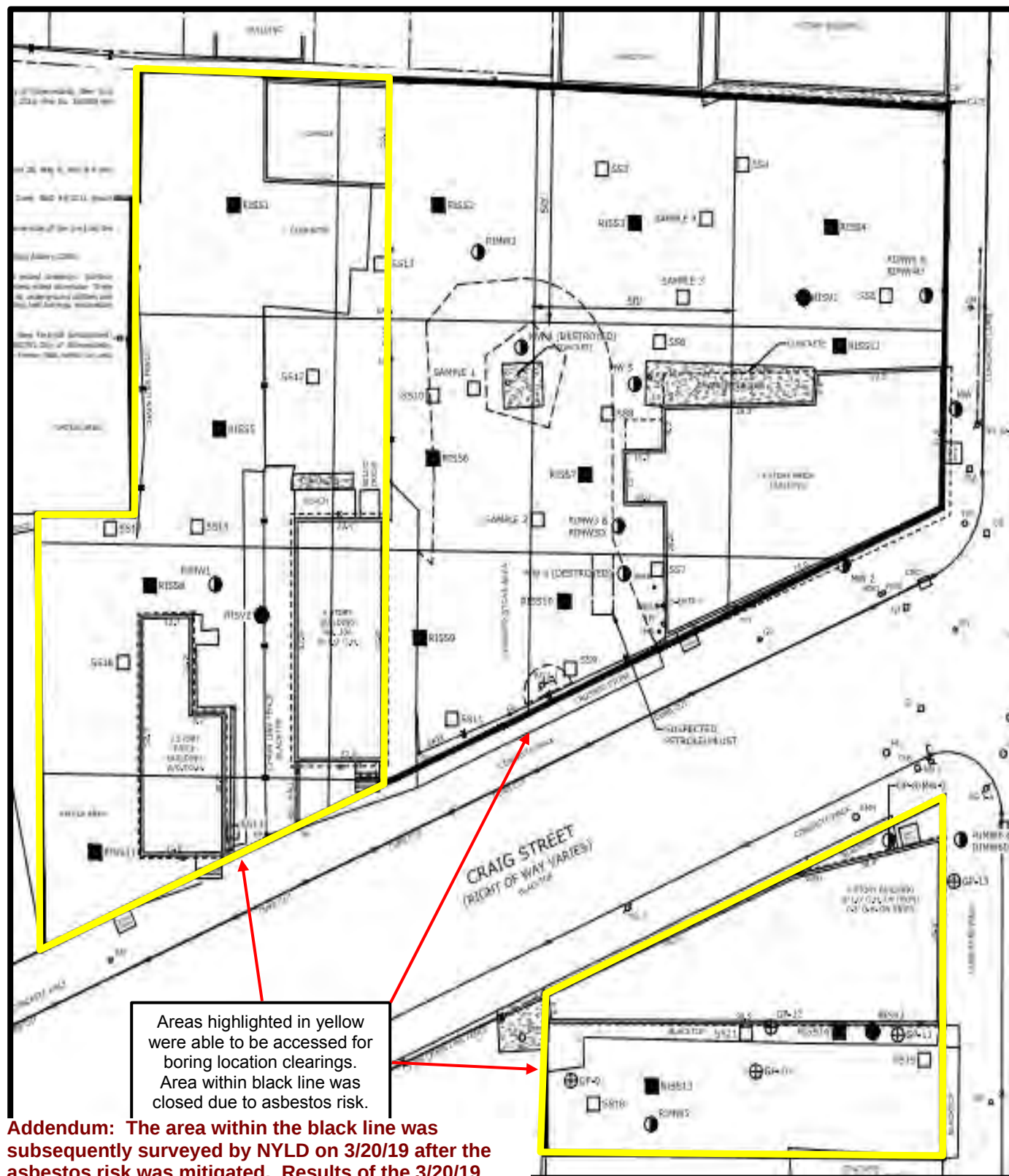
Utilities were painted in appropriate color, marked with flags and depths provided where possible.

GPR imagery was limited due to the following factors:

- Thick layer of ice covering most areas scanned
- Debris on the ground or under the ice
- Close proximity to walls or other structures

*Unable to visually inspect possible utility access points due to thick ice layer covering most of the job site. See images below for example.

This report is back up to information relayed and marked on site at time of service. It is for informational purposes only.

Provided Mapping

Field Report – Utility Location**Key**

Blue	Water
Red	Power
Orange	Communications
Yellow	Gas/Flammable Fuel
White	Unknown
Green	Storm/Sanitary











Subsurface Limitations

Utility locating is the art and science of using non-intrusive methods to search for, find and mark out buried, unseen conduits or other objects. There are innumerable variables involved in locating underground utilities, such as topography, size and complexity of job site, depth and proximity of buried utilities, above ground obstructions, short turnaround schedules, changes in the scope of work, lack of (or outdated) blueprints and adverse weather conditions.

New York Leak Detection, Inc. (NYLD) has made a substantial financial investment in crossover technologies and training to meet our clients' needs when locating and mapping utilities. However, due to unpredictable factors that may affect the results, NYLD makes no guarantee, expressed or implied, with respect to the completeness or accuracy of the information provided. Any use or reliance on the information or opinion is at the risk of the user and NYLD shall not be liable for any damage or injury arising out of the use or misuse of the information provided.

NYLD strives to provide the highest quality utility location services possible with the technical expertise of our field specialists and state-of-the-art equipment used. Every effort is made to provide our clients with the most accurate information possible without adverse consequences.

NYLD makes no guarantee that all subsurface utilities and obstructions will be detected. GPR signal penetration might not be sufficient to detect all utilities. NYLD is not responsible for detecting subsurface utilities and obstructions that normally cannot be detected by the methods employed or that cannot be detected because of site conditions. NYLD is not responsible for maintaining mark-outs after leaving the work area. Mark-outs made in inclement weather and in high traffic areas may not last. Surveyor assumes responsibility of picking up data on site.

Date(s) on site: 3/20/19**Technician:** Joe Goodfellow**Other Technicians on site:****Customer:** NYEG Drilling**Site Address:** Craig St. & Albany St. Schenectady**Contact Person:** Dan Achty**Phone:****Scope of Work:** Location services**Type of Service:** *mark all that apply*

- | | | |
|--|--|--|
| ☐ Leak Detection | ☐ Comprehensive Leak Survey | ☐ Pressurized Pipe Inspection |
| ☐ Infrastructure Assessment | ☒ Utility Location/GPR | ☐ Utility Mapping/AutoCAD |
| ☐ EM Survey | ☐ Video Inspection | ☐ Valve Exercising |

Type of Equipment Used:*mark all that apply*

- | | | |
|--|--|--|
| ☐ Profiler EMP 400 | ☐ RD8000 Pipe & Cable Locator | ☒ MetroTech vLocPro2 |
| ☐ LC2500 Leak Correlator | ☒ Noggin 250 mHz | ☐ PosiTector UTG G3 |
| ☐ S-30 Surveyor | ☐ Noggin 500 mHz | ☐ Video Inspection Camera |
| ☐ Sonde / Locatable Rodder | ☐ Conquest 1000 mHz | ☐ Helium # Bottles |
| ☐ Leica Robotic Total Station | ☐ Leica RTK GPS | ☐ JD7 Investigator |
| ☐ Valve Maintenance Trailer | ☐ Thermal Imaging Camera | ☐ ZCorr Data Loggers |

Marking Used: *mark all that apply*

- | | | |
|---|---|---------------------------------------|
| ☒ Paint | ☒ Flags | ☐ Chalk/Marker |
| ☐ Tape | ☐ Updated Onsite Mapping | ☐ Other _____ |

Site Access/Safety Training:**Expiration Date:****Ground Cover/Weather Conditions:** Dirt, some frozen, brush. Sun, 40s.**Instructions from Onsite Contact:** Clear for borings and relocate UST.

Field Report – Utility Location

Information Transfer:

In addition to this field report,
mark all that apply:

☒ Information relayed on site to:

Dan Achty CT Male

☐ *Hand drawn sketch*

☐ *Maps updated onsite*

☒ *Photographs*

☐ *Surveyed by others*

☐ *Surveyed and AutoCAD Mapping by NYLD*

Notes/Testing Results:

A visual inspection was performed in the area of concern to assess for utility structures. Utilizing the MetroTech vLocPro2 in conductive, inductive and power/radio modes, located and marked out utilities as shown in the area below. Sonde/Locatable Rodder was used within applicable utilities. Additional confirmation performed with the Noggin with a 250 MHz antenna. GPR signal reception varies depending upon soil conditions. Therefore, it is utilized in combination with various other geophysical tools for the most accurate verification of known/unknown utilities and/or structures.

Moved borings as needed due to utilities. Located another possible UST near larger one. Also located fill port to larger tank.

Utilities were painted in appropriate color, marked with flags and depths provided where possible.

This report is back up to information relayed and marked on site at time of service. It is for informational purposes only.

Key

Blue	Water
Red	Power
Orange	Communications
Yellow	Gas/Flammable Fuel
White	Unknown
Green	Storm/Sanitary





Field Report – Utility Location



Field Report – Utility Location













Subsurface Limitations

Utility locating is the art and science of using non-intrusive methods to search for, find and mark out buried, unseen conduits or other objects. There are innumerable variables involved in locating underground utilities, such as topography, size and complexity of job site, depth and proximity of buried utilities, above ground obstructions, short turnaround schedules, changes in the scope of work, lack of (or outdated) blueprints and adverse weather conditions.

New York Leak Detection, Inc. (NYLD) has made a substantial financial investment in crossover technologies and training to meet our clients' needs when locating and mapping utilities. However, due to unpredictable factors that may affect the results, NYLD makes no guarantee, expressed or implied, with respect to the completeness or accuracy of the information provided. Any use or reliance on the information or opinion is at the risk of the user and NYLD shall not be liable for any damage or injury arising out of the use or misuse of the information provided.

NYLD strives to provide the highest quality utility location services possible with the technical expertise of our field specialists and state-of-the-art equipment used. Every effort is made to provide our clients with the most accurate information possible without adverse consequences.

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EXHIBIT 2
GEOTECHNICAL EVALUATION REPORT
(NOVEMBER 2017)

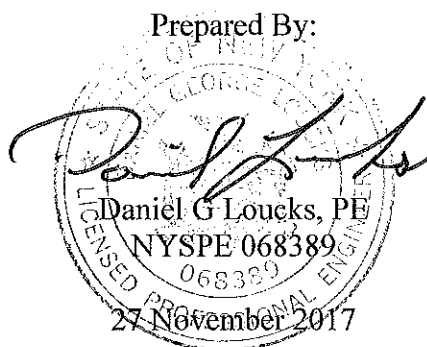
Geotechnical Report
For
Hamilton Hill 2 Buildings
Schenectady, New York

File No. 3249

Prepared For:

Dave Sadowski Architect

Prepared By:



INTRODUCTION:

The subsurface investigation for the proposed Hamilton Hill 2 Buildings, Albany Street, Schenectady, New York has been completed. Parratt Wolff Inc. of Syracuse, New York has completed six (6) soil borings at the site. The logs of these borings, along with a location diagram, have been included in the appendix of this report.

It is my understanding that the proposed construction will include one six-story building and five two story buildings located approximately as indicated on the boring location diagram. The six-story building will have a steel frame design and the two-story buildings will have a wood frame with all building will have a slab on grade design.

The maximum column loadings for the six-story building will range from 350 to 400 kips. Bearing wall loads for the two-story buildings will range from 2 to 4 kips per foot of wall. The settlement tolerances are normal. Settlement tolerances are considered to include up to 1 inch of total settlement and 3/4 inch of differential settlement between column locations.

The first floor slab for the six-story building will be established at between elevations 310 and 312. This will require up to 6 feet of cut. The finished floor elevations for the two-story buildings will be within 3 feet of the existing grades at the site.

The purpose of this report is to describe the investigation conducted and the results obtained; to analyze and interpret the data obtained; and to make recommendations for the design and construction of the feasible foundation types and earthworks for the project. The recommendations contained in this report are based on the information that was provided up to the date the report was completed. Any changes in the design of the project or changes to the recommendations provided in this report should be brought to my attention to determine if there needs to be any revision of the geotechnical recommendations. I am not responsible for any changes made to the recommendations provided in this report unless I have provided written approval of the changes.

The scope of my services has been limited to coordinating the boring and laboratory investigation, analyzing the soils information, and providing a geotechnical report with foundation recommendations and seismic site classifications as per NYS Building Code. Environmental aspects of the project as well as grading and site design should be performed by qualified others.

FIELD INVESTIGATION PROCEDURES:

The borings were extended by means of 4.25-inch ID, hollow-stem augers and by continuous sampling with a split-spoon sampler.

Representative samples were obtained from the boring holes by means of the split-spoon sampling procedure performed in accordance with ASTM D 1586. The standard penetration values obtained from this procedure have been indicated on the soil boring logs.

Soil samples obtained from these procedures were examined in the field, sealed in containers, and shipped to the laboratory for further examination, classification and testing, as applicable.

During the investigation, water level readings were obtained at various times where water accumulated in the boring hole. The water level readings, along with an indication of the time of the reading relative to the boring procedure, have been indicated on the soil boring logs.

In addition to the field boring investigation, the soil engineer visited the site to observe the surface conditions.

LABORATORY INVESTIGATION:

All samples were examined in the laboratory by the soil engineer and classified according to the Unified Soil Classification System. In this system, the soils are visually classified according to texture and plasticity. The appropriate group symbol is indicated on the soil boring logs.

Samples exhibiting significant percentages of fine-grained soils or organic materials were subjected to moisture content testing. This testing was performed in accordance with ASTM D 2216-71. The results of these tests have been included in the appendix of the report.

Samples exhibiting significant cohesion were tested with a calibrated, spring-loaded, penetrometer. This test is used to estimate the unconfined compressive strength of the soil sample by measuring the soil's resistance to the penetration of the penetrometer needle. The results of these tests are listed on the boring logs.

Atterberg limit tests were performed on representative samples in accordance with ASTM D 4318. The results of these tests are included in the appendix of this report.

Sieve Analyses were performed on representative samples in accordance with ASTM Specification D 422. These tests were performed to verify the visual soil classifications. Results of the tests can be found in the appendix of the report.

SITE CONDITIONS:

At the proposed six-story building site I observed that there were three existing structures and some grass surfaced areas. One building was a three-story brick building. I did not observe significant cracking on the exterior walls of this building. The ground surface at the site slopes up to the southwest between approximately 4 and 8 feet.

At the proposed site on the northwest corner of Albany Street and Craig Street there is a three-story building with brick exterior walls, two wood framed houses and a vacant lot. No significant signs of differential settlement were observed on the exterior walls of the brick building. The ground surface slope gently up to the south. The proposed site on the southwest corner of Albany and Craig street also contained a wood framed structure and a vacant lot.

SUBSURFACE CONDITIONS:

The specific subsurface conditions encountered at each boring location are indicated on the individual soil boring logs. However, to aid in the evaluation of this data, I have prepared a generalized description of the soil conditions based on the boring data. Ground surface elevations as shown on the boring logs, when available, have been estimated from the existing topographic mapping as shown on the site plan provided to this office.

Borings B-1, B-2, B-3 and B-4 were performed at the location of the proposed six-story building. These borings encountered an upper layer of uncontrolled fill that extended to between approximately 4.0 and possibly 6.0 feet below the existing ground surface. This uncontrolled fill is generally comprised of sand with varying amounts of gravel/shale, brick and organics with a trace to some silt. The exact depth of uncontrolled fill was difficult to determine at all boring locations due to the similarity of the virgin soils with some of the soils used as possible fill in old building locations. Sandy soils appeared to be used as fill in old building locations and the upper virgin

soils are also sandy soils. Additional subsurface investigations such as test pits would be required to more accurately determine the depth of the uncontrolled fill soils. Below the uncontrolled fill is a layer of loose to medium dense sand that extends to between approximately 14.0 and 15.0 feet in all the borings except boring B-2 where silty soils were encountered to the bottom of the boring at 15.0 feet below the existing grade. In boring B-3, silt with occasional thin clay layered were encountered under the sand and to the bottom of the boring at 15.0 feet. In boring B-1 a layer of silt with a trace to some fine sand was encountered under the sandy virgin soils to a depth of approximately 18.0 feet below the existing ground surface. Underlying the silt is layered silt with clay. These layered soils are loose/soft and extend to approximately 27.0 feet. Layered silt/clayey silt, fine sand and clay soils continued to the bottom of the boring at 100 feet below the existing ground surface. These soils are loose to dense/medium stiff to stiff.

The borings at the two-story building locations, B-5 and B-6 also encountered an upper layer of uncontrolled fill. This uncontrolled fill contained sand with varying amounts of gravel, brick, concrete and ash with a trace to some silt. The uncontrolled fill extended to between approximately 4.0 and 7.0 feet. Beneath the uncontrolled fill is a layer of sand with varying amounts of silt. This sandy soil is loose to medium dense and extends to approximately 14.0 feet. A layer of silt with a trace to some fine sand was encountered below the virgin sandy soils. This silt layer is loose and extended to the bottom of the boring at 15.0 feet below the existing ground surface.

GROUNDWATER CONDITIONS:

Accurate groundwater levels are difficult to determine in clayey silt soils with only short-term readings or observations. Clayey silt soils typically do not allow an adequate amount of water to flow through the soil to produce a water level reading during the drilling operation. I have indicated where water was observed on the boring logs.

Based on the groundwater levels observed during the boring investigation, the moisture condition of the samples recovered from the boring holes and coloration of the soil samples, I judge that the groundwater level was located below depth of 4 feet at the six-story building location and 8 feet at the two-story building locations.

Perched groundwater tables may occur at higher elevations in the soil profile due to groundwater being retained by layers or lenses of silt or clay soils.

Some fluctuation in hydrostatic groundwater levels and perched water conditions should be anticipated with variations in the seasonal rainfall and surface runoff.

It should be noted that the groundwater levels were obtained during the drilling procedure. Actual water levels may vary at the time of construction. Some groundwater could be encountered in soil layers labeled moist to wet on the boring logs.

ANALYSIS AND RECOMMENDATIONS:

All the borings encountered an upper layer of uncontrolled fill. The exact depth of uncontrolled fill was difficult to determine at all boring locations due to the similarity of the virgin soils with some of the soils used as possible fill in old building locations. Sandy soils appeared to be used as fill in old building locations and the upper virgin soils are also sandy soils. Additional subsurface investigations such as test pits would be required to more accurately determine the depth of the uncontrolled fill soils.

Beneath the uncontrolled fill are loose to medium dense virgin sand, silt and clay soils. In my opinion these virgin soils are adequate to support properly designed spread footing/mat foundations for both the two and six story buildings within normal settlement tolerances. For the six-story building the proposed footings will be large (as large as 14 feet square), but in my opinion this approach would be less expensive than pile foundations (over 100 feet to dense soils) and because of the proximity of existing adjacent structures, site improvement techniques such as dynamic compaction or vibrofloation are not feasible. Depending on the column spacing and final loading, it may be more economical to use a mat foundation to support the proposed six-story building.

Depending on the final design finished floor elevation it is likely that groundwater may be encountered in excavations to remove the uncontrolled fill and to place footings/mat foundations. Dewatering including vacuum well points and geotextiles and a layer of uniform crushed stone may be required to properly place the footings/mat and reduce disturbance of the subgrade depending on the bottom of footing/mat elevation and the groundwater levels at the time of construction.

Site Work:

The proposed construction areas should be cleared and grubbed and all organic topsoil and vegetation along with any uncontrolled fill, existing buildings and debris. The subgrade should be proof-rolled with a 10-ton roller and the proof rolling should be observed by the soil engineer. This proof rolling will compact the subgrade and reveal the presence of soft spots. If saturated subgrade conditions exist, I recommend that the subgrade be observed and probed by the soil engineer in place of proof rolling. Any soft spots should be excavated and backfilled with controlled fill material.

The removal of any uncontrolled fill should extend to a minimum horizontal distance past the edge of the footings equal to half the depth that the fill extends under the footing. This is equal to a 1:2 (H:V) slope down from the outer edge of the footing to the virgin soil. All uncontrolled fill within the proposed building area should also be removed.

A way to stabilize a spongy, but suitable, virgin, subgrade would be to spread a reinforcement or separation type of geotextile (Mirafi 600X or approved equal) on the subgrade and follow with a lift of clean, granular fill or uniform crushed stone. The thickness of the controlled fill can range from 1.0 to 2.5 feet, as necessary, to achieve a working mat upon which to construct the remainder of the controlled fill or to place footings. If uniform crushed stone is used as controlled fill a layer of geotextile should be placed between the crushed stone and any sand/gravel controlled fill or virgin soil.

A third method for stabilizing spongy areas of the subgrade would be to improve the drainage by use of properly designed drain tiles or by using properly designed sump pit and pump dewatering systems. Using these methods, the local groundwater table maybe able to be lowered sufficiently to aid in stabilizing the subgrade surface. If large quantities of water are encountered vacuum well point dewatering maybe required. The need of a well point or any other type of dewatering program should be evaluated by the contractor before starting construction and be designed by a qualified dewatering contractor or hydrologist.

Controlled Fill:

Before any controlled fill is placed the site should be inspected to verify that the site has been prepared according to the recommendations contained in this report as required by the NYS Building Code Section 1704.7.1.

Controlled fill can consist of non-organic, on-site or imported soils free of debris and having a maximum particle size of 4 inches. A gradation and proctor should be performed on the proposed soil and submitted to me for approval. Approved, properly placed and compacted material can be used as controlled fill within the proposed building footprint. Free draining controlled fill or crushed stone material should be placed as recommended in this report. Approved on-site or imported soils should not be used in these locations where free draining controlled fill is recommended unless approved by me.

Controlled, relatively clean, granular fill can be spread in lifts not exceeding 12 inches in loose thickness. These materials should be compacted to a minimum of 95 percent of the maximum ASTM Specification D 1557-91 density, modified proctor.

On-site, silty soils, may be difficult to compact during wet weather or poor drying conditions. These types of soils are sensitive to moisture content and weather conditions. During freezing or wet weather conditions these materials may not be able to be adequately compacted for use as structural fill.

If crushed stone is used as controlled fill it should have a layer of geotextile with a minimum tensile strength of 200 lbs should be placed between the stone and existing soils. The stone should be placed in lifts not exceeding 12 inches in thickness and should be compacted with a minimum of 5 passes of a vibratory roller rated at 5 tons or larger. Weathered shale or crushed shale should not be used as controlled fill within the proposed building area.

Free Draining Controlled Fill Material: Naturally or artificially graded mixture of sand, natural or crushed stone or gravel conforming to NYS DOT Item 304-2.03, Type 4 or 2 as follows:

<u>U.S. Sieve No.</u>	<u>Percent Passing by Weight</u>
2 inch	100
1/4 inch	30-65
No. 40	5-40
No. 200	0-10

NYS DOT Table 703-4, Size 2 crushed stone, clean, durable, angular, and of uniform quality throughout:

<u>U.S. Sieve No.</u>	<u>Percent Passing by Weight</u>
1 ½ inch	100
1 inch	90-100
1/2 inch	0-15

All controlled fill should be free of organic and/or frozen material.

Free-draining controlled fill should have less than 10 percent fines passing the #200 sieve.

I recommend performing one field density test for every 2,000 square feet of controlled fill placed, within the overlaying building footprint, but in no case fewer than three tests per lift.

I recommend that for foundation wall and footing backfill that in each compacted backfill layer have at least one field in place density test for each 50 feet or less of wall or footing length, but not fewer than two tests along a wall face or footing be performed per lift.

Proper placement and compaction of backfill along exterior portions of foundation walls should be provided, especially in locations where there are sidewalks or building entries. Proper placement of backfill materials can reduce possible settlements and the use of properly designed backfill and drainage can reduce possible frost heave movements.

Results of the field compaction test results should be sent to my office for review. Copies of the results of soil gradation tests should also be provided to me for review and approval.

Building Foundations:

I recommend that the proposed structure be supported by spread footing foundations resting on firm virgin, inorganic, soils or on controlled fill which, in turn, rests on these virgin materials. Footings can be designed for a maximum, net, allowable soil bearing pressure of 2000 psf.

The soil engineer should observe the footing subgrade at the beginning of the project or if soil conditions change to verify the allowable bearing pressure of the soil encountered and that all the uncontrolled fill has been removed.

Loads from adjacent footings or structures should be assumed to distribute based on the elastic theory. Typical Boussinesq charts can be used to approximate loads at various depths and locations due to adjacent structures.

A minimum footing width of 1.75 feet is recommended for load bearing strip footings. Isolated footings should be at least 2.5 feet wide.

Exterior footings or footings in unheated areas should have a minimum of 4.0 feet of embedment for protection from frost action. Interior footings should have a minimum embedment of 2.0 feet below finished grade to develop the bearing value of the soils.

All walls that retain soil on only one side should have a drain tile placed along the base of the wall. The drain tile should be a minimum of 4 inches in diameter, surrounded by a minimum of 6 inches of properly graded washed sand or crushed stone wrapped with a non-woven filter fabric with a maximum apparent opening size of 70 and a minimum trapezoid tearing strength of 100 lbs. The drain tile should drain to a stormwater sewer, daylight, or a sump equipped with a pump.

The wall should then be backfilled with a controlled, well graded, free-draining granular material. The material should extend away from the wall a horizontal distance of two-thirds the height of the fill being placed. The upper 1 foot of material should be a fairly impermeable material to shed surface water and should be pitched away from the building to provide proper drainage.

If these procedures are used, a static lateral soil pressure of 40 psf per foot of retained soil can be used for design of the wall. This static, active lateral soil pressure is based on a moist unit weight of 125 pcf and an angle of internal friction of 32 degrees. A wall soil friction angle of 18 degrees and a coefficient of base sliding of 0.4 can also be used for design.

If the retaining wall is braced or if the deflection is limited prior to backfilling so the active soil pressure is not achieved, a static, at-rest lateral soil pressure of 63 psf per foot of retained soil can be used for design.

To resist overturning and sliding a static lateral passive pressure of 250 psf per foot of embedment can be used, provided foundations are backfilled with controlled fill. This static, passive pressure resistance value has been reduced from the calculated full passive pressure because of stress/strain characteristics of the soil. To develop the full, calculated resistance a certain amount of movement or deflection in the structure is required. The amount of movement required to generate this resistance generally greater than is acceptable for structures. I therefore recommend that the full passive pressure not be used.

The passive resistance of the upper two feet of soil, not in floor slab areas, should be ignored due to surface effects of frost and moisture.

Any surcharge loading of existing adjacent building foundations or other adjacent structures/utilities should be addressed by the structural engineer using Boussinesq charts.

For the analysis of seismic loading the allowable soil bearing pressure and passive soil resistance may be increased by a factor of one-third.

Floor Slabs:

Concrete floor slabs can be designed to rest on controlled fills resting on virgin materials. A 6-inch layer of well-graded, free-draining, granular material should be placed beneath the floor slab to provide drainage, act as a capillary break, and to provide better and more uniform support.

If vehicle loadings are to be applied to the floor slab, the proposed slab and supporting soils should be analyzed as a pavement structure. I recommend that a minimum of 12 inches of free draining controlled granular fill be placed below any concrete pavements.

A modulus of subgrade reaction of 150 psi per inch can be used to design concrete slabs resting on a minimum of 6 inches of free draining controlled fill that in turn rests on virgin soils. A modulus of subgrade reaction of 100 psi per inch can be used to design exterior slabs or pavements resting on a minimum of 12 inches of free draining controlled fill. This reduced value is recommended due to seasonal variations that occur due to frost in the soils.

Exterior concrete pavements will experience some frost heave movements during the winter and spring. If these movements are not acceptable then a minimum of 4.0 feet of approved subbase material and properly designed drains would be required below the concrete pavements or sidewalks. The use of properly designed footing drains can also be used to reduce possible frost heave movements adjacent to the proposed structure.

If the moisture levels of floor slab areas are critical additional drainage materials and vapor barriers will be required beneath the floor slab. Also, the moisture content of the subbase soils should be carefully monitored to prevent excess water from saturating these subbase soils before the floor slab is poured. This aspect of the design should be performed by qualified others.

Seismic Conditions:

The potential seismic conditions at the proposed site have been investigated using the information provided in the NYS Building Code Section 1613 and the boring information obtained during my investigation.

Based on the soil boring information and my experience it is my opinion that the Site Soil Classification (Table 1615.1.1) could be assumed to be D. Using figures 1615 (1 and 2) and the USGS 2012/2015 IBC Seismic Design Provisions, I estimate that the MCE spectral acceleration (S_{ms}) at short periods is 30.4 and the MCE spectral acceleration (S_{m1}) at 1 s period is 17.2.

The probabilistic ground motion values are expressed in %g for rock site class B. Peak ground accelerations in the upper soil profile may vary. If specific peak ground accelerations or shear wave velocities are required for the upper soil profile additional testing would be required. If it is determined by the structural engineer that the Seismic Design Category is D, E or F additional geotechnical recommendations can be provided.

The soil borings and my analysis do not indicate any significant potential seismic hazards such as liquefaction, sensitive clays, weakly cemented soil or surface rupture.

CONSTRUCTION PROCEDURES AND PROBLEMS:

The NYS Building Code Section 17 requires special inspections and follow up reports. These inspections should be performed to verify compliance with the recommendations contained in this report.

All excavations of more than a few feet should be sheeted and braced or laid back to prevent sloughing in of the sides.

Excavations should not extend below adjacent footings or structures unless properly designed sheeting and bracing or underpinning is installed.

Footings and floor slab subgrades should be tamped to compact any soil disturbed during the excavation process. A flat plate should be placed on the end of the excavator or backhoe bucket to reduce disturbance of the footing subgrade. If over excavation of subgrades are required to remove old foundations or uncontrolled fill, then the over excavated areas should be filled with controlled granular fill or lean concrete.

A layer of geotextile (min. tensile strength of 200 lbs) and 8 to 24 inches of crushed stone may be required in footing/mat excavations to prevent disturbance of the virgin subgrade during wet weather. The stone and fabric should be placed as described in the *Controlled Fill* section of this report.

Sump-pit and sump-pump-type or vacuum well point dewatering will be required in excavations or low areas during wet weather or if groundwater is encountered. If large quantities of groundwater are encountered vacuum wells will be required to stabilize the subgrade soils. All excavations should be dewatered to a minimum of 3 foot below the bottom of the excavation. All dewatering programs should be designed to prevent bottom heave. Any dewatering program should be performed with properly designed filtration protection on all pumps to prevent loss of ground.

As previously noted the on-site soils contain clayey silt which will make the soils sensitive to moisture content. If the material becomes wet or saturated, it will become spongy and easily disturbed. It will also be difficult to place as controlled fill if it becomes too wet. Imported crushed stone may be required to prevent disturbance of the subgrade soils during construction.

Subgrades should be kept from freezing during construction.

Water, snow, and ice should not be allowed to collect and stand in excavations or low areas of the subgrade.

Some obstacles, including foundations and utilities will be encountered in excavations.

Design and construction procedures should include measures to limit the potential for slab curl and vapor transmission. The shrinkage properties of the concrete should be controlled and the curing of the concrete controlled. Differential shrinkage between the top and bottom of the slabs could otherwise result in curling of the slabs. The control of vapor transmission through the slab should also be addressed. These phenomena may be only indirectly related to soil conditions. The architect/structural engineer should address this aspect of the design.

Current American Concrete Institute recommendations for the design and construction of floor slabs and the control of shrinkage, slab curl and vapor transmission can be referred to.

Hamilton Hill 2
Albany Street, Schenectady, NY
File No. 3249

CONTENTS OF APPENDIX:

1. General Notes
2. Boring Location Diagram
3. Boring Logs
4. Liquefaction Analysis Results
5. Seismic Settlement Analysis Results
6. 2012/2015 IBC Seismic Design Values
7. Laboratory Test Results
8. Unified Soil Classification System
9. Soil Use Chart
10. General Qualifications

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS

SS : Split-Spoon — 1^{3/4} " I.D., 2" O.D., except where noted
S : Shelby Tube — 2" O.D., except where noted
PA : Power Auger Sample
DB : Diamond Bit — NX: BX: AX:
CB : Carbide Bit — NX: BX: AX:
OS : Osterberg Sampler — 3" Shelby Tube
HS : Housel Sampler
WS : Wash Sample
FT : Fish Tail
RB : Rock Bit
WO : Wash Out

Standard "N" Penetration: Blows per foot of a 140 pound hammer falling 30 inches
on a 2 inch OD split spoon, except where noted

WATER LEVEL MEASUREMENT SYMBOLS

WL : Water Level
WCI : Wet Cave In
DCI : Dry Cave In
WS : While Sampling
WD : While Drilling
BCR : Before Casing Removal
ACR : After Casing Removal
AB : After Boring

Water levels indicated on the boring logs are the levels measured in the boring at the times indicated.
In pervious soils, the indicated elevations are considered reliable ground water levels. In impervious soils
the accurate determination of ground water elevations is not possible in even several day's observation,
and additional evidence on ground water elevations must be sought.

CLASSIFICATION

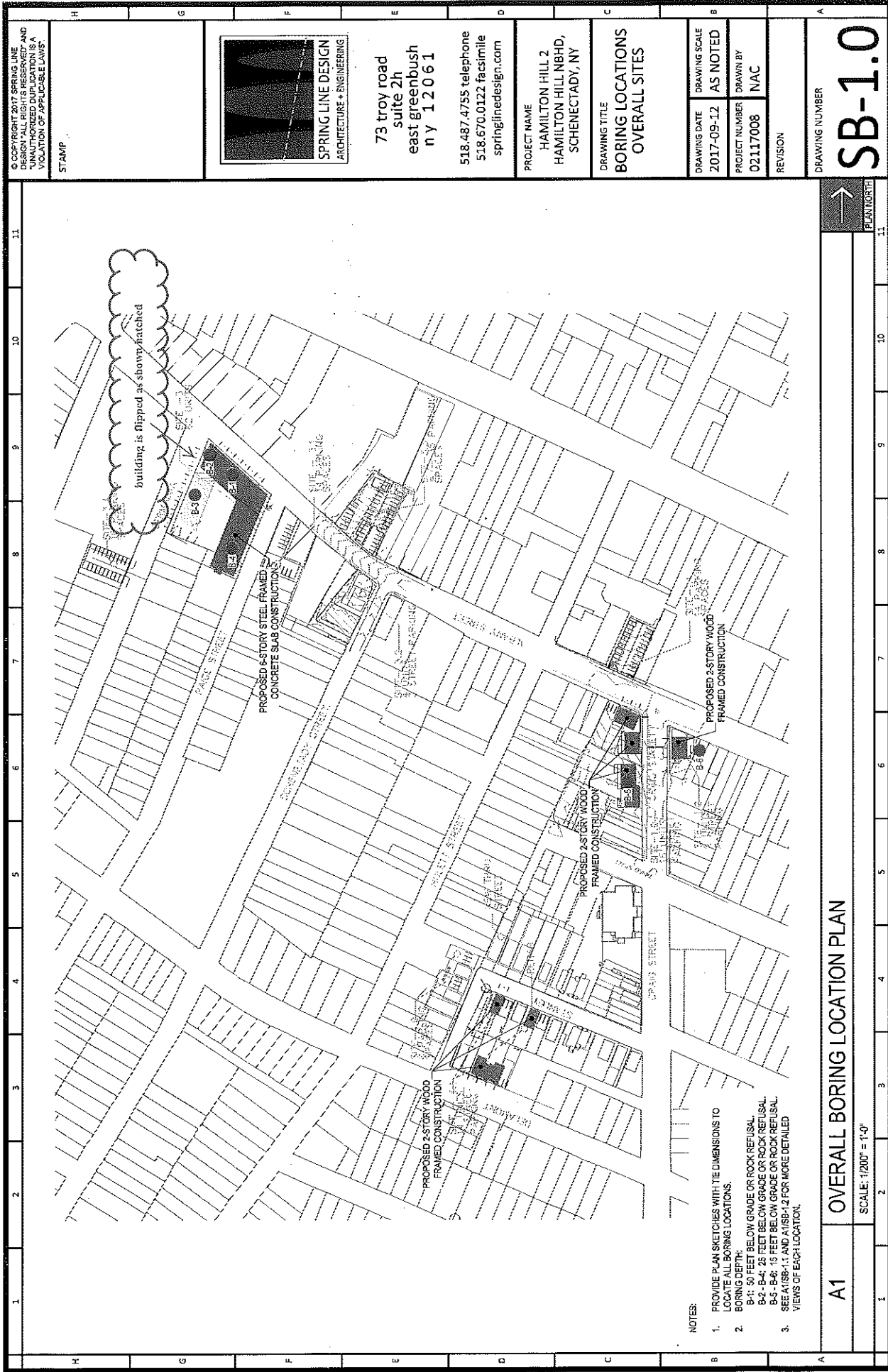
COHESIONLESS SOILS

"Trace"	: 1% to 10%	
"Trace to some"	: 10% to 20%	
"Some"	: 20% to 35%	
"And"	: 35% to 50%	
Loose	: 0 to 9 Blows	} or equivalent
Medium Dense	: 10 to 29 Blows	
Dense	: 30 to 59 Blows	
Very Dense	: ≥60 Blows	

COHESIVE SOILS

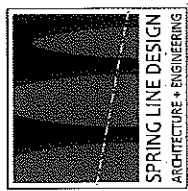
If clay content is sufficient so that clay
dominates soil properties, then clay becomes
the principle noun with the other major soil
constituent as modifiers: i.e., silty clay. Other
minor soil constituents may be added according
to classification breakdown for cohesionless soils;
i.e., silty clay, trace to some sand, trace gravel.

Soft	: 0.00 — 0.59 tons/ft ²
Medium	: 0.60 — 0.99 tons/ft ²
Stiff	: 1.00 — 1.99 tons/ft ²
Very Stiff	: 2.00 — 3.99 tons/ft ²
Hard	: ≥ 4.00 tons/ft ²



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VIOLATION OF APPLICABLE LAWS.

STAMP



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ny 12061

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springlinedesign.com

PROJECT NAME
HAMILTON HILL 2
HAMILTON HILL NBHD,
SCHENECTADY, NY

DRAWING TITLE
BORING LOCATIONS
OVERALL SITES

DRAWING DATE	DRAWING SCALE
2017-09-12	AS NOTED
PROJECT NUMBER	DRAWN BY
02117008	NAC
REVISION	

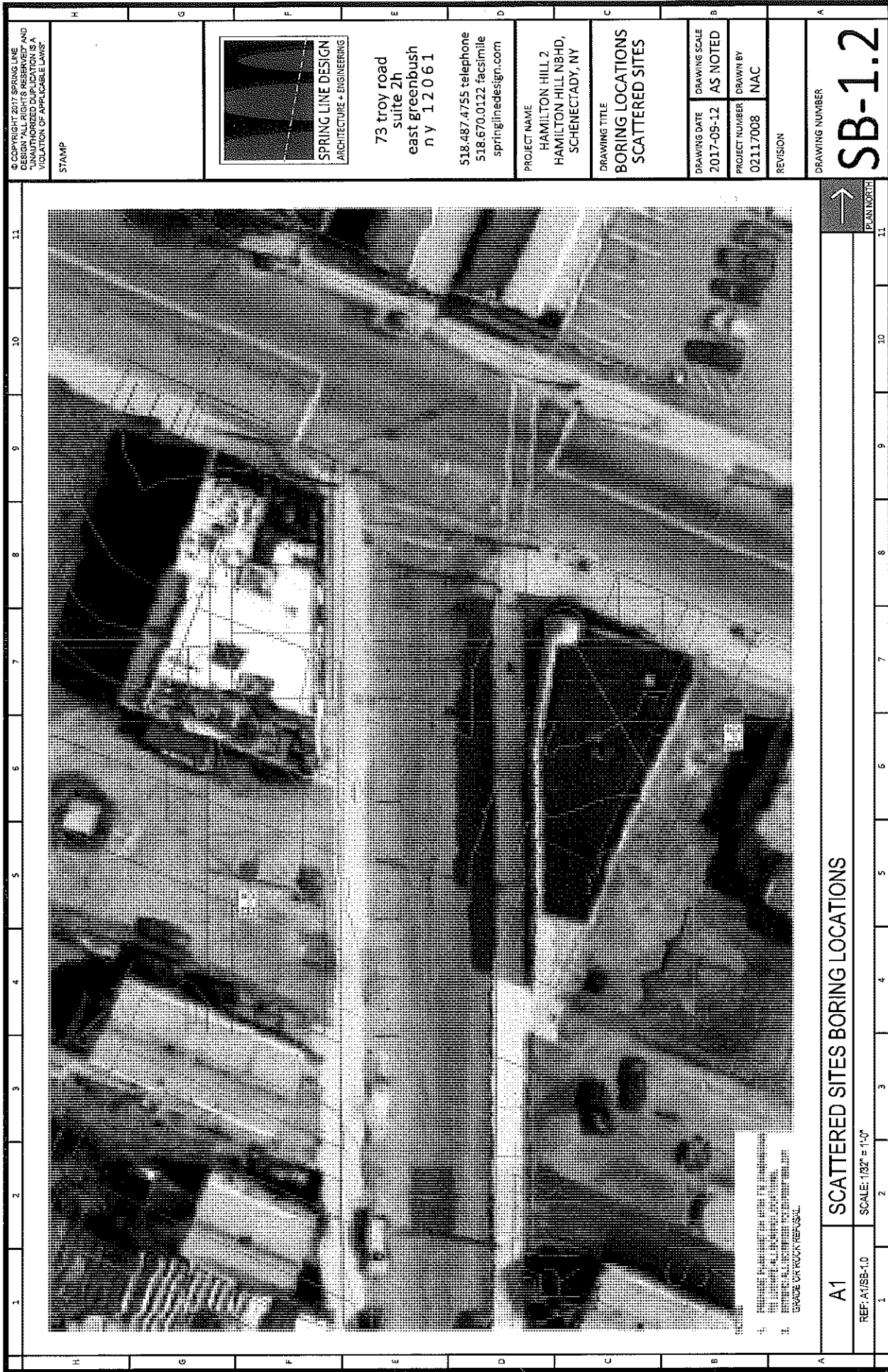
DRAWING NUMBER
SB-1.0

- NOTES:
1. PROVIDE PLAN SKETCHES WITH THE DIMENSIONS TO LOCATE ALL BORING LOCATIONS.
 2. BORING DEPTH:
B-1: 50 FEET BELOW GRADE OR ROCK REFUSAL.
B-2 - B-4: 25 FEET BELOW GRADE OR ROCK REFUSAL.
B-5 - B-6: 15 FEET BELOW GRADE OR ROCK REFUSAL.
SEE A1/SB-1.1 AND A1/SB-1.2 FOR MORE DETAILED VIEWS OF EACH LOCATION.
 - 3.

A1 OVERALL BORING LOCATION PLAN

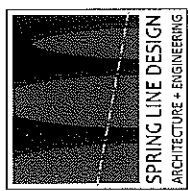
SCALE: 1/200" = 1'-0"

PLAN NORTH



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PROJECT NAME
HAMILTON HILL 2
HAMILTON HILL NBHD,
SCHENECTADY, NY

DRAWING TITLE
BORING LOCATIONS
SCATTERED SITES

DRAWING DATE
2017-09-12

DRAWING SCALE
AS NOTED

PROJECT NUMBER
02117008

DRAWN BY
NAC

REVISION

DRAWING NUMBER

SB-1.2



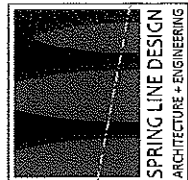
PLAN NORTH

A1 SCATTERED SITES BORING LOCATIONS

REF: A1/SS-1.0 SCALE: 1/32" = 1'-0"

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PROJECT NAME
HAMILTON HILL 2
HAMILTON HILL NBHD,
SCHEENECTADY, NY

DRAWING TITLE
BORING LOCATIONS
MIDRISE

DRAWING DATE	DRAWING SCALE
2017-09-12	AS NOTED
PROJECT NUMBER	DRAWN BY
02117008	NAC
REVISION	

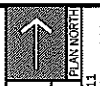
DRAWING NUMBER
SB-1.1



A. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
B. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
C. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
D. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
E. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
F. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
G. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY
H. HAMILTON HILL 2 NBHD, SCHEENECTADY, NY

A1 MIDRISE BORING LOCATIONS

REF: A1/SB-1.0 SCALE: 1/32" = 1'-0"



PROJECT NAME: Hamilton Hill 2
LOCATION: Schenectady, New York
DATE STARTED/COMPLETED: November 2017
ENGINEER/ARCHITECT:

FILE NUMBER: 3249
OFFSET: None
SURFACE ELEV.: N/A
DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger
DRILL RIG TYPE: Truck Mount
HAMMER WEIGHT: 140 Lbs
DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID
WATER LEVEL DEPTH: 6.0 ft **TIME:** WS

Daniel G Loucks PE
 PO Box 163
 Ballston Spa, New York 12020
 Phone: 518-371-7622
 Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
1	1	SS	1-1-1-1	2		Fine to Medium Sand, trace to some Silt, Brown, Moist, Loose (SM) FILL
2						
3	2	SS	2-3-4-4	7		Fine to Medium Sand and Brick, trace to some Silt, trace Gravel, Brown, Moist, Loose (SM) FILL
4						
5	3	SS	4-5-5-8	10		Fine to Medium Sand, trace to some Silt, Brown, Moist to Wet, Loose to Medium Dense (SM-SP)
6						
7	4	SS	4-4-5-4	9		
8						
9	5	SS	3-5-5-5	10		
10						
11	6	SS	6-11-8-7	19		
12						
13		PA				
14						
15						
16	7	SS	3-3-3-4	6		Silt, trace to some Fine Sand, Brown, Wet, Loose (ML)
17						
18		PA				Silt, trace to some Fine Sand, Clay, Brown, Wet, Loose/Soft (ML) (CL) Occasional Thin Clay Layers
19						Unconfined Compressive Strength = 0.4 tsf
20						
21	8	SS	3-5-3-2	8		
22						
23		PA				Silt, trace to some Clay, trace Fine Sand, Dark Gray, Moist to Wet, Loose/Soft (ML)(CL) Occasional Thin Clay Layers
24						Unconfined Compressive Strength = 0.4 tsf
25						
26	9	SS	3-3-4-4	7		
27						

BORING LOG

BORING NO: 1

SHEET 2 of 4

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 6.0 ft TIME: WS

Daniel G Loucks PE
PO Box 163
Ballston Spa, New York 12020
Phone: 518-371-7622
Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
28		PA				Silt, trace to some Fine Sand, Dark Gray, Wet, Medium Dense (ML)
29						
30						
31	10	SS	8-10-11-14	21		Silt and Fine Sand, Dark Gray, Wet, Medium Dense (SM)
32						
33		PA				
34						
35						
36	11	SS	3-5-6-7	11		
37						
38		PA				
39						
40						
41	12	SS	6-5-10-11	15		Fine Sand and Silt, Dark Gray, Wet, Medium Dense (SM-ML)
42						
43		PA				
44						
45						
46	13	SS	4-13-12-8	25		
47						
48		PA				
49						
50						
51	14	SS	13-10-8-7	18		
52						
53		PA				
54						

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 6.0 ft TIME: WS

Daniel G Loucks PE
PO Box 163
Ballston Spa, New York 12020
Phone: 518-371-7622
Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
55						Silt and Clay, Dark Gray, Moist to Wet, Loose/Stiff (ML)(CL) Layered Unconfined Compressive Strength = 1.3 tsf
56	15	SS	3-4-5-7	9		
57						
58		PA				Clayey Silt, some Clay, Dark Gray, Moist to Wet, Medium Dense/Stiff (ML)(CL) Layered Unconfined Compressive Strength = 1.0 tsf
59						
60						
61	16	SS	4-5-7-11	12		
62						
63		PA				
64						
65						
66	17	SS	4-5-8-10	13		
67						Fine Sand, some Silt, Dark Gray, Wet, Medium Dense (SM)
68		PA				
69						
70						
71	18	SS	6-8-10-11	18		
72						
73		PA				Clayey Silt and Fine Sand, Dark Gray, Moist to Wet, Medium Dense (ML-SM)
74						
75						
76	19	SS	6-8-11-13	19		
77						
78		PA				
79						Silty Clay, trace to some Silt, Dark Gray, Moist to Wet, Loose/Medium Stiff to Stiff (CL)(ML) Occasional Silt Layers Unconfined Compressive Strength = 0.8 to 1.3 tsf
80						
81	20	SS	5-4-4-5	8		

BORING LOG

BORING NO: 1

SHEET 4 of 4

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 6.0 ft TIME: WS

Daniel G Loucks PE
PO Box 163
Ballston Spa, New York 12020
Phone: 518-371-7622
Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
82	20			0		Silty Clay, trace to some Silt, Dark Gray, Moist to Wet, Loose/Medium Stiff to Stiff (CL)(ML) Occasional Silt Layers Unconfined Compressive Strength = 0.8 to 1.3 tsf
83		PA				
84		PA				
85		PA				
86	21	SS	5-10-12-13	22		Clayey Silt, some Fine Sand, Dark Gray, Moist to Wet, Medium Dense to Dense (ML)
87						
88		PA				
89		PA				
90						
91	22	SS	4-11-22-17	33		
92						
93		PA				
94		PA				End of Boring at 100.0 Feet
95						
96	23	SS	4-5-9-15	14		
97		PA				
98		PA				
99	24	SS	10-20-14-24	34		
100						
101						
102						
103						
104						
105						
106						
107						
108						

BORING LOG

BORING NO: 2

SHEET 1 of 1

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 4.0 ft TIME: WS

Daniel G Loucks PE

PO Box 163

Ballston Spa, New York 12020

Phone: 518-371-7622

Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
1	1	SS	5-5-6-7	11		Shale and Sand, trace to some Silt, Brown/Black, Moist, Medium Dense (GM-SM) FILL
2						
3	2	SS	9-16-17-18	33		Fine to Coarse Sand, some Gravel, trace to some Silt, Dark Brown, Moist, Dense (SM) FILL
4						
5	3	SS	2-3-3-2	6		Clayey Silt, trace Fine Sand, Brown, Wet, Loose (ML)
6						
7	4	SS	3-3-3-3	6		Silt and Fine Sand, Brown, Wet, Loose (ML-SM)
8						
9	5	SS	3-3-4-3	7		Silt, trace to some Fine Sand, Brown, Wet, Loose (ML)
10						
11	6	SS	3-2-3-3	5		
12						
13	7	SS	5-4-3-4	7		
14						
15	8	SS	5-5	10		Clayey Silt, Brown, Moist to Wet, Medium Dense (ML)
16						End of Boring at 15.0 Feet
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

BORING LOG

BORING NO: 3

SHEET 1 of 1

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 8.0 ft TIME: WS

Daniel G Loucks PE
PO Box 163
Ballston Spa, New York 12020
Phone: 518-371-7622
Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
1	1	SS	2-5-6-5	11		Fine to Medium Sand, trace to some Silt, Dark Brown, Moist, Medium Dense (SM) Topsoil/FILL
2						Fine to Medium Sand, trace to some Silt, Brown, Moist, Loose (SM) Possible Fill
3	2	SS	2-3-3-2	6		
4						
5	3	SS	2-2-2-3	4		
6						
7	4	SS	2-3-4-4	7		Fine to Medium Sand, trace to some Silt, trace Roots, Brown, Moist to Wet, Loose (SM)
8						
9	5	SS	2-1-1-4	2		Fine to Medium Sand, trace to some Silt, Brown, Wet, Loose to Medium Dense (SM-SP)
10						
11	6	SS	3-3-6-6	9		
12						
13	7	SS	4-7-9-9	16		
14	8	SS	4-6	10		Silt, trace to some Clay, Brown, Wet, Medium Dense/Soft (ML) (CL) Occasional Thin Clay Layers
15						End of Boring at 15.0 Feet
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

BORING LOG

BORING NO: 4

SHEET 1 of 1

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 6.0 ft TIME: ACR

Daniel G Loucks PE
PO Box 163
Ballston Spa, New York 12020
Phone: 518-371-7622
Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
1	1	SS	WRH-1-1-5	2		Fine to Medium Sand, trace to some Silt, trace Gravel, Organics, Dark Brown, Moist, Loose (SM) Topsoil/FILL
2						
3	2	SS	5-6-6-7	12		Fine to Medium Sand, trace to some Silt, trace Gravel, Brown, Moist, Loose to Medium Dense (SM) Possible Fill
4						
5	3	SS	6-4-4-7	8		
6						
7	4	SS	4-4-4-5	8		Fine Sand, trace to some Silt, Brown, Moist Loose (SM)
8						
9	5	SS	4-4-5-5	9		
10						
11	6	SS	2-2-2-2	4		
12						
13	7	SS	3-3-4-5	7		
14						
15	8	SS	4-4	8		Fine to medium Sand, trace to some Silt, Brown, Moist to Wet, Loose (SM)
16						End of Boring at 15.0 Feet
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

BORING LOG

BORING NO: 5

SHEET 1 of 1

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 8.0 ft TIME: WS

Daniel G Loucks PE
 PO Box 163
 Ballston Spa, New York 12020
 Phone: 518-371-7622
 Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
1	1	SS	2-2-4-4	6		Fine to Coarse Sand, trace to some Silt, Brown, Moist, Loose (SM) FILL
2						
3	2	SS	3-3-4-5	7		
4						Fine to Coarse Sand, trace Gravel Silt, Dark Brown, Moist, Loose to Medium Dense (SM-SP) Possible Fill
5	3	SS	4-6-5-6	11		
6						
7	4	SS	4-3-3-3	6		Fine to Coarse Sand, trace Silt, Dark Brown, Moist, Loose (SM-SP)
8						
9	5	SS	2-2-2-2	4		
10						Fine to Medium Sand, trace to some Silt, trace Gravel, Dark Brown, Moist to Wet, Loose (SM)
11	6	SS	2-1-1-1	2		
12						
13	7	SS	2-2-2-2	4		Silt, trace to some Fine Sand, Brown, Wet, Looswe (ML)
14	8	SS	2-2	4		
15						End of Boring at 15.0 Feet
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

BORING LOG

BORING NO: 6

SHEET 1 of 1

PROJECT NAME: Hamilton Hill 2

FILE NUMBER: 3249

LOCATION: Schenectady, New York

OFFSET: None

DATE STARTED/COMPLETED: November 2017

SURFACE ELEV.: N/A

ENGINEER/ARCHITECT:

DRILL CONTRACTOR: Parrott Wolff Inc.

DRILLING METHOD: Hollow Stem Auger

DRILL RIG TYPE: Truck Mount

HAMMER WEIGHT: 140 Lbs

DROP: 30 Inches

CASING DIAMETER: OD/ID: 3.25 inch ID

WATER LEVEL DEPTH: 11.9 ft TIME: BCR

Daniel G Loucks PE
PO Box 163
Ballston Spa, New York 12020
Phone: 518-371-7622
Fax: 518-383-2069

DEPTH	Sample Number	Sample Type	BLOW COUNTS per 6 inches	"N" Value	Recovery	DESCRIPTION
1	1	SS	11-19-8-7	27		Fine to Coarse Sand and Gravel, trace to some Silt, Concrete, Gray, Moist, Medium Dense (SM-GM) FILL
2						
3	2	SS	4-6-5-6	11		Fine to Medium Sand, trace to some Brick, Silt, trace Ash, Dark Brown, Moist, Medium Dense (SM) FILL
4						
5	3	SS	4-3-2-2	5		Concrete, some Sand, trace to some Silt, trace Gravel, Dark Gray, Moist, Loose to Medium Dense (GM) FILL
6						
7	4	SS	2-19-4-3	23		Fine to Medium Sand, trace to some Silt, Brown, Moist, Loose (SM)
8						
9	5	SS	2-3-3-2	6		
10						
11	6	SS	4-3-3-3	6		Fine to Coarse Sand, trace to some Silt, Dark Brown, Moist to Wet, Loose (SM)
12						
13	7	SS	2-3-2-2	5		Fine Sand, some Silt, Brown, Wet, Loose (SM)
14						
15	8	SS	3-3	6		Silt, trace to some Fine Sand, Brown, Wet, Loose (ML)
16						End of Boring at 15.0 Feet
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Hamilton Hill 2
B-1

Liquefaction Analysis

SPT No.	Depth (ft)	N field	Ce	Cr	Cs	Cb	Total Stress (psf)	Effective Stress (psf)	Cn	N1,60	FC (%)	N1,60,cs	Ksigma	Alpha	Kalpa	CRR	CSR	Safety Factor
1	1	2	.95	1	1	1	125	125	1.7	3.2	15	5.85	1	---	---	---	.095	---
2	3	7	.95	1	1	1	375	375	1.7	11.3	15	14.34	1	---	---	---	.095	---
3	5	10	.95	1	1	1	625	625	1.7	16.1	11	17.73	1	---	---	---	.099	---
4	7	9	.95	1	1	1	845	782.6	1.64	14	11	15.57	1	---	---	.346	.103	3.35
5	9	10	.95	1	1	1	1065	877.8	1.55	14.7	11	16.29	1	---	---	.361	.111	3.25
6	11	19	.95	1	1	1	1275	963	1.48	26.7	11	28.61	1	---	---	.82	.121	6.77
7	16	6	.95	1	1	1	1775	1151	1.35	7.6	75	14.12	1	---	---	.315	.14	2.25
8	21	8	.95	1	1	1	2275	1339	1.25	9.5	100	16.4	1	---	---	.364	.153	2.37
9	26	7	.95	1	1	1	2775	1827	1.17	7.7	100	14.24	1	---	---	.318	.161	1.97
10	31	21	.95	1	1	1	3275	1715	1.11	22.1	75	31.52	1	---	---	NL	.166	---
11	36	11	.95	1	1	1	3775	1903	1.05	10.9	40	18.08	1	---	---	.402	.166	2.42
12	41	15	.95	1	1	1	4275	2091	1	14.2	40	22.04	1	---	---	.506	.163	3.1
13	46	25	.95	1	1	1	4775	2279	.96	22.8	40	32.36	.97	---	---	NL	.157	---
14	51	18	.95	1	1	1	5275	2467	.92	15.7	50	23.84	.946	---	---	.534	.151	3.53
15	55	9	.95	1	1	1	5675	2617.39	.89	7.6	100	14.12	.942	---	---	.297	.145	2.04
16	61	12	.95	1	1	1	6275	2843	.86	9.8	100	16.76	.914	---	---	.34	.136	2.5

Notes:

CSR analysis using Seed & Idriss (1971)
 CSR File: SPT Data and Seed et al. Method in 1997 NCEER Workshop
 CRR using Seed & Idriss (1971) Method in 1997 NCEER Workshop
 CRR using Seed & Idriss (1971) Method in 1997 NCEER Workshop
 Earthquake Magnitude for CSR Analysis: 6.0 Mw
 Peak Ground Acceleration for CSR Analysis: .147
 Magnitude Scaling Factor (MSF): 2.088
 Depth to Water Table for CSR Analysis (ft): 6
 Depth to Base Layer for CSR Analysis (ft): 6
 Depth to Base Layer for CSR Analysis (ft): 62.5
 Cn Option: Liao & Whitlock (1989)
 Ksigma Option: Hynes & Olsen (1999)
 SPT Energy Ratio: Safety Hammer(1): 95
 **effective stress computed using Depth to Water Table for CRR Analysis
 *value modified by user

Hamilton Hill 2
B-1
Seismic Induced Settlement Analysis

SPT No.	Depth (ft)	Thickness (ft)	Soil Type	(N)1	(N1)60,cs	N(1,J)	CSR M=7.5	FSL	Ecyc (%)	Evol (%)	Settlement (in)
1	1	2		5.85	----	----	.045	----	1.9429E-03	.0273	.006
2	3	2		14.34	----	----	.045	----	2.5669E-03	.0091	.002
3	5	2		17.73	----	----	.047	----	3.2896E-03	.0073	.001
4	7	2		----	15.57		.049	3.35		----	0
5	9	2		----	16.29		.053	3.25		----	0
6	11	3.5		----	28.61		.057	6.77		----	0
7	16	5		----	14.12		.067	2.25		----	0
8	21	5		----	16.4		.073	2.37		----	0
9	26	5		----	14.24		.077	1.97		----	0
10	31	5		----	----	----	----	NFSL		----	0
11	36	5		----	18.08		.079	2.42		.1	.06
12	41	5		----	22.04		.078	3.1		.1	.06
13	46	5		----	----	----	----	NFSL		----	.06
14	51	4.5		----	23.84		.072	3.53		.1	.054
15	55	5		----	14.12		.069	2.04		.1	.06
16	61	3		----	16.76		.065	2.5		.1	.036
Total Settlement (in):											.339

Notes:

CSR analysis using Seed & Idriss (1971)
 CSR analysis on File:
 Earthquake used in CSR Analysis: 6.0 Mw
 CRR File: C:\Program Files\GeoMotions\Projects\3249.CRR
 CRR - SPT Data & Seed et. al. Method in NCEER Workshop
 CRR results on File: C:\Program Files\GeoMotions\Projects\3249.CRR
 Depth to Water Table for CRR Analysis (ft): 6
 Settlement of Dry Sands: Tokimatsu & Seed (1987)
 Settlement of Saturated Sands: Tokimatsu & Seed (1987)

Design Maps Summary Report

User-Specified Input

Report Title Hamilton Hill 2

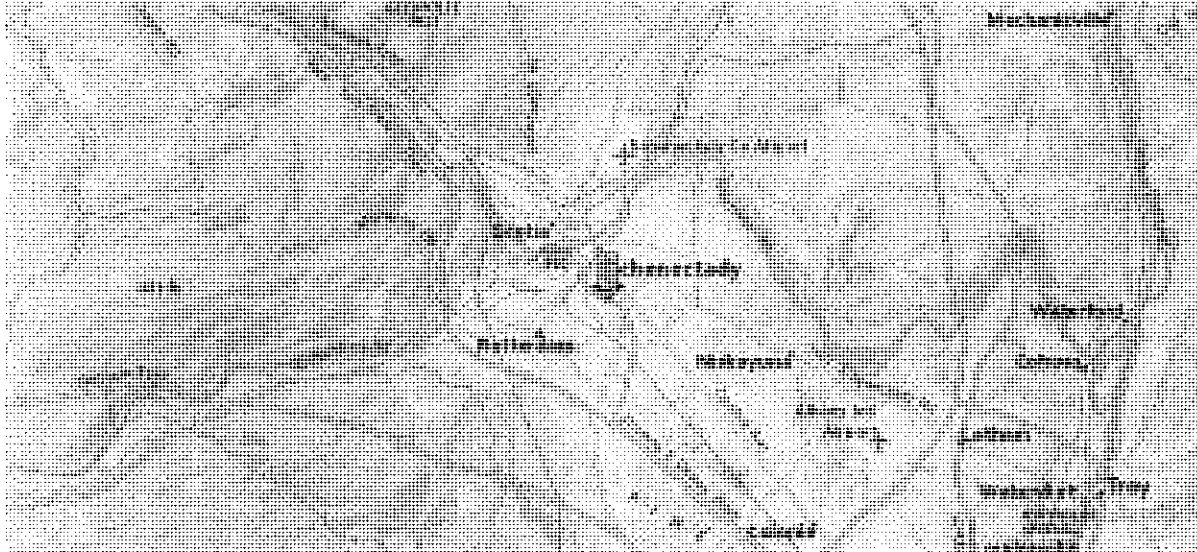
Mon November 20, 2017 15:16:45 UTC

Building Code Reference Document 2012/2015 International Building Code
(which utilizes USGS hazard data available in 2008)

Site Coordinates 42.80774°N, 73.93728°W

Site Soil Classification Site Class D – "Stiff Soil"

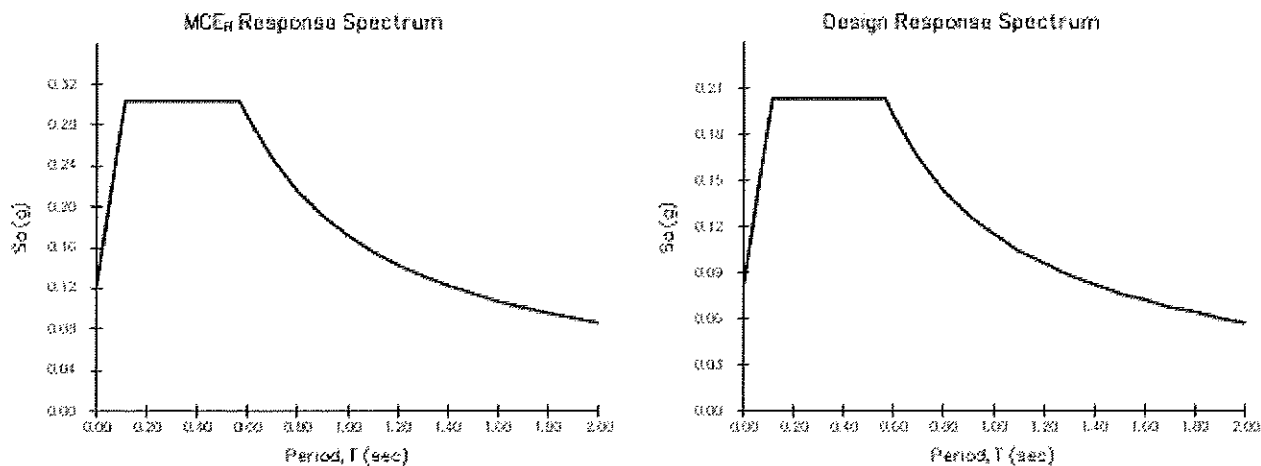
Risk Category I/II/III



USGS-Provided Output

$S_s = 0.190 \text{ g}$	$S_{MS} = 0.304 \text{ g}$	$S_{DS} = 0.203 \text{ g}$
$S_1 = 0.072 \text{ g}$	$S_{M1} = 0.172 \text{ g}$	$S_{D1} = 0.115 \text{ g}$

For information on how the S_s and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

CONSTRUCTION TECHNOLOGY

INSPECTION & TESTING DIVISION, P.D. & T.S., INC.

4 William Street, Ballston Lake, New York 12019

Phone: (518) 399-1848 Fax: (518) 399-1913

CLIENT: **DANIEL LOUCKS, P.E.**
POST OFFICE BOX 163
BALLSTON SPA, NEW YORK 12020

REPORT DATE: 11/20/17
SAMPLE NUMBER: 17786
OUR FILE NO: 750.001

Tam Jaslin

ATTN: MR. DANIEL LOUCKS, P.E.

REVIEWED BY: TOM JOSLIN, SET, NICET

PROJECT: **HAMILTON HILL**

ASTM C136 / C117 / D422: SIZE DISTRIBUTION OF SOIL & AGGREGATES: SIEVE ANALYSIS

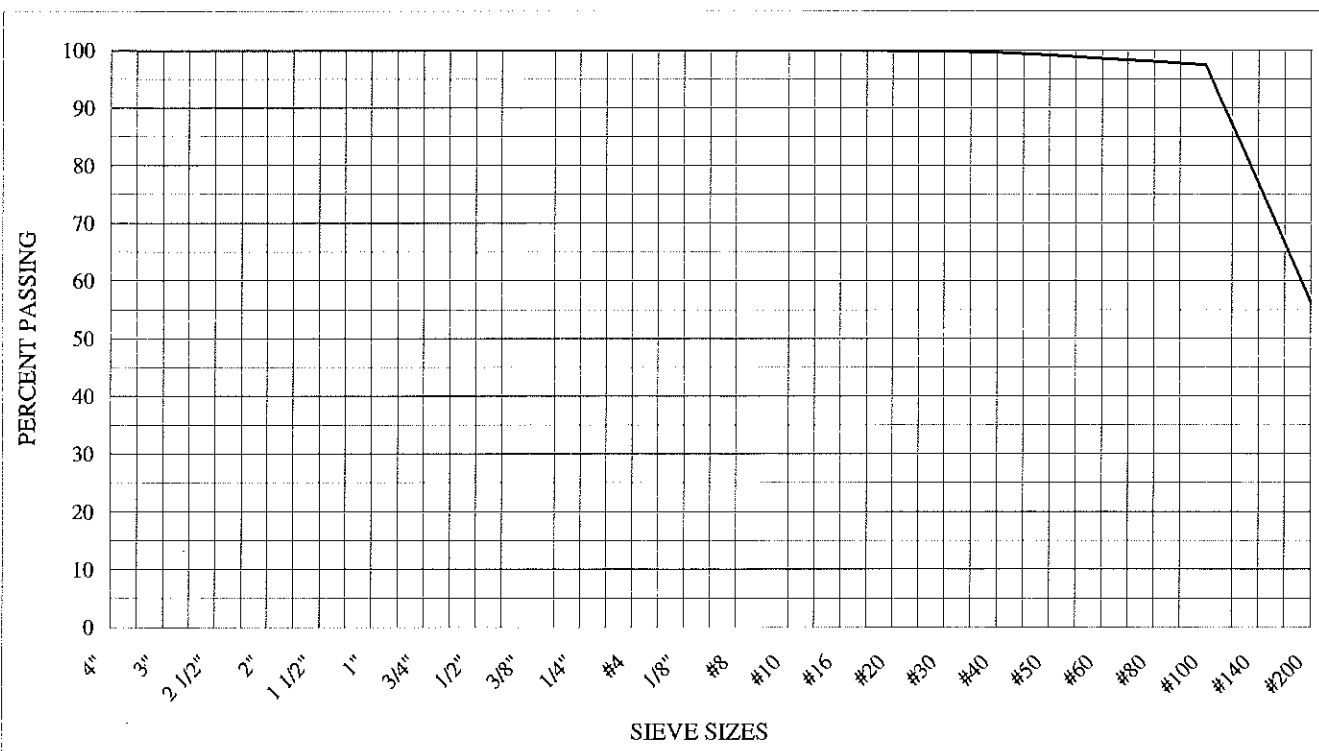
MATERIAL SOURCE: CLIENT ID: B-1, S-12, 40-42'

MATERIAL DESCRIPTION: SILT/CLAY; and fine Sand

MATERIAL PROJECT USE: PER CLIENT:

EVALUATION SPECIFICATION: PER CLIENT:

COARSE SIEVE SERIES: US STANDARD				MEDIUM SIEVE SERIES: US STANDARD				FINE SIEVE SERIES: US STANDARD			
SIEVE SIZE	PERCENT RETAINED	PERCENT PASSING	SPECIFICATION ALLOWANCE	SIEVE SIZE	PERCENT RETAINED	PERCENT PASSING	SPECIFICATION ALLOWANCE	SIEVE SIZE	PERCENT RETAINED	PERCENT PASSING	SPECIFICATION ALLOWANCE
4"				1/4"				#50	0.9	99.1	
3"				#4				#60			
2 1/2"				1/8"				#80			
2"				#8				#100	2.5	97.5	
1 1/2"				#10				#140			
1"				#16		100.0		#200	43.7	56.3	
3/4"				#20				SILT			
1/2"				#30	0.2	99.8		CLAY			
3/8"				#40	0.4	99.6		COLLOID			



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Phone: (518) 399-1848 Fax: (518) 399-1913

CLIENT: **DANIEL LOUCKS, P.E.**

POST OFFICE BOX 163

BALLSTON SPA, NEW YORK 12020

REPORT NUMBER: 1 : PAGE: 1

REPORT DATE: 11/20/17

OUR FILE NUMBER: 750.001

LAB CONTROL NUMBER: 17787

ATTN: MR. DANIEL LOUCKS, P.E.

PROJECT: **HAMILTON HILL**

DETERMINATION OF PLASTICITY INDEX & WATER (MOISTURE) CONTENT IN SOILS

SAMPLE ID: CLIENT ID: B-1, S-17, 65-67'

ASTM D-4318

LIQUID LIMIT

29.0%

ASTM D-4318

PLASTIC LIMIT

18.6%

ASTM D-4318

PLASTICITY INDEX

10

ASTM D-2216

MOISTURE CONTENT

24.1%

AS RECEIVED

REPORT DISTRIBUTION

1: FILE

2:

3:

4:

RESPECTFULLY SUBMITTED,

CONSTRUCTION TECHNOLOGY

Tom Joslin

TOM JOSLIN, S.E.T. (NICET)

MANAGER TECHNICAL SERVICES

Table 3.5 Unified Soil Classification

Field Identification Procedures (Excluding particles larger than 3 in. and basing fractions on estimated weights)			Group Symbols	Typical Names	Information Required for Describing Soils	Laboratory Classification Criteria		
Coarse-grained soils More than half of material is larger than No. 100 sieve size ^b	Gravels More than half of coarse fraction is larger than No. 4 sieve size	Clean gravels (little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines	Give typical name; indicate approximate percentages of sand and gravel; maximum size; and nature, surface condition, and hardness of the coarse sand; local or geologic name and other pertinent descriptive information; and symbols in parentheses	$C_u = \frac{D_{60}}{D_{10}}$ $C_c = \frac{D_{30}^2}{D_{10} \times D_{60}}$	Greater than 4 Between 1 and 3	
		Gravels with fines (appreciable amount of fines)	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines			Not meeting all gradation requirements for GW	
	Sands More than half of coarse fraction is smaller than No. 4 sieve size	Clean sands (little or no fines)	SW	Well graded sands, gravelly sands, little or no fines	For undisturbed soils add information on stratification, degree of compaction, cementation, and moisture characteristics	$C_u = \frac{D_{60}}{D_{10}}$ $C_c = \frac{D_{30}^2}{D_{10} \times D_{60}}$	Greater than 6 Between 1 and 3	
		Sands with fines (appreciable amount of fines)	SP	Poorly graded sands, gravelly sands, little or no fines			Not meeting all gradation requirements for SW	
Fine-grained soils More than half of material is smaller than No. 200 sieve size	Silt and clay Liquid limit less than 50	Nonplastic fines (for identification procedures, see CL below)	SM	Silty sands, poorly graded sand-silt mixtures	Example: Silty sand, gravelly; about 20% hard, angular gravel particles 1-in. maximum size; rounded and subangular sand grains coarse to fine, about 15% non-plastic fines; with low dry strength; well compacted and moist in place; alluvial sand; (SM)	5% to 12% Less than 5% 200 sieve size coarse-grained soils are classified as follows: Determine percentages of gravel and sand from grain size curve Depending on percentage of fines (fraction smaller than No. 200 sieve size) coarse-grained soils are classified as follows: GW, GP, SW, SP GM, GC, SM, SC	Greater than 7 greater than 7	
		Plastic fines (for identification procedures, see CL below)	SC	Clayey sands, poorly graded sand-clay mixtures			Greater than 7	
	Highly Organic Soils	Nonplastic fines (for identification procedures, see CL below)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands with slight plasticity	Give typical name; indicate degree and character of plasticity, amount and maximum size of coarse grains; colour in wet condition, odour if any, local or geologic name, and other pertinent descriptive information, and symbol in parentheses		Greater than 7	
		Plastic fines (for identification procedures, see CL below)	CL	Inorganic clays of low to medium plasticity, gravels, silty clays, silty clays, lean clays			Greater than 7	
Identification Procedures on Fraction Smaller than No. 40 Sieve Size								
Fine-grained soils More than half of material is smaller than No. 200 sieve size	Silt and clay Liquid limit less than 50	Dry Strength (crushing characteristics):						
		Dilatancy (reaction to shaking)						
	Silt and clay Liquid limit greater than 50	Nonplastic fines (for identification procedures, see CL below)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands with slight plasticity	Give typical name; indicate degree and character of plasticity, amount and maximum size of coarse grains; colour in wet condition, odour if any, local or geologic name, and other pertinent descriptive information, and symbol in parentheses		Greater than 7	
		Plastic fines (for identification procedures, see CL below)	CL	Inorganic clays of low to medium plasticity, gravels, silty clays, silty clays, lean clays			Greater than 7	
Highly Organic Soils	Silt and clay Liquid limit greater than 50	Nonplastic fines (for identification procedures, see CL below)	OL	Organic silts and organic silty clays of low plasticity	For undisturbed soils add information on structure, stratification, consistency in undisturbed and remoulded states, moisture and drainage conditions		Greater than 7	
		Plastic fines (for identification procedures, see CL below)	OH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, clastic silts			Greater than 7	
	Highly Organic Soils	Nonplastic fines (for identification procedures, see CL below)	CH	Inorganic clays of high plasticity, fat clays			Greater than 7	
		Plastic fines (for identification procedures, see CL below)	OH	Organic clays of medium to high plasticity			Greater than 7	
		Nonplastic fines (for identification procedures, see CL below)	PI	Peat and other highly organic soils			Greater than 7	
		Field Identification Procedure for Fine Grained Soils or Fractions						
		Dry Strength (Crushing characteristics):						
		After removing particles larger than No. 40 sieve size, mould a pat of soil to the consistency of putty, adding water if necessary. Allow the pat to dry completely by oven-drying or air drying, and then test its strength by breaking and crumbling between the fingers. This strength is a measure of the character and quantity of the colloidal fraction contained in the soil. The dry strength increases with increasing plasticity.						
		High dry strength is characteristic for clays of the CH group. A typical inorganic silt possesses only very slight dry strength. Silty fine sands and silts have about the same slight dry strength, but can be distinguished by the feel when powdering the dried specimen. Fine sand feels gritty whereas a typical silt has the smooth feel of flour.						
		Toughness (Consistency near plastic limit):						
		After removing particles larger than No. 40 sieve size, a specimen of soil about one-half inch cube in size, is moulded to the consistency of putty. If too dry, water must be added and if sticky, the specimen should be spread out in a thin layer and allowed to lose some moisture by evaporation. Then the specimen is rolled out by hand on a smooth surface or between the palms into a thread about one-eighth inch in diameter. The thread is then folded and re-rolled repeatedly. During this manipulation the moisture content is gradually reduced and the specimen stiffens, finally loses its plasticity, and crumbles when the plastic limit is reached.						
After the thread crumbles, the pieces should be lumped together and a slight kneading action continued until the lump crumbles.								
The tougher the thread near the plastic limit and the stiffer the lump when it finally crumbles, the more potent is the colloidal clay fraction in the soil. Weakness of the thread at the plastic limit and quick loss of coherence of the lump below the plastic limit indicate either inorganic clay of low plasticity, or materials such as kaolin-type clays and organic clays which occur below the A-line.								
Highly organic clays have a very weak and spongy feel at the plastic limit.								

Use grain size curve in identifying the fractions as given under field identification

Determine percentages of gravel and sand from grain size curve
Depending on percentage of fines (fraction smaller than No. 200 sieve size) coarse-grained soils are classified as follows:
GW, GP, SW, SP
GM, GC, SM, SC

Borderline cases requiring use of dual symbols

Atterberg limits below "A" line, or P_f less than 4 and γ are borderline cases requiring use of dual symbols

Atterberg limits above "A" line, with P_f greater than 7

Atterberg limits below "A" line or P_f less than 5

Atterberg limits below "A" line with P_f greater than 7

Not meeting all gradation requirements for SW

Not meeting all gradation requirements for GW

Greater than 4
Between 1 and 3

Greater than 6
Between 1 and 3

Greater than 7
greater than 7

Greater than 7
greater than 7

Plasticity index

Plasticity chart for laboratory classification of fine grained soils

Liquid limit

Atterberg limits below "A" line or P_f less than 5

Atterberg limits below "A" line with P_f greater than 7

Atterberg limits below "A" line, or P_f less than 4 and γ are borderline cases requiring use of dual symbols

Atterberg limits above "A" line, with P_f greater than 7

Not meeting all gradation requirements for SW

Not meeting all gradation requirements for GW

Greater than 4
Between 1 and 3

Greater than 6
Between 1 and 3

Greater than 7
greater than 7

From Wagner, 1957.

^a Boundary classifications. Soils possessing characteristics of two groups are designated by combinations of group symbols. For example GW-GC, well graded gravel-sand mixture with clay binder.

^b All sieve sizes on this chart are U.S. standard.

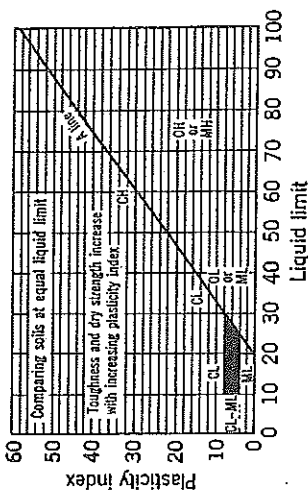
These procedures are to be performed on the minus No. 40 sieve size particles, approximately 1/4 in. For field classification purposes, screening is not intended, simply remove by hand the coarse particles that interfere with the tests.

Dilatancy (Reaction to shaking):

After removing particles larger than No. 40 sieve size, prepare a pat of moist soil with a volume of about one-half cubic inch. Add enough water if necessary to make the soil soft but not sticky.

Place the pat in the open palm of one hand and shake horizontally, striking vigorously against the other hand several times. A positive reaction consists of the appearance of water on the surface of the pat which changes to a lively consistency and becomes glossy. When the sample is squeezed between the fingers, the water and gloss disappear from the surface, the pat stiffens and finally it cracks or crumbles. The rapidity of appearance of water during shaking and of its disappearance during squeezing assist in identifying the character of the fines in a soil.

Very fine clean sands give the quickest and most distinct reaction whereas a plastic clay has no reaction. Inorganic silts, such as a typical rock flour, show a moderately quick reaction.



Plasticity chart
for laboratory classification of fine grained soils

Soil Characteristics Pertinent to Roads and Airfields

Major Divisions	Letter (1)	Name	Value as Subgrade When Not Subject to Frost Action	Value as Subbase When Not Subject to Frost Action	Value as Base When Not Subject to Frost Action	Potential Frost Action	Compressibility and Expansion	Drainage Characteristics	Compaction Equipment	Unit Dry Weight lb. per cu. ft.	Typical Design Values	
											Subgrade Modulus k lb. per cu. in.	CBR (2)
COARSE- GRAINED SOILS	GW	Well-graded gravels or gravel-sand mixtures, little or no fines	Excellent	Excellent	Good	None to very slight	Almost none	Excellent	Crawler-type tractor, rubber-tired roller, steel-wheeled roller	125-140	300-500	40-80
	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines	Good to excellent	Good	Fair to good	None to very slight	Almost none	Excellent	Crawler-type tractor, rubber-tired roller, steel-wheeled roller	110-140	300-500	30-60
	d	Silty gravels, gravel-sand-silt mixtures	Good to excellent	Good	Fair to good	Slight to medium	Very slight	Fair to poor	Rubber-tired roller, sheepfoot roller, close control of moisture	125-145	300-500	40-60
	GM		Good	Fair	Poor to not suitable	Slight to medium	Slight	Poor to practically impervious	Rubber-tired roller, sheepfoot roller	115-135	200-500	20-30
	u	Clayey gravels, gravel-sand-clay mixtures	Good	Fair	Poor to not suitable	Slight to medium	Slight	Poor to practically impervious	Rubber-tired roller, sheepfoot roller	130-145	200-500	20-40
	OC											
	SW	Well-graded sands or gravelly sands, little or no fines	Good	Fair to good	Poor	None to very slight	Almost none	Excellent	Crawler-type tractor, rubber-tired roller	110-130	200-400	20-40
	SP	Poorly graded sands or gravelly sands, little or no fines	Fair to good	Fair	Poor to not suitable	None to very slight	Almost none	Excellent	Crawler-type tractor, rubber-tired roller	105-135	150-400	10-40
	d	Silty sands, sand-silt mixtures	Fair to good	Fair to good	Poor	Slight to high	Very slight	Fair to poor	Rubber-tired roller, sheepfoot roller, close control of moisture	120-135	150-400	15-40
	SM		Fair	Poor to fair	Not suitable	Slight to high	Slight to medium	Poor to practically impervious	Rubber-tired roller, sheepfoot roller	100-130	100-300	10-20
FINE- GRAINED SOILS	u	Clayey sands, sand-clay mixtures	Poor to fair	Poor	Not suitable	Slight to high	Slight to medium	Poor to practically impervious	Rubber-tired roller, sheepfoot roller	100-135	100-300	5-20
	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	Poor to fair	Not suitable	Not suitable	Medium to very high	Slight to medium	Fair to poor	Rubber-tired roller, sheepfoot roller, close control of moisture	90-130	100-200	15 or less
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	Poor to fair	Not suitable	Not suitable	Medium to high	Medium	Practically impervious	Rubber-tired roller, sheepfoot roller	90-130	50-150	15 or less
	OL	Organic silts and organic silt-clays of low plasticity	Poor	Not suitable	Not suitable	Medium to high	Medium to high	Poor	Rubber-tired roller, sheepfoot roller	90-105	50-100	5 or less
	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	Poor	Not suitable	Not suitable	Medium to very high	High	Fair to poor	Sheepfoot roller, rubber-tired roller	80-105	50-100	10 or less
	CH	Inorganic clays of medium to high plasticity, organic silts	Poor to fair	Not suitable	Not suitable	Medium	High	Practically impervious	Sheepfoot roller, rubber-tired roller	90-115	50-150	15 or less
	OH	Organic clays of high plasticity, fat clays	Poor to very poor	Not suitable	Not suitable	Medium	High	Practically impervious	Sheepfoot roller, rubber-tired roller	80-110	25-100	5 or less
	PI	Peat and other highly organic soils	Not suitable	Not suitable	Not suitable	Slight	Very high	Fair to poor	Compaction not practical	—	—	—

Note:

(1) Unit Dry Weights are for compacted soil at optimum moisture content for modified AASHO compaction effort. Division of GM and SM groups into subdivision of d and u are for roads and airfields only. Subdivision is basis of Atterberg limits: suffix d (e.g., GMd) will be used when the liquid limit (LL) is 25 or less and the plasticity index is 6 or less; the suffix u will be used otherwise.

(2) The maximum value that can be used in design of airfields is, in some cases, limited by gradation and plasticity requirements.

GENERAL QUALIFICATIONS

This report has been prepared in order to aid in the evaluation of this property and to assist the architect and/or engineer in the design of this project. The scope of the project and location described herein, and my description of the project represents my understanding of the significant aspects relevant to soil and foundation characteristics. In the event that any changes in the design or location of the proposed facilities, as outlined in this report, are planned, I should be informed so the changes can be reviewed and the conclusions of this report modified or approved in writing by myself.

It is recommended that all construction operations dealing with earthwork and foundations be inspected by an experienced soil engineer to assure that the design requirements are fulfilled in the actual construction. If you wish, I would welcome the opportunity to review the plans and specifications when they have been prepared so that I may have the opportunity of commenting on the effect of soil conditions on the design and specifications.

The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings and/or test pits performed at the locations indicated on the location diagram and from any other information discussed in the report. This report does not reflect any variations which may occur between these boring and/or test pits. In the performance of subsurface investigations, specific information is obtained at specific locations at specific times. However, it is a well-known fact that variations in soil and rock conditions exist on most sites between boring locations and also such situations as groundwater conditions vary from time to time. The nature and extent of variations may may not become evident until the course of construction. If variations then appear evident, it will be necessary for a reevaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of any variations.

EXHIBIT 3

**NYSDEC COMMENT LETTER TO THE DRAFT
RIR (DATED JUNE 12, 2019)**

**SUPPLEMENTAL RI WORK PLAN (DATED JULY
18, 2019)**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 4

1130 North Westcott Road, Schenectady, NY 12306-2014

P: (518) 357-2045 | F: (518) 357-2460

www.dec.ny.gov

June 12, 2019

Hamilton Hill II Limited Partnership

Attn: Jennica Huff

90 State Street

Suite 602

Albany, NY 12207

ipetrik-huff@tcbinc.org

(Sent via email and USPS)

RE: Comments on Draft Remedial Investigation Report
Hamilton Hill II – Target Area 1 Site, Schenectady (Site No. C447052)
830 & 834 Albany Street Parcels

Dear Ms. Huff:

The New York State Departments of Environmental Conservation (DEC) and Health (DOH) have reviewed the draft Remedial Investigation (RI) report submitted electronically on May 6, 2019 by C.T. Male Associates on behalf of Hamilton Hill II Limited Partnership. Based on our review of the draft document, the following comments are provided.

- X** Section 1.1 – As a result of relocating of RIMW6D, the extent of metals and SVOCs impacts previously detected in soil and groundwater at GP-08/MW-02 has not been fully defined. Therefore, additional sampling should be conducted in this area, if feasible, now that the building has been removed.
- 2. Section 1.3.1 – The last paragraph in this section should indicate the operational status of site utilities (e.g., turned off or hard disconnect). **Sent email to Jennica on 6/12/19 asking her this.**
- 3.** Section 1.3.4 describes contaminant of concern based on pre-RI sampling. The contaminants of concern (i.e., those expected to drive remediation) based on the accumulated data should be listed for each media evaluated.
- X** Section 2.4 indicates that the utility locator detected a subsurface anomaly suggesting a buried tank or drum exists near the previously identified abandoned UST, but this was not confirmed through field investigation. Based on the observed groundwater flow direction, additional investigation of the UST and adjacent anomaly is needed. Subsurface soil and groundwater samples should be collected from the downgradient side of the tank(s) as described in DER-10 section 3.9(a)4.
- 5.** Section 2.3 – Indicate in the first paragraph the rationale for selecting sub-slab soil sample locations (e.g., staining of slab or near recognized environmental concerns such as the known or suspected past locations of ASTs or dry cleaning equipment.)
- 6.** Section 2.3: Please indicate whether the laboratory is ELAP certified.
- 7.** Section 2.5 – Clarify the analytical sample interval depths indicated for RIMW1 through RIMW6 (do these samples all represent a six-foot interval?).



Department of
Environmental
Conservation

8. Section 2.5 – Please clarify whether the suspected USTs on the site have been removed.
9. Section 2.12 – Per the RI work plan and DER-10, the well search should include county and local municipality records.
10. Section 2.14 – IDW characterization and proper disposal should occur promptly at the conclusion of each field investigation.
11. Section 2.15 – Correct the apparent typo in the third paragraph (upwind dust monitor readings).
12. Section 3.1.5 – Based on the data collected to date, the groundwater flow direction should be described as observed, rather than inferred, as stated throughout the draft report.
13. Section 4.2 – Clarify that project-specific SCGs were not established (*i.e.*, the results are compared to the generic SCOs and groundwater standards). Section 4.9 also references site- and project-specific SCGs and should be clarified.
14. Section 4.3.7 – State the range of detection limits for the emerging contaminants and include specifically PFOA, PFOS, and 1-4 dioxane.
15. Section 4.5.7 – As noted in DER-10 section 3.5.2, the intent of field screening soils during the field investigation is to focus the analytical sampling toward the most likely source areas. However, the soil sample intervals with elevated PID readings listed in this section were not submitted for laboratory analysis. Pursuant to DER-10 paragraph 3.11(b)3iii(2), soil samples from 0'-2' at the RIMW6 and RISV1 locations and 4'-8' at the RISB8 location should be collected and analyzed VOCs. Alternatively, if appropriate, the report should provide the rationale for not analyzing these samples.
16. Section 4.6.7 – Indicate the detected concentrations of PFAS in the text and compare in terms of upgradient and downgradient sampling locations.
17. Additional soil and groundwater investigation of the RISV1 area is needed based on the soil vapor results (PCE detected at 440 ug/m³) and PID screening results (33.9 ppm from 0'-2') from this location.
18. Section 4.9 – For the purpose of evaluating remedial alternatives, it would be helpful to separate HFM from native subsurface soil.
19. Section 4.9, Table 4.9 – Explain why previously collected HFM and native subsurface soil data is presented in the surface soil section or correct the table if this is an error.
20. Section 4.9, Table 4.9 – Explain why previous groundwater results are not included or correct the table if this is an error.
21. Section 6.1 – This section should be titled “Qualitative Human Health Exposure Assessment.” In addition, this section should indicate reasonably anticipated future groundwater use at the site.
22. Section 6.1, Table 6.1 – Correct the title of the third column, which appears to contain soil vapor data rather than sub-slab soil data. Indicate which column includes the sub-slab soil (*i.e.*, HFM or subsurface soil).
23. Section 6.2 – This section should briefly summarize surrounding land use and reasonably anticipated future groundwater use off-site. This should also provide a limited assessment of exposure to contamination emanating the site based on the fate and transport analysis.

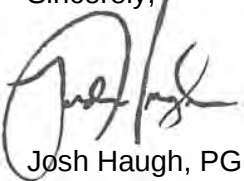
24. Figure 5 – In the legend, “Existing” should be replaced with “Phase II” or “pre-RI”.
25. Figure 5 – The RISB8 summary table indicates the sample from 6’-8’ was analyzed for SVOCs; however, this sample was only analyzed for metals according to table 5.
26. Figure 4, 5 and 6 – Please add an arrow indicating generalized groundwater flow direction.
27. Figures 7 and 9 – Water levels from existing 834 MW2 should be shown on the groundwater contour maps, as indicated in the second paragraph of Section 3.1.5.
28. Exhibit 1 – The figure on page 3 indicates that the geophysical survey excluded most of the 830 Albany Street parcel and the UST area where the second anomaly was identified. This figure should be corrected to show actual geophysical survey extents.

There were two surveys conducted on 3/12 and 3/20/2019. The 3/12 survey did not include the portion of the 830 Albany Street Parcel adjacent south of the same addressed building because this area was an asbestos regulated area. The 3/20 survey addressed this area and located the known suspect UST and the drum and/or UST anomaly adjacent southwest of the known UST. Both reports are included in Exhibit 1 of the RIR

above (i.e., comments 2, 4, 20, 21). Ultimately, the revised RI report should incorporate the results from the supplemental RI work at the 830 and 834 Albany Street parcels and the upcoming RI work at the 831 Albany Street parcel (pending approval of the recent BCA amendment application to add this parcel).

Please contact me at 518-357-2008 or joshua.haugh@dec.ny.gov with any questions about this letter.

Sincerely,



Josh Haugh, PG
Professional Geologist 1

cc: R. Mustico, DEC
G. Burke, DEC
S. Wagh, DOH
S. Selmer, DOH
K. Moline, C.T. Male
A. Smith, C.T. Male
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July 18, 2019

Mr. Joshua Haugh
Engineering Geologist, Division of Environmental Remediation
New York State Department of Environmental Conservation
1130 N. Westcott Road
Schenectady, NY 12306
Via Email: joshua.haugh@dec.ny.gov

Re: *Supplemental Remedial Investigation Work Plan (RIWP)*
NYS Brownfields Cleanup Program
Hamilton Hill II – Target Area 1 Site
830 and 834 Albany Street Parcels
City of Schenectady, Schenectady County
BCP Site No. C447052

Dear Mr. Haugh:

A Draft Remedial Investigation (RI) Report was prepared for the Hamilton Hill II Target Area 1 Brownfields Cleanup Program (BCP) Site (i.e., Target Area 1 BCP Site). The Target Area 1 BCP Site consists of two (2) non-contiguous parcels identified as the 830 Albany Street and 834 Albany Street Parcels.

The purpose of this Supplemental RIWP is to address the New York State Department of Environmental Conservation's (NYSDEC's) June 12, 2019 comments to the RI Report related to data gaps pertaining to comments 1, 4, 15 and 17 concerning the following areas:

- The northwestern portion of the 834 Albany Street Parcel (Comment No. 1): Due to the presence of utility lines and the former site building, a planned boring (RIMW6D) was unable to be advanced in this area.
- Potential drum/tank and known underground storage tank (UST) on the 830 Albany Street Parcel (Comment No. 4): Although test borings were completed near these features, based on the direction of groundwater flow as determined during the RI, the borings were not advanced in positions down-gradient from these features.
- Area of RISV1 on the 830 Albany Street Parcel (Comment Nos. 15 and 17): Elevated soil vapor results and photoionization detector (PID) results were recorded at RISV1, a soil vapor point advanced as a function of the RI. As RISV1 was advanced for the purpose of collecting a soil vapor sample, soil samples were not submitted for laboratory analysis from this sample location.

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Supplemental Remedial Investigation Work Plan *Page - 2*

The supplemental investigation to be completed at the 830 and 834 Albany Street Parcels will be subject to the same methodologies as described in the Target Area 1 BCP Site RIWP except where noted herein.

Supplemental RI Scope

The scope of work for the 830 and 834 Albany Street Parcels will include the following:

- Advancement of soil borings to characterize the parcel's subsurface fill and/or native soils as it relates to the above data gaps; to aid in the collection of fill and/or native soil samples for laboratory analysis; and for installation of monitoring wells.
- Collection and laboratory analysis of groundwater samples from newly installed monitoring wells.

Advancement of Soil Borings and Soil Sampling

Five (5) Geoprobe soil borings will be completed within the site boundaries as follows:

- RIGP1 will be advanced in proximity to RISV1 on the 830 Albany Street Parcel.
- RIGP2 will be advanced to the eastern and down-gradient side of the suspect buried drum/tank on the 830 Albany Street Parcel.
- RIGP3 will be advanced to the eastern and down-gradient side of the suspect petroleum UST on the 830 Albany Street Parcel.
- RIGP4 will be advanced on the northwestern portion of 834 Albany Street Parcel.
- RIGP5 will be advanced within the northwestern portion of the former building foundation on the northwestern portion of the Albany Street parcel. If the Geoprobe is unable to enter the foundation area, RIGP5 will be advanced using and auger or dolly mounted Geoprobe.

With respect to the other locations referenced in Comment No. 15 that had slightly elevated PID readings (RIMW6D (0 to 2-foot sampling interval with a PID reading of 32 parts per million (ppm); and RISB8 4 to 6-foot interval (15.8 ppm) and 6 to 8-foot interval (12.5 ppm)) it is noted that these samples did not appear impacted via organoleptic perception and the PID readings were relatively low. Each of these soil samples were moist and the elevated PID readings are likely attributed to high humidity conditions within the Ziploc bag that the soils were contained in when they were assessed. Additionally, VOCs were not detected above regulatory values in groundwater at RIMW6 (only acetone, a common laboratory artifact was detected above the laboratory method detection limit). As such, additional sampling is not planned for these two locations.

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Supplemental Remedial Investigation Work Plan

Page - 3

Soil boring RIGP1 will be completed to assess subsurface conditions, to aid in the collection of soil samples for laboratory analyses, and for installation of a monitoring well to aid in the collection of a groundwater sample for laboratory analyses. RIGP1 is being advanced in proximity to RISV1 where an elevated PID reading was recorded and perchloroethene (PCE) was detected in a soil vapor sample. Soils at this location will be analyzed for the Target Compound List (TCL) of volatile organic compounds (VOCs) plus Tentatively Identified Compounds (TICs). Samples will be submitted for every two-foot interval until the groundwater table is encountered (anticipated at approximately 10 feet below grade surface (bgs)).

Soil borings RIGP2 and RIGP3 will be completed to assess the subsurface conditions, to aid in the collection soil samples for laboratory analysis and for the installation of monitoring wells to aid in the collection of groundwater samples for laboratory analysis. These borings are being advanced in proximity to a suspect buried UST/drum (RIGP2) and suspect petroleum UST (RIGP3). Soil samples are proposed to be collected from the approximate bottom of the buried vessels. At RIGP2 samples will be submitted for laboratory analysis from the 6 to 8-foot interval and from the 8 to 10-foot interval. As the contents of this vessel are unknown the samples will be submitted for laboratory analyses for TCL VOCs, semi volatile organic compounds (SVOCs), pesticides and PCBs, the Target Analyte List (TAL) of metals (including mercury and hexavalent chromium) and cyanide (TCL/TAL Parameters). These samples will also be analyzed for emerging contaminants 1,4-dioxane and PFAS. At RIGP3 soil samples will be submitted for laboratory analysis from the 6 to 8-foot interval and from the 8 to 10-foot interval. As RIGP3 is being advanced at a suspect petroleum tank these samples will be analyzed for TCL VOCs and TCL SVOCs plus TICs. In addition to the planned soil sampling intervals for these borings, soil sample intervals either above or below the target intervals which exhibit visual and/or olfactory evidence of contamination will also be subjected to laboratory analysis.

Soil borings RIGP4 and RIGP5 will be completed to assess the subsurface conditions, to aid in the collection of subsurface fill/soil samples for laboratory analyses and for the installation of monitoring wells to aid in the collection of groundwater samples for laboratory analysis. At these boring locations, one sample representative of fill/soil will be collected from the 2 to 4-foot depth interval and then at subsequent 2 foot depth intervals until native soil is encountered. The sample collected from the 2 to 4-foot sampling depth interval will be subjected to laboratory analyses for SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide. The samples collected from the deeper sampling intervals will be held at the laboratory for possible analyses. If RI compound(s) of concern (COC) is detected above its Unrestricted Use soil cleanup objective (SCO) in the sample collected from the 2 to 4-foot sampling depth

interval, additional fill/soil samples from the deeper fill/soil sampling depth intervals (i.e. 4 to 6-feet, etc.) will be analyzed for the COC(s) detected above its Unrestricted Use SCO in the sample interval from immediately above.

The borings will be completed utilizing Geoprobe direct-push drilling methods as discussed in the Field Sampling Plan (FSP) in Appendix A of the RIWP. Soil samples will be collected continuously by advancing a field decontaminated (alconox wash and tap water rinse) macro-core sampler containing a new, disposable acetate liner within its interior the desired sampling depth interval employing direct-push methods. Upon obtaining the soil samples at the prescribed depth, the acetate liner will be removed from the macro-core sampler and provided to the geologist. The geologist will then retain the requisite samples for visual and/or olfactory evidence of contamination and laboratory analyses. A new pair of nitrile gloves will be used for each acetate liner. The soil sampling procedures will conform to the FSP in Appendix A.

The boring locations may be modified at the time of drilling based on buried utility locations mapped by Dig Safely New York. The NYSDEC Project Manager will be notified if the locations of the soil borings are modified.

Installation of Monitoring Wells

One (1)-inch diameter monitoring wells with PVC slotted screens and risers will be installed in soil borings RIGP1 through RIGP5 (see the attached Remedial Investigation Plan). The screened portion of the monitoring well will straddle the water table approximately five feet above and five feet below the water table. A filter sand pack will be installed from the bottom of the borehole to at least 1 foot above the top of the well screen. The monitoring wells will be finished with a surface seal and protected with lockable protective enclosures. Samples submitted for laboratory analysis from the newly installed monitoring wells will be analyzed for the contaminants of concern for each area. Specifically:

- RIGP1: Groundwater at this location will be analyzed for TCL VOCs plus TICs.
- RIGP2: Groundwater at this location will be analyzed for TCL/TAL Parameters plus emerging contaminants 1,4-dioxane and PFAS.
- RIGP3: Groundwater at this location will be analyzed for TCL VOCs plus TICs and TCL SVOCs plus TICs.
- RIGP4 and RIGP5: Groundwater at these locations will be analyzed for SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide.

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Supplemental Remedial Investigation Work Plan *Page - 5*

The monitoring wells will be installed, developed and sampled in accordance with the Target Area 1 BCP Site RIWP and the FSP in Appendix A.

At the time the monitoring wells are sampled, depth to groundwater measurements will be recorded for the purpose of determining groundwater flow contours across the site. The groundwater elevations will be used to construct a groundwater contour map for inclusion in the Supplemental RI Report.

Field Quality Control

Quality Assurance/Quality Control (QA/QC) samples at a ratio of one (1) set of QA/QC samples per 20 media samples will be collected and analyzed. The QA/QC samples for soil and groundwater will include a blind duplicate sample, matrix spike (MS) sample, matrix spike duplicate (MSD) sample and equipment (field) blank sample. Laboratory prepared Trip Blanks will be submitted with aqueous samples requiring analysis for TCL VOCs.

Laboratory Reporting and Data Validation

The laboratory will generate NYSDEC ASP Category B data deliverable packages of the investigative analytical data. A Data Usability Summary Report (DUSR) of the analytical data developed during this investigation will be prepared to confirm that it is valid and usable for subsequent decision making purposes. The DUSR will be completed by an independent data validator.

Survey

A horizontal survey will be completed to locate the RI sampling points and other pertinent Site features. The vertical elevations of the top of the well casings will also be established utilizing a project benchmark.

Reporting

Upon completion of supplemental field activities and receipt and independent validation of the analytical laboratory data, the existing RI Report will be revised to include a summary of the supplemental investigations at the Site, analytical results of samples collected and analyzed, and interpretations of the data.

Miscellaneous

The Community Air Monitoring Plan, as provided in Appendix C of the Health and Safety Plan within the Target Area 1 BCP Site RIWP, will be implemented during ground intrusive investigation activities.

C.T. MALE ASSOCIATES

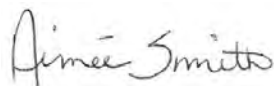
Supplemental Remedial Investigation Work Plan
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Investigation derived wastes will be managed as outlined in the Target Area 1 BCP Site RIWP. Subcontractors are anticipated to be the same as identified in the Target Area 1 BCP Site RIWP. The field activities are anticipated to commence on July 18, 2019.

If you have any questions or require any additional information please contact me at your convenience at a.smith@ctmale.com and/or 518-223-2413.

Respectfully submitted,

C.T. MALE ASSOCIATES



Aimee Smith
Sr. Environmental Scientist



Kirk Moline, P.G.
Sr. Project Manager/Managing Geologist

Attachment: Remedial Investigation Plan

c: Jennica Petrik-Huff, The Community Builders, Inc.
Kelly Melarango, The Community Builders, Inc.
Susan McCann, Hamilton Hill II Limited Partnership
Steve Bieber, C.T. Male Associates

MAP REFERENCES:

1. "Map Showing Lot Line Adjustment of No. 310 Craig Street No. 807 Emmett Street" City of Schenectady, County of Schenectady, New York State of New York prepared by Hershberg & Hershberg, Consulting Engineers and Land Surveyors dated March 23, 2016, Map No. 160068 and filed in the Schenectady County Clerk's Office on December 2, 2016 in Cabinet N, Map No. 279.
2. ALTA/NSPS Land Title Boundary and Topographic Survey 820 Albany Street - 824 Albany Street - 830 Albany Street - 834 Albany Street - 840 Albany Street - 811 Albany Street - 827 Albany Street - 831 Albany Street - 302 Craig Street - 304 Craig Street - 306 Craig Street - 308 Craig Street - 310 Craig Street, prepared for TCB Holdings, Inc., prepared by C.T. Male Associates, Engineering, Surveying, Architecture & Landscape Architecture, D.P.C., dated May 24, 2017, Project No. 17.7266, Drawing No. 17-376.

MAP NOTES:

1. Boundary and topographic information shown hereon was compiled from an actual field survey conducted on April 28, May 4, May 8-9 and May 24, 2017 and June 15, 2017.
2. North orientation and bearings are Grid North based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00 obtained from GPS observations.
3. Objects shown on this drawing with a distance indicating how far that object is from a particular line, lie on the same side of the line that the offset distance is written.
4. Vertical datum shown hereon is NAVD 88 and was obtained from GPS observations which were post processed holding Albany CORS.
5. Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
6. Per map entitled National Flood Insurance Program, FIRM Flood Insurance Rate Map for Schenectady County, New York(All Jurisdictions)- contains Community Number 360739, Town of Niskayuna, Number 360740, Town of Rotterdam and Number 360741 City of Schenectady, Panel 170 of 257, Map Suffix: D, Map Number 36093C0170D, effective date January 8, 2014, the parcel shown hereon falls within an area designated as Zone X areas determined to be outside the 0.2% annual chance floodplain.

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RIGP1

PRE-EXISTING GEOPROBE (APPROXIMATE LOCATION)

PRE-EXISTING MONITORING WELL LOCATION

PRE-EXISTING SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)

RI SUBSURFACE SOIL SAMPLE LOCATION

RI SOIL VAPOR SAMPLE LOCATION

RI SURFACE SOIL LOCATION

RI HAND AUGER LOCATION

RI MONITORING WELL LOCATION

SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION

