

Remedial Work Plan

with Remedial Alternative Analysis

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NYSDEC BCP Site:

The Huguenot Site
381-393 Huguenot Street
New Rochelle, NY
Westchester County Tax Map Designation: Section 2; Block 239; Lot 3A, 4, 5 & 7
NYSDEC BCP Site No. C360157

Prepared for:

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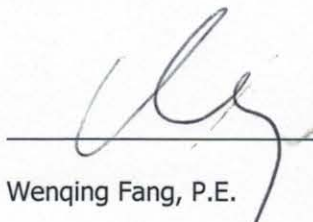
CERTIFICATION

Client: 381-383 Huguenot LLC
Project: Remedial Work Plan
Location: The Huguenot Site, New Rochelle, New York
NYSDEC BCP No. C360157

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I, Wenqing Fang, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Remedial Work Plan (RWP) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10, May 2010).


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LIST OF ACRONYMS

Acronym	Definition
AMSL	Above Mean Sea Level
AOC	Area of Concern
AWQS	Ambient Water Quality Standard
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CPP	Citizen Participation Plan
CSM	Conceptual Site Model
DER-10	New York State Department of Environmental Conservation Technical Guide 10
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IRM	Interim Remedial Measure
NAPL	Non-aqueous Phase Liquid
NYS DOH ELAP	New York State Department of Health Environmental Laboratory Accreditation Program
NYS DEC	New York State Department of Environmental Conservation
OSHA	Occupational Safety and Health Administration
PID	Photo Ionization Detector
QA/QC	Quality Assurance and Quality Control
QEP	Qualified Environmental Professional
REC	Recognized Environmental Condition
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
SCG	Standards, Criteria or Guidance
SCO	Soil Cleanup Objective
SOW	Scope of Work
USEPA	United State Environmental Protection Agency
USGS	United State Geological Survey

1 EXECUTIVE SUMMARY

Cider Environmental (CE), on behalf of 381-383 Huguenot LLC (the "Participant"), has prepared this Remedial Work Plan (RWP) with Alternative Analysis Report (AAR) for the property located at 381-393 Huguenot Street, New Rochelle, Westchester County, New York (the "Site" or the "Subject Property"). BCP Site No. C360157.

On November 3, 2017, 381-383 Huguenot LLC (the "Applicant") voluntarily entered into a Brownfield Cleanup Agreement (BCA) as a "Participant" with the New York State Department of Environmental Conservation (NYSDEC) for the property located at 381-393 Huguenot Street, New Rochelle, Westchester County, New York (the "Site" or the "Subject Property") as BCP Site No. C360157.

A remedial investigation (RI) was performed to compile and evaluate data and information necessary to develop this RWP. The remedial action described in this document provides for the protection of public health and the environment consistent with the intended property use, complies with applicable environmental standards, criteria and guidance and conforms with applicable laws and regulations.

Site Description

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business. These buildings are currently vacant in anticipation of demolition.

Previously Identified Issues

Lot 3A & 4 (381 & 383 Huguenot Street) has been utilized for cleaning services from 1931 to 1951. The 1931 Sanborn Map depicted a "dry cleaning" service on this lot, in the parking lot area (building since

demolished). The laboratory analysis on soil gas samples did detect PCE and its daughter products (TCE, cis-1,2-DCE and VC). In addition, TCE, a potential daughter product of PCE, was detected in groundwater sample GW-4 (6.3 µg/L), collected south of this Lot. This area has also maintained fuel oil USTs. A remote sensing survey was performed at this area. No abandoned USTs were identified. Elevated PID readings (maximum 346 ppm) and strong petroleum odors were noted during soil sampling. The soil gas samples from this area detected fuel oil related VOCs. The groundwater sample from this area (GW-2) detected elevated levels of petroleum product related SVOCs (>13 ppm in total SVOCs) exceeding the AWQS. PCBs were detected in one soil sample (SB-2B [5'-7']) exceeding the RRSCO. The source and origin of the PCB contamination is unknown. Lead and SVOCs were detected in one shallow soil sample (SB-20 [0'-2']) exceeding the RRSCO.

Lot 5 (no address) was utilized for the parking of rental vehicles associated with the U-Haul business. This portion has exposed soil and no pavement. Lead (maximum 4,330 mg/Kg), mercury (maximum 1.26 mg/Kg) and SVOCs were detected in shallow soil samples at multiple locations at levels exceeding the RRSCO.

Lot 7 (393 Huguenot Street) has historically maintained a gasoline filling station and car wash from 1931 to 1951, and has been utilized as a warehouse since the 1990s. Elevated PID readings (>1000 ppm) and strong petroleum odors were noted during soil sampling activities. Lead was detected in one of the soil samples (SB-19 [0'-2']) exceeding the RRSCO. The groundwater samples at this area (GW-5) detected elevated levels of gasoline related VOCs (>0.500 ppm in total VOCs) exceeding the AWQS. TCE was detected in groundwater sample GW-4 (6.3 µg/L) exceeding the AWQS.

Physical Characteristics of the Site

Below the surface cover and heterogeneous fill materials, the subsurface stratigraphy generally consists of natural sand and silt deposits overlying a thin mantle of weathered rock, atop more competent bedrock.

The sidewalk of Huguenot Street is covered by 4 inches of concrete, underlain by 6 inches of subbase. Part of the site is covered by asphalt paved driveways and parking lots. The central portion of the Site is exposed soil.

Fill consisting of a heterogeneous mixture of medium to fine sand and silt, with lesser amounts of coarse to fine gravel and occasional asphalt, concrete, and brick fragments was encountered throughout the Site. Fill generally varied between 4 ft and 6 ft in thickness.

Below the fill, starting at depths between approximately 4 ft and 6 ft below grade, the stratum consists of medium to fine sand with silt, lesser amounts of coarse to fine gravel, and occasional cobbles. This stratum is generally considered medium dense to dense material.

The top of completely weathered rock was encountered at depths between approximately 10 ft and 20 ft below grade. This stratum is mostly soil-like in consistency, comprising coarse to fine micaceous sand and gravel, with variable amounts of silt, and intact components of the parent material.

Bedrock was encountered at depths between approximately 19 ft and 24 ft below grade.

Groundwater monitoring wells were installed throughout the Site. The recorded water levels are between 6.11 (MW-3) and 8.38 (MW-8) below grade. The flow rates of the wells are extremely low. Most of the wells runs dry when purging rate is >500 ml/min. Based on the presence of shallow bedrock and the low flow rate, it is suspected that the observed groundwater is trapped stormwater perched atop the dense underlying weathered bedrock.

Based on the groundwater elevation surveys (dated 2/15/2017 and 5/8/2018), the groundwater flow direction on the site is to the northwest. The hydraulic gradient is between 0.039 to 0.069 ft/ft.

Remedial Investigation Findings

From March 2018 to May 2018, CE performed the Remedial Investigation (RI) on the Site in accordance with the NYSDEC approved work plan. During the RI, CE performed a geophysical survey; installed fifteen (15) soil borings and collected twenty-six (26) soil samples; installed eight (8) groundwater monitoring wells and collected eight (8) groundwater samples; collected one (1) sub-slab soil gas sample, two (2) indoor air samples, and two (2) outdoor air samples; and performed a groundwater elevation survey. All samples were submitted to a NYSDOH certified laboratory for analysis. The result of the RI and the previous investigations were summarized in the Remedial Investigation Report (RIR).

GPR

During the GPR survey, a fill port, suspected to be associated with a fuel oil UST, was found in the front of Building 393 Huguenot St. A metallic anomaly was detected near the fill port. GPR transects over this area display inconclusive data. It is possible that the former fuel oil UST was backfilled. This area will be excavated, with any tank(s) properly removed, during the upcoming site redevelopment.

Soil Sampling

The RI soil sampling followed the approved RIWP and CPP. There were no significant deviations from the approved RIWP. During this RI, a total of twenty-six (26) soil samples and two (2) QA/QC samples were collected for laboratory analysis.

The field observation and laboratory analysis results of the soil samples from this RI are consistent with the previous investigation.

Exceedances of lead (maximum 1,560 mg/Kg), cadmium (maximum 4.79 mg/Kg) and several SVOCs (including benzo-a-anthracene maximum 3,700 µg/Kg, benzo-a-pyrene maximum 4,300 µg/Kg, benzo-b-fluoranthene maximum 4,500 µg/Kg, chrysene maximum 4,000 µg/Kg, dibenzo-a,h-anthracene maximum 510 µg/Kg, and indeno (1,2,3-cd) pyrene maximum 4,000 µg/Kg) over RRSCO were detected in multiple shallow soil samples within the urban fill layer. The deeper soil samples generally met RRSCO and, except for nickel and chromium, met UUSCO. Nickel and chromium exceeding UUSCO were detected throughout the site and in soil samples from the off-site monitoring wells, suggesting that there are elevated background levels.

Based on the results of this RI, it is anticipated that upon completion of the proposed site excavation for new building construction (and remedial excavation of the "hot spots"), the end point soil samples from the excavated areas can meet the RRSCO and the UUSCO, except for nickel and chromium, which appears to have a higher regional background level.

Groundwater Sampling

The monitoring well installation and groundwater sampling followed the approved RIWP. There were no significant deviation from the approved RIWP. The flow rates of the wells were extremely low. Most of the wells ran dry when purging rate was >500 ml/min.

During the RI, a total of eight (8) groundwater samples and three (3) QA/QC samples were collected for laboratory analysis.

Petroleum odor was observed with groundwater samples from MW-1, MW-2 and MW-4.

Exceedances of several inorganic compounds (aluminum, iron, magnesium, manganese and sodium) over the AWQS were detected in both on-site and off-site wells (including upgradient and side-gradient wells). This is due to elevated regional background levels, and not from impacts from the Site.

Selenium was detected in MW-5 (side-gradient) at 0.012 mg/L marginally above the AWQS. PCB was detected in MW-8 (up-gradient) at 0.094 µg/L marginally above the AWQS. 1,3-Dichlorobenzene was detected in both the on-site and up-gradient wells (maximum 6.8 µg/L) marginally exceeding the AWQS. Isopropylbenzene was detected in MW-4 at 17 µg/L marginally above the AWQS. Phenol was detected in MW-8 (up-gradient) at 1.4 µg/L marginally above the AWQS. Naphthalene was detected in MW-1 at 16 µg/L marginally above the AWQS.

PFAS compounds were detected in all groundwater samples, both on- and off-site; however, total PFOA+PFOS concentrations were found in three (3) on-site monitoring wells exceeding the USEPA Health Advisory Levels of 70 parts per trillion (ppt). The highest total PFOA+PFOS levels were found in MWs-4 and 5, both located on-site adjacent to the former car wash, at concentrations of 102 and 184 ppt, respectively. Total PFOA+PFOS levels in MW-2, located on-site downgradient of the former dry cleaning operation, were found slightly exceeding the health advisory level at 74 ppt.

Field data from the groundwater samples indicated groundwater at the Site has a pH range from 7 to 9 (with exception of MW-3, which has pH at 5.5).

Air Sampling

Access for air sampling were denied by most of the neighboring property owners. All objections were properly documented. A total of one (1) sub-slab soil gas sample, two (2) indoor air samples and two (2) outdoor air samples were collected from the neighboring property.

The laboratory analysis results of the air samples did not identify any significant impacts from petroleum products or chlorinated solvents.

Qualitative Human Health Risk Assessment

The RI included a qualitative human health risk assessment for the Site.

Potential On-Site Exposure

Human contact with the Site can be reasonably expected to occur primarily by the following receptors: 1) construction workers involved in the remediation and/or redevelopment of the Site; 2) commercial workers for the new commercial units to be constructed; 3) residents of the apartment units to be constructed; 4) pedestrians walking past the site or patronizing nearby businesses; and 5) trespassers.

Though impacted soil/fill above the UUSCO and the RRSCO is currently present on-site, most of the contamination is limited to the shallow soil, and direct contact is limited to non-routine contact during site

excavation work (construction worker). If Track 4 Cleanup is selected, impacted soil/fill exceeding RRSCO (within the building footprint) will be removed. Any unexcavated area will either have a concrete/asphalt pavement or a 2-foot clean fill cover. If Track 1 Cleanup is selected, impacted soil/fill exceeding the UUSCO on the entire site will be removed. The potential future exposure to contaminated soil/fill will be eliminated.

For groundwater, excavation waters encountered during remedial excavation will be managed in accordance with SCGs, approved Remedial Work Plan and/or construction dewatering work plan (if needed), under an approved temporary discharge permit. Furthermore, the availability of municipally supplied potable water at the Site mitigates the potential for routine direct human contact or ingestion (i.e., as might occur with use of on-Site groundwater water for potable or process purposes). Human contact with groundwater can be expected to be limited to only one receptor: construction worker during deep intrusive activities.

VOCs contamination in soil, groundwater and soil gas appears to be marginal. The risk of vapor intrusion for future residents is relatively low, and it can be addressed via a sub-slab depressurization system (SSDS) and/or vapor barrier system.

Potential Off-Site Exposure

This RI did not identify any off-site soil and or soil vapor exposure risk as a result for Site operation.

Remedial Alternative Analysis

A remedial alternative analysis was performed to satisfy the remedial action objectives for the Site. The remedial action will be required to address the soil contamination at the Site to achieve a BCP Track 4 restricted-residential use soil cleanup. In addition to the evaluation of alternatives to remediate to the required criteria for the proposed use of the Site, NYSDEC regulations require an evaluation of more restrictive end-use scenarios. These include an unrestricted use scenario (considered under 6NYCRR Part 375-2.8 to be representative of cleanup to pre-disposal conditions), and a scenario less restrictive than the reasonably anticipated future use. Per DER-10, evaluation of a "no action" alternative is also required to provide a baseline for comparison against other alternatives.

Summary of the Remedial Actions

After considering the proposed future use of the site, as well as reviewing and comparing the three alternatives for the site, it appears that Alternative No. 2 Track 4 Cleanup would be the most appropriate remedy for the Site.

Alternative No. 2 will pursue a Track 4 cleanup, and will include:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures. The proposed excavation is shown in **Figure 16**.
- Endpoint soil sampling and analysis. The proposed endpoint sampling locations are shown in **Figure 17**.
- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development. The site covering system is shown in **Figure 18**.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring program. The groundwater monitoring network is shown in **Figure 20**.
- Implementation of a Site Management Plan, including future land use and groundwater use restrictions.

Although not considered a component of the remedy, a sub-slab vapor barrier has been incorporated into the building design to mitigate any potential risk of vapor intrusion on-site. The vapor barrier layouts are shown on **Figures 19**.

The remedial cost estimation for A-2 Track 4 Cleanup is approximately **\$469,215.00** during the construction phase, and **\$163,867.50** for the long-term site management. An itemized cost analysis is presented in **Table 11**.

A-2 Track 4 Cleanup would control potential exposure pathways through source removal and the implementation of Institutional and Engineering Controls. This alternative would achieve the SCGs for groundwater over time. In addition, this alternative would provide significant reduction of the toxicity and mobility of contaminants in the groundwater via source removal. This alternative would meet the Track 4 cleanup and RAOs for soils with the implementation of the Site Management Plan. Risk of exposure to soil contamination as well as the mobility of the soil contamination is eliminated via the maintenance of the composite covering system. Over time, this alternative would comply with the SCGs for groundwater and would provide adequate protection to both public health and the environment. RAOs for groundwater would be achieved through the implementation of Institutional and Engineering controls as set forth in the Environmental Easement. This alternative would provide the second highest level of protection to

both public health and the environment. This alternative would be the second most expensive alternative to implement, however its implementation would not present technical challenges.

Therefore, Alternative No. 2 Track 4 Cleanup is selected as the proposed remedy.

2 INTRODUCTION

On November 3, 2017, 381-383 Huguenot LLC (the "Applicant") voluntarily entered into a Brownfield Cleanup Agreement (BCA) as a "Participant" with the New York State Department of Environmental Conservation (NYSDEC) for the property located at 381-393 Huguenot Street, New Rochelle, Westchester County, New York (the "Site" or the "Subject Property") as BCP Site No. C360157.

This Remedial Work Plan (RWP) has been prepared by Cider Environmental (CE), on behalf of the Applicant, for the proposed Site redevelopment and remediation in accordance with the NYSDEC Brownfield Cleanup Program (BCP) requirements.

From March 2018 to May 2018, CE performed the Remedial Investigation (RI) on the Site in accordance with the NYSDEC approved work plan. During the RI, CE performed a geophysical survey; installed fifteen (15) soil borings and collected twenty-six (26) soil samples; installed eight (8) groundwater monitoring wells and collected eight (8) groundwater samples; collected one (1) sub-slab soil gas sample, two (2) indoor air samples, and two (2) outdoor air samples; and performed a groundwater elevation survey. All samples were submitted to a NYSDOH certified laboratory for analysis. The result of the RI and the previous investigations were summarized in the Remedial Investigation Report (RIR).

This RWP summarizes the findings of the RI and the previous investigations, discusses the proposed site redevelopment, and presents and compares potential remedial alternatives for the Site. This report identifies, evaluates and selects a remedy to address the contamination identified by the RI and the previous investigation.

Unless otherwise noted, this RWP has been prepared in accordance with the following state and local standards, criteria or guidance (SCGs):

- NYSDEC, Division of Environmental Remediation, DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010
- NYSDEC CP-51 Soil Cleanup Guidance
- 6 NYCRR Part 375 Subpart 375-6, Remedial Program Soil Cleanup Objectives
- NYSDEC, Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Limitations
- NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006

This RWP was also prepared based on the following NYSDEC approved documents:

- C360157 Remedial Investigation Work Plan, dated 4/16/2018, by CE (approved by the NYSDEC)
- C360157 Health and Safety Plan, dated 4/16/2018, by CE (approved by the NYSDEC)
- C360157 Community Air Monitoring Program, dated 4/16/2018, by CE (approved by the NYSDEC)
- C360157 Citizen Participation Plan, dated March 2018, by CE (approved by the NYSDEC)
- C360157 Remedial Investigation Report, dated 11/28/2018, by CE (pending approval by the NYSDEC)

3 SITE DESCRIPTION

3.1 Site Conditions

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building was most recently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, but was most recently utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 most recently housed a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 was occupied by a hydraulic repair business. These buildings are currently vacant in anticipation of demolition.

The Site is currently utilized for mixed commercial and residential uses. The surrounding parcels are currently utilized for mixed commercial and residential uses. The Site is located within the City of New Rochelle's recently designated Downtown Overlay Zone (DOZ). The DOZ is part of a new zoning plan adopted in 2015 to re-establish the downtown as a center of vibrancy within a mixed-use, transit oriented setting. The characteristics of the Site allow a building of up to six stories, with the provision by the developer of a community benefit.

3.2 Site History

The northern portion of the Site (Lots 3A and 4 at 381 and 383 Huguenot Street) has been utilized for dry cleaning services since circa 1931, and for manufacturing since the 1970s to 2010s. The central portion of the Site (385 & 387 Huguenot) has maintained a residential dwelling since circa 1931, and truck and trailer parking since the 1990s. The southern portion of the Site (Lots 5 and 7 at 391 and 393 Huguenot) has maintained a gasoline filling station from 1930s to 1950s, car wash in 1931, and a warehouse from 1970s to 2010s.

3.3 Proposed Site Redevelopment

The proposed development project entails demolition of the existing facilities and construction of one (1) 6-story mixed-use building with on-site parking. The proposed building will have sixty (60) rental apartment units, and two commercial/retail units on the ground floor. The building will include the construction of a basement on the northern portion. Excavation will be performed to approximately 11 feet below ground surface along the eastern property line. Vehicle parking spaces will be on the first/ground floor within the footprint of the building, with some below ground using a mechanical parking system. The proposed building will cover a footprint of 10,100 square feet. The basement will cover a footprint of 5,800 square feet. Two (2) drainage structures will cover a combined area of 1,745 square feet with 6 feet in depth. The remainder of the Site will consist of an asphalt-paved parking lot. There will be no landscape areas at the Site. The proposed site redevelopment is included as **Appendix 1**.

4 PHYSICAL CHARACTERISTICS OF THE SITE

4.1 Subsurface Soil Conditions

Below the surface cover and heterogeneous fill materials, the subsurface stratigraphy generally consists of natural sand and silt deposits overlying a thin mantle of weathered rock, atop more competent bedrock.

The sidewalk of Huguenot Street is covered by 4 inches of concrete, underlain by 6 inches of subbase. Part of the site is covered by asphalt paved driveways and parking lots. The central portion of the Site is exposed soil.

Fill consisting of a heterogeneous mixture of medium to fine sand and silt, with lesser amounts of coarse to fine gravel and occasional asphalt, concrete, and brick fragments was encountered throughout the Site. Fill generally varied between 4 ft and 6 ft in thickness.

Below the fill, starting at depths between approximately 4 ft and 6 ft below grade, the stratum consists of medium to fine sand with silt, lesser amounts of coarse to fine gravel, and occasional cobbles. This stratum is generally considered medium dense to dense material.

The top of completely weathered rock was encountered at depths between approximately 10 ft and 20 ft below grade. This stratum is mostly soil-like in consistency, comprising coarse to fine micaceous sand and gravel, with variable amounts of silt, and intact components of the parent material.

Bedrock was encountered at depths between approximately 19 ft and 24 ft below grade.

Subsurface soil conditions based on the RI and the historic investigations can be referenced with **Figure 15**.

4.2 Subsurface Groundwater Conditions

Groundwater monitoring wells were installed throughout the Site. The recorded water levels are between 6.11 (MW-3) and 8.38 (MW-8) below grade. The flow rates of the wells are extremely low. Most of the wells ran dry when purging rate was >500 ml/min. Based on the presence of shallow bedrock and the low flow rate, it is suspected that the observed groundwater is trapped stormwater perched atop the dense underlying weathered rock.

On May 8, 2018, a groundwater elevation survey was performed to determine the groundwater flow direction as part of the RI. The elevation of groundwater was gauged at each monitoring well and recorded. The elevations were used to graphically define the planimetric surface of the water table. The elevations of the top of the casings were represented with respect to each other and based on a benchmark elevation or approximate elevation above mean sea level. The groundwater elevations were based as a function of the depth to water and these elevations.

Based on the groundwater elevation surveys (dated 2/15/2017 and 5/8/2018), the groundwater flow direction on the site is to the northwest. The hydraulic gradient is between 0.039 to 0.069 ft/ft. This is consistent with the regional groundwater flow direction. A detailed groundwater potentiometric map is referenced in **Figure 14**. Groundwater monitoring wells gauging results are included in **Table 10**.

5 SUMMARY OF PREVIOUS INVESTIGATION

5.1 Site Investigation Prior to RI

The Subject Property (381 Huguenot Street, under the name of Rush Manufacturing) has an open NYSDEC Spill case (9604099). This spill was reported on June 6, 1996 due to soil and groundwater contamination encountered during a site investigation.

In March 2016, CE performed a Phase II ESA at the Subject Property. The Phase II ESA collected subsurface soil/groundwater/soil gas samples to evaluate the potential environmental impacts. The soil samples showed several target VOC/SVOCs at levels above the Unrestricted Use Soil Cleanup Objectives. Elevated PID readings and strong petroleum odors were noted during soil sampling. Strong odor representing degraded petroleum product was noted, exceeding the nuisance criteria of CP-51. The laboratory analysis performed on the soil gas samples detected several gasoline related compounds and chlorinated solvents, including PCE and its daughter products TCE, cis-1,2-DCE and VC. The groundwater samples showed evidence of impact from petroleum products of chlorinated solvent. The maximum fuel oil related SVOCs in groundwater was 13,000 ug/L (GW-2). The maximum gasoline related VOCs in groundwater was 2,020 ug/L (GW-1). TCE was detected in one of the monitoring wells (GW-4) at 6.3 ug/L.

In February 2017, CE performed a Supplemental Subsurface Investigation (SSI) at the Subject Property. The SSI collected samples of the urban fill materials and analyzed for metals and PCBs. The SSI also determined the groundwater flow direction and delineate the extent of groundwater contamination. The SSI detected a 2-foot layer of urban fill material throughout the site. Lead (maximum 4,330 mg/Kg) was detected at levels exceeding the RRSCO (400 mg/Kg) within the urban fill layer at multiple locations. Mercury was detected at a level (1.26 mg/Kg) exceeding the RRSCO (0.81 mg/Kg) at one (1) location (SB-21 [0'-2']). PCB was detected at a level (3,000 ug/Kg) exceeding the RRSCO (1,000 ug/Kg) at one (1) location (SB-2B [5'-7']). The SSI concluded that the existing groundwater contamination originated from the fuel oil application on the Subject Property. Using the AWQS as the cut off, it is likely that the groundwater contamination has migrated beyond Site boundary to the west.

The summary of the previous sampling analytical results are presented in **Table 1** through **Table 5**. The summary of exceedances of the previous investigation are presented as **Figure 4** through **Figure 6**. The groundwater potentiometric map, based on survey event during the SSI, is presented as **Figure 7**.

5.2 Summary of Remedial Investigation Results

From March 2018 to May 2018, CE performed the Remedial Investigation (RI) on the Site in accordance with the NYSDEC approved work plan. During the RI, CE performed a geophysical survey; installed fifteen (15) soil borings and collected twenty-six (26) soil samples; installed eight (8) groundwater monitoring wells and collected eight (8) groundwater samples; collected one (1) sub-slab soil gas sample, two (2) indoor air samples, and two (2) outdoor air samples; and performed a groundwater elevation survey. All samples were submitted to a NYSDOH certified laboratory for analysis. The result of the RI and the previous investigations were summarized in the Remedial Investigation Report (RIR).

GPR

During the GPR survey, a fill port, suspected to be associated with a fuel oil UST, was found in the front of Building 393 Huguenot St. A metallic anomaly was detected near the fill port. GPR transects over this area display inconclusive data. It is possible that the former fuel oil UST was backfilled. This area will be excavated, with any tank(s) properly removed, during the upcoming site redevelopment.

Soil Sampling

The RI soil sampling followed the approved RIWP and CPP. There is no significant deviation from the approved RIWP. During this RI, a total of twenty-six (26) soil samples and two (2) QA/QC samples were collected for laboratory analysis.

The field observation and laboratory analysis results of the soil samples from this RI are consistent with the previous investigation.

Exceedances of lead (maximum 1,560 mg/Kg), cadmium (maximum 4.79 mg/Kg) and several SVOs (including benzo-a-anthracene maximum 3,700 µg/Kg, benzo-a-pyrene maximum 4,300 µg/Kg, benzo-b-fluoranthene maximum 4,500 µg/Kg, chrysene maximum 4,000 µg/Kg, dibenzo-a,h-anthracene maximum 510 µg/Kg, and indeno (1,2,3-cd) pyrene maximum 4,000 µg/Kg) over RRSCO were detected in multiple shallow soil samples within the urban fill layer. The deeper soil samples generally met RRSCO and, except for nickel and chromium, met UUSCO. Nickel and chromium exceeding UUSCO were detected throughout the site and in soil samples from the off-site monitoring wells, suggesting that there are elevated background levels.

Based on the results of the RI, it is anticipated that upon completion of the proposed site excavation for new building construction (and remedial excavation of the "hot spots"), the end point soil samples can meet the UUSCO, except for nickel, which appears to have a higher regional background level.

Groundwater Sampling

The monitoring well installation and groundwater sampling followed the approved RIWP. There were no significant deviation from the approved RIWP. The flow rates of the wells were extremely low. Most of the wells ran dry when purging rate was >500 ml/min.

During the RI, a total of eight (8) groundwater samples and three (3) QA/QC samples were collected for laboratory analysis.

Petroleum odor was observed with groundwater samples from MW-1, MW-2 and MW-4.

Exceedances of several inorganic compounds (aluminum, iron, magnesium, manganese and sodium) over the AWQS were detected in both on-site and off-site wells (including upgradient and side-gradient wells). This is due to elevated regional background levels, and not from impacts from the Site.

Selenium was detected in MW-5 (side-gradient) at 0.012 mg/L marginally above the AWQS. PCB was detected in MW-8 (up-gradient) at 0.094 µg/L marginally above the AWQS. 1,3-Dichlorobenzene was detected in both the on-site and up-gradient wells (maximum 6.8 µg/L) marginally exceeding the AWQS. Isopropylbenzene was detected in MW-4 at 17 µg/L marginally above the AWQS. Phenol was detected in MW-8 (up-gradient) at 1.4 µg/L marginally above the AWQS. Naphthalene was detected in MW-1 at 16 µg/L marginally above the AWQS.

PFAS compounds were detected in all groundwater samples, both on- and off-site; however, total PFOA+PFOS concentrations were found in three (3) on-site monitoring wells exceeding the USEPA Health Advisory Levels of 70 parts per trillion (ppt). The highest total PFOA+PFOS levels were found in MWs-4 and 5, both located on-site adjacent to the former car wash, at concentrations of 102 and 184 ppt, respectively. Total PFOA+PFOS levels in MW-2, located on-site downgradient of the former dry cleaning operation, were found slightly exceeding the health advisory level at 74 ppt.

Air Sampling

Access for air sampling was denied by many of the neighboring property owners. All objections were properly documented. A total of one (1) sub-slab soil gas sample, two (2) indoor air samples and two (2) outdoor air samples were collected.

Based upon comparison to May 2017 Decision Matrices contained in NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State, the laboratory analysis results of the air samples did not identify any significant impacts from petroleum products or chlorinated solvents.

The summary of the RI sampling analytical results are presented in **Table 6** through **Table 9**. The RI sampling locations and summary of exceedances are presented as **Figure 8** through **Figure 13**. The groundwater potentiometric map, based on survey event during the RI, is presented as **Figure 14**.

6 QUALITATIVE HUMAN HEALTH RISK ASSESSMENT

To evaluate potential exposures to site contaminants, a qualitative human health exposure assessment was completed consistent with the NYSDOH guidance in Appendix 3B of the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation dated May 2010 (DER-10). This assessment consisted of characterizing the exposure setting, a description of the physical environment and the proposed future land use, a description of the potentially exposed human populations, identifying exposure pathways, and evaluating contaminant fate and transport.

6.1 Potential On-Site Human Health Exposure Assessment

The proposed development project entails demolition of the existing buildings and construction of one (1) 6-story mixed-use building with on-site parking. The proposed building will have sixty (60) rental apartment units, and two commercial/retail units on the ground floor. The planned site uses are consistent with the surrounding property use and zoning. As such, human contact with the Site can be reasonably expected to occur primarily by the following types of receptors: 1) construction workers involved in the remediation and/or redevelopment of the Site; 2) commercial workers for the new commercial units to be constructed; 3) residents of the apartment units to be constructed; 4) pedestrians walking past the site or patronizing nearby businesses; and 5) trespassers.

Construction workers, commercial workers will be comprised of adults, and residents would be children and adults. For the construction workers, the exposure would be short-term. For the commercial workers and residents, the exposure would be long-term.

Though impacted soil/fill above the UUSCO and the RRSCO is currently present on-Site, most of the contamination is limited to the shallow soil, and direct contact is limited to non-routine contact during site excavation work (construction worker). The proposed remediation will remove impacted soil/fill exceeding RRSCO at areas with no permanent composite covering system, will include a composite covering system to prevent direct contact with impacted soil, and therefore remove potential future exposure scenarios.

For groundwater, excavation waters encountered during remedial excavation will be managed in accordance with SCGs, approved work plan, and discharged to sanitary sewer system under an approved temporary discharge permit. Furthermore, the availability of municipally supplied potable water at the Site mitigates the potential for routine direct human contact or ingestion (i.e., as might occur with use of on-Site groundwater water for potable or process purposes). Human contact with groundwater can be expected to be limited to only one receptor: construction worker during deep intrusive activities. VOCs

contamination in soil, groundwater and soil gas appear to be marginal. The risk of vapor intrusion for future residents is relatively low, and it can be addressed via a sub-slab depressurization system (SSDS) and/or vapor barrier system.

6.2 Potential Off-Site Exposure Risk

Per DER-10, the qualitative exposure assessment must consider the nature of populations currently exposed or have the potential to be exposed to Site-related contaminants both on-site and off-site, and must describe the reasonably anticipated future land use of the site and affected off-site areas. The qualitative exposure assessment must include a full delineation of the nature and extent of off-site impacts; unless the remedial party is a volunteer in the BCP, in which event off-site field information is only needed sufficient to identify the presence of contamination and support the qualitative off-site exposure assessment for these sites.

6.2.1 Off-Site Soil Impacts

The RI did not identify any off-site soil impacts as a result of the historic operations on the Site. Soil sampling data from off-site borings surrounding the Site did not identify any impact exceeding the UUSCO (except for nickel, due to elevated regional background level).

6.2.2 Off-Site Groundwater Impacts

Based on the RI groundwater assessment, several target analytes (metals and 1,3-dichlorobenzene) were present in several off-site wells (including the upgradient well, MW-8) exceeding the AWQS. This is due to elevated regional background levels, not a result of impact from the Site. The off-site groundwater impact from the Site is limited.

6.2.3 Off-Site Soil Vapor Impacts

The RI did not identify any off-site soil vapor impacts as a result of the historic operations on the Site. However, since only one of the six off-site buildings were allowed access and sampled, further evaluations are needed to determine if soil vapor intrusion is a potential concern for other off-site buildings.

6.3 Potential Ecological Exposure Assessment

The Site is a commercially developed facility located within a highly developed area of the City of New Rochelle. The Site provides little or no wildlife habitat or food value, and/or access to the detected subsurface contamination. The reasonably anticipated future use is mixed-use commercial and residential redevelopment with the Site being covered by buildings, concrete sidewalks and asphalt, with minimum exposed soil on the western side of the building.

Planned remediation will eliminate source areas including the former UST system, impacted soil/fill, and excavation water management. The planned remediation will achieve a Restricted-Residential or less restrictive use cleanup (e.g., Residential or Unrestricted). As such, no unacceptable ecological risks are anticipated under the current or reasonably anticipated future use scenario.

7 REMEDIAL ACTION OBJECTIVES

The final remedial measures for the Site must satisfy Remedial Action Objectives (RAO). RAOs are site-specific statements that convey the goals for minimizing or eliminating substantial risk to human health and the environment. The RAOs for the Site are as follows.

Soil

- Prevent ingestion/direct contact with contaminated soil.
- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Groundwater

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.
- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil Vapor

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

In addition to achieving RAOs, NYSDECs BCP requires remedy evaluation in accordance with DER-10. The guidance states that an appropriate remedy should identify and develop a remedial action that is based on the following criteria.

Overall Protection of Public Health and the Environment. This criterion is an evaluation of the remedy's ability to protect public health and the environment assessing how each alternative would eliminate, reduce or control (through removal, treatment, containment, engineering controls, or institutional controls) the existing or potential human exposures or environmental impacts.

Compliance with Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.

Long-Term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness permanence of the remedy after implementation. If contamination will remain on- or off-site after the selected remedy has been implemented, the following items are evaluated: (i) human exposures, (ii)

ecological receptors or (iii) impacts to the environment. Evaluation of institutional and/or engineering controls is also required.

Reduction of Toxicity, Mobility or Volume with Treatment. This criterion evaluates the remedy's ability to reduce the toxicity, mobility, or volume of Site contamination. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the Site.

Short-Term Effectiveness. This criterion is an evaluation of the potential short-term adverse environmental impacts and human exposures during construction and/or implementation of the remedy. This criterion also includes a discussion of engineering controls that will be used to mitigate short term impacts (i.e., dust control measures), and an estimate of the length of time needed to achieve the remedial objectives.

Implementability. This criterion is an evaluation of the technical and administrative feasibility of implementing the remedy. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

Cost Effectiveness. This criterion is an evaluation of the overall cost effectiveness of a remedy. Capital costs and costs associated with site management are estimated for the remedy and presented on a Present Worth basis.

Land Use. This criterion is an evaluation of the current, intended and reasonably anticipated future use of the site and its surroundings, as it relates to a remedy, when unrestricted levels would not be achieved.

Community Acceptance. This criterion is evaluated after public review of the remedy selection process as part of the final NYSDEC selection/approval of a remedy for site use.

8 IDENTIFICATION AND DEVELOPMENT OF REMEDIAL ALTERNATIVES

To satisfy the remedial action objectives for the Site, remedial action will be required to address the soil contamination at the Site to achieve a BCP Track 4 restricted-residential use soil cleanup.

In addition to the evaluation of alternatives to remediate to the required criteria for the proposed use of the Site, NYSDEC regulations require an evaluation of more restrictive end-use scenarios. These include an unrestricted use scenario (considered under 6NYCRR Part 375-2.8 to be representative of cleanup to pre-disposal conditions), and a scenario less restrictive than the reasonably anticipated future use. Per DER-10, evaluation of a "no action" alternative is also required to provide a baseline for comparison against other alternatives.

Therefore, the alternatives to be discussed in greater detail will include:

- Alternative No. 1 (A-1): No action
- Alternative No. 2 (A-2): Track 4 Restricted Residential Uses Cleanup
- Alternative No. 3 (A-3): Track 1 Unrestricted-Use Cleanup

8.1 Alternative No. 1: No Action

The "No Action" Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative would leave the Site in its present condition and would not provide any additional protection to human health or the environment. The "No Action" Alternative would not involve any additional surface soil, subsurface soil, or groundwater remedial activities. In addition, the "No Action" alternative would not place any institutional or engineering controls on the Site property, such as future land use restrictions, groundwater use limitations, and/or application of protective soil cover/barrier. With no action being taken under this alternative there are no additional costs.

8.2 Alternative No. 2: Track 4 Restricted Residential Uses Cleanup

Alternative No.2 will pursue a Track 4 cleanup, and will include:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures.
- Endpoint soil sampling.
- Backfill with clean fill and/or clean stone to replace the excavated soil or complete backfilling of the excavation and establish the designed grades at the site.

- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring.
- Imposition of an institutional control in the form of an Environmental Easement (EE) for the controlled property which will restrict land and groundwater use, and require compliance with a Site Management Plan (SMP).
- Implementation of a Site Management Plan, which includes an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the institutional and engineering controls remain in place and effective, and a Monitoring Plan to assess the performance and effectiveness of the remedy.

8.2.1 A-2 Limited Soil Excavation and Disposal

For Alternative No. 2, limited soil excavation will be performed concurrent with the construction of the new building. Specifically:

- A2-Zone-1 (future cellar). Excavation will be performed to the extent to accommodate the cellar.
- A2-Zone-2 (former fuel oil UST, "hot spot"). Excavation will be performed to the extent feasible to remove source of significant contamination.
- A2-Zone-3 (future garage and drainage structure). Excavation will be performed to the extent to accommodate the structures.
- A2-Zone-4 (former gasoline USTs, "hot spot"). Excavation will be performed to extent feasible to remove significant contamination.
- A2-Zone-5 (uncovered area on western border). The top 2 feet of soil will be excavated.
- Shallow soil in areas under building footprint not otherwise indicated will be removed as necessary to accommodate paved parking surfaces.

This alternative would remove significantly impacted materials, prevent exposure to residual impacted soils and mitigate adverse impact to groundwater.

It is estimated approximately 3,500 tons of impacted soil will be excavated and will required off-site disposal at NYSDEC approved facilities. No excavated soil will be reused on the Site.

The areas and depths of excavation are depicted on **Figure 16**.

8.2.2 A-2 Soil Endpoint Sampling

Pursuant to DER-10, end point samples would be collected along the sidewalls and bottom of the excavated area; an estimated thirty (30) endpoint soil samples would be collected. The proposed sampling locations can be referenced with **Figure 17**. All soil samples would be labeled, preserved on ice in coolers, and sent to the analytical laboratory under chain of custody procedures.

Selected endpoint samples will be analyzed for:

- Full Target Compound List (TCL) suite [volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and pesticides/ polychlorinated biphenyls (PCBs)];
- Target Analyte List (TAL) suite (Metals, Mercury and Cyanide); and
- Per- and polyfluoroalkyl substances (PFAS).

8.2.3 A-2 Clean Fill Installation

For Alternative No. 2, any imported fill or stone for backfilling or site leveling purpose will need to meet the requirements of 6 NYCRR Part 375-6.7(d). It is estimated that A-2 Track 4 Cleanup will require approximately 1,200 cubic yards (1,600 tons) of clean fill/stone.

8.2.4 A-2 Vapor Barrier

For Alternative No. 2, although not considered a component of the remedy, a vapor barrier will be installed to mitigate any potential future risk of soil vapor encroachment into the new building.

A vapor barrier system will be installed underneath the building. The product to be used will be GCP Applied Technologies ("GCP") PREPRUFE® 300R membrane under the floor slab and PREPRUFE® 160R membrane behind the foundation wall. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier will be installed in accordance with manufacturer specifications. The design of the vapor barrier system is shown in **Figure 19**.

8.2.5 A-2 Covering System and Clean Fill Installation

Upon completion of the site redevelopment, most of the Site will be covered by concrete/asphalt. For the areas that are not covered by concrete/asphalt, a two (2) feet layer of clean fill will be installed. A demarcation layer (e.g., geotextile or equivalent) will be installed between contaminated soil and cover soil (clean fill). Demarcation layer is not necessary where cover consists of hard surfaces such as pavement, concrete, building, etc. The clean fill will meet the RRSCO requirements. The proposed site covering system for A-2 Track 4 Cleanup is shown in **Figure 18**.

Note that part of the site will need to be leveled to grade. Any imported fill for site leveling purpose will need to meet the RRSCO requirements.

8.2.6 A-2 Long Term Groundwater Monitoring

Alternative No. 2 will include a long-term groundwater monitoring program to evaluate the effectiveness of the remedy in restoring groundwater quality. Groundwater monitoring would be conducted to track the reductions in contaminants of concern (COC) over time and confirm the protectiveness of the remedy. The on-site groundwater monitoring wells that will be decommissioned during redevelopment of the site will need to be re-installed (replaced by 2-inch wells). In order to monitor the PFAS exceedances in the groundwater, MW-4R will be relocated across Huguenot Street; and one additional monitoring well (identified as MW-9) will be installed along Pine Street, south of MW-6 and hydraulically downgradient of the former car wash. The groundwater monitoring network would consist of a total of nine (9) monitoring wells as shown on **Figure 20**.

Upon excavation of the "hot spots", it is anticipated that natural attenuation will achieve AWQS for groundwater within 5 years (except of several inorganic compounds/metals, which have elevated regional background levels above AWQS).

A long-term groundwater monitoring plan will be included in the Site Management Plan. It is assumed for purposes of cost estimating that the long-term groundwater monitoring program would be conducted over a period of 5 years, with semiannual monitoring for the first year, followed by annual monitoring thereafter and each sampling event would include the submittal of a report detailing the analytical results.

8.2.7 A-2 Site Management Plan

An Environmental Easement would be needed to provide an enforceable legal instrument to ensure compliance with all ECs and ICs placed on the site. A Site Management Plan (SMP) would be required and it would specify the methods necessary to ensure compliance with all at the site. The SMP would provide a detailed description of all ECs and ICs required by the Environmental Easement for contamination that remains and procedures required to manage remaining contamination at the site after completion of the Remedial Action, including:

- Implementation and management of all Engineering and Institutional Controls;
- Media monitoring (groundwater, etc.);
- Performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and
- Defining criteria for termination of long term groundwater monitoring.

The SMP would include provisions for the implementation and maintenance of the currently in-place soil cover; a soil management plan for any future site excavation; and a long-term groundwater monitoring program to evaluate the effectiveness of the remedy.

8.3 Alternative No. 3: Track 1 Unrestricted Use Cleanup

Alternative No.3 will pursue a Track 1 cleanup, and will include:

- Extensive soil excavation and disposal of any on-site soil exceeding the UUSCO (above bedrock).
- Endpoint soil sampling (for areas not excavated to bedrock).
- Installation of clean fill material (meeting UUSCO) for backfill.
- A vapor barrier system to mitigate the risk of vapor intrusion.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring.

8.3.1 A-3 Extensive Soil Excavation and Disposal

For Alternative No. 3, extensive soil excavation will be performed to remove any soil exceeding the UUSCO (above bedrock). Specifically:

- A3-Zone-1 (future cellar). Beyond cellar bottom, excavation to clean soil or bedrock, whichever is encountered first.
- A3-Zone-2 (former fuel oil UST, "hot spot"). Excavation to bedrock to remove source of significant contamination.
- A3-Zone-3 (future garage and drainage structure). Beyond structure bottom, excavation to clean soil or bedrock, whichever is encountered first.
- A3-Zone-4 (former gasoline USTs, "hot spot"). Excavation to bedrock to remove significant contamination.
- A3-Zone-5 (all other areas). Excavation to greater than 2 feet below grade and until clean soil.

This alternative would remove all impacted soil/materials and mitigate adverse impact to groundwater.

It is estimated approximately 6,000 tons of impacted soil will be excavated and will required off-site disposal at NYSDEC approved facilities. No excavated soil will be reused on the Site.

8.3.2 A-3 Soil Endpoint Sampling

Pursuant to DER-10, confirmatory end point samples would be collected along the sidewalls and bottom of the excavated area. If excavation reached bedrock in some areas, then no soil samples will be

collected from those areas. An estimated twenty (20) soil samples would be collected. All soil samples would be labeled, preserved on ice in coolers, and sent to the analytical laboratory under chain of custody procedures.

Selected endpoint samples will be analyzed for:

- Full Target Compound List (TCL) suite [volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and pesticides/ polychlorinated biphenyls (PCBs)];
- Target Analyte List (TAL) suite (Metals, Mercury and Cyanide); and
- Per- and polyfluoroalkyl substances (PFAS).

8.3.3 A-3 Clean Fill Installation

For Alternative No. 3, any imported fill for site leveling purpose will need to meet the UUSCO requirements. It is estimated that additional 4,000 cubic yard (5,400 tons) clean fill will be required for A-3 Track 1 cleanup, compared to A-2 Track 4 cleanup.

8.3.4 A-3 Chemical Injection for Groundwater Remediation

For Alternative No. 3, enhanced aerobic biodegradation (EAB) treatment will be performed at the “hot spots” (former fuel oil USTs and former gasoline USTs). ORC Advanced®, product of Regenesys, will be applied. The chemical will be applied first in the open excavation, immediately before backfilling; and secondly, if needed, by Geoprobe.

ORC Advanced® is an engineered, oxygen release compound designed specifically for enhanced, in situ aerobic bioremediation of petroleum hydrocarbons in groundwater and saturated soils. Upon contact with groundwater, this calcium oxy-hydroxide based material becomes hydrated producing a controlled-release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application. Oxygen is required by microorganisms to transform organic contaminants (such as petroleum hydrocarbons) into carbon dioxide, water and microbial cell mass. More importantly, the new and readily available oxygen produced by ORC Advanced accelerates aerobic biodegradation processes up to 100 times faster than natural degradation rates. ORC Advanced provides remediation practitioners with a significantly faster and highly effective means of treating petroleum contaminated sites.

For each injection event, a 30% slurry containing 1,000 pounds of ORC-Advanced® will be applied (among the “hot spots”). If Geoprobe injection is required, the injection points will be installed in 10 ft by 10 ft grid.

This chemical treatment, along with source removal, will stabilize the plume and mitigate any off-site impacts.

8.3.5 A-3 Vapor Barrier

For Alternative No. 3, a vapor barrier system will be installed underneath the building. The product to be used will be GCP Applied Technologies ("GCP") PREPRUFE® 300R membrane under the floor slab and PREPRUFE® 160R membrane behind the foundation wall. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier will extend throughout the area occupied by the footprint of the new building and will be installed in accordance with manufacturer specifications.

8.3.6 A-3 Long Term Groundwater Monitoring

Alternative No. 3 will include a long-term groundwater monitoring program to evaluate the effectiveness of the remedy in restoring groundwater quality. Groundwater monitoring would be conducted to track the reductions in contaminants of concern (COC) over time and confirm the protectiveness of the remedy. The on-site groundwater monitoring wells that will be decommissioned during redevelopment of the site will need to be re-installed (replaced by 2-inch wells). In order to monitor the PFAS exceedances in the groundwater, MW-4R will be relocated across Huguenot Street; and one additional monitoring well (identified as MW-9) will be installed along Pine Street, south of MW-6 and hydraulically downgradient of the former car wash. The groundwater monitoring network would consist of a total of nine (9) monitoring wells.

Upon extensive source removal and chemical injection, it is anticipated that the groundwater will meet AWQS within 5 years (except of several inorganic compounds/metals, which have elevated regional background levels above AWQS).

Groundwater samples collected will be analyzed for the full TCL suite (VOCs, SVOCs, and Pesticides/PCBs); TAL suite (Metals and Cyanide); and per- and polyfluoroalkyl substances (PFAS) due to the elevated levels of PFAS found in the on-site groundwater during the RI.

A monitoring plan would be prepared and submitted to the NYSDEC for approval prior to implementation of the remedy. It is assumed for purposes of cost estimating that the long-term groundwater monitoring program would be conducted over a period of 3 years, with semiannual monitoring for the first year, followed by annual monitoring thereafter and each sampling event would include the submittal of a report detailing the analytical results.

Following successful completion of the long-term groundwater monitoring activities, Alternative No. 3 would include the abandonment of the eight (8) on-site and off-site monitoring wells according to NYSDEC guidance documents. The well abandonment would occur once concentrations in the groundwater consistently remain below AWQS and/or when termination is granted by the NYSDEC.

9 ANALYSIS AND COMPARISON OF REMEDIAL ALTERNATIVES

The alternatives to be discussed include:

- Alternative No. 1: No action
- Alternative No. 2: Track 4 Restricted Residential Uses Cleanup
- Alternative No. 3: Track 1 Unrestricted-Use Cleanup

Vapor Barrier System

Although not considered a component of the remedy, a sub-slab vapor barrier has been incorporated into the building design (for A-2 and A-3) to mitigate any potential risk of vapor intrusion on-site. The product to be used will be GCP Applied Technologies ("GCP") PREPRUFE® 300R membrane under the floor slab and PREPRUFE® 160R membrane behind the foundation wall. The cost of the vapor barrier system is not included in the remedial cost estimation.

Construction Dewatering

Based on the RI and the previous investigation, the groundwater elevation fluctuates between 75 to 78 feet AMSL. The proposed excavation bottom for the basement is 76 feet AMSL, with the bottom of an elevator pit at approximately 72 feet AMSL. If groundwater is encountered during excavation, construction dewatering will be performed in compliance with city, state, federal laws and regulations. Extracted groundwater will either be containerized for off-site disposal or will be treated under a city permit to meet pretreatment requirements prior to discharge to the sewer system.

Clean Fill Material

Certified clean fill material and clean stone will be required for remediation, site construction and grading. It is estimated that A-2 Track 4 Cleanup will require approximately 1,200 cubic yards (1,600 tons) of clean fill/stone. Compared to A-2 Track 4 Cleanup, approximately 4,000 cubic yards (5,400 tons) additional clean fill/stone will be needed for A-3 Track 1 Cleanup.

9.1 A-1 No Action

Overall Protection of Public Health and Environment - This alternative would not provide sufficient protection to human health and the environment. Residual public health risks would be high in consideration of the future use of the site, remaining source of groundwater contamination, and exposure to surface, subsurface soils and groundwater that exhibit levels of contamination over SCGs. This alternative would not achieve Site RAO's.

Compliance with SCGs - This alternative would not comply with SCGs since known contaminants exist in soils and groundwater.

Long Term Effectiveness and Permanence - This alternative would not constitute an effective long term solution because the lack of any remedial action or set controls which may result in public health risks.

Reduction in Toxicity and Mobility - This alternative would not reduce the toxicity or mobility of the known contaminants on-site as no remedial action is proposed under this alternative.

Short Term Effectiveness - This alternative would not provide any benefits in the short term except for zero cost associated with "No Action" and the time to implement the remedy. In addition, no remedial/construction activities would be implemented for this alternative; therefore, no short-term impacts or effects to the Site or environment would occur.

Implementability - This alternative could be easily implemented as there are no remedial/construction activities.

Cost - The cost to implement this alternative would be zero and the least costly alternative presented. Future costs, however, may arise when the Site is developed.

Land Use - This alternative would not comply with the proposed future land use of the Site.

Although the "No Action" alternative would be the least expensive alternative, it would represent the greatest risk to public health and to any future use of the Site property. This alternative would not comply with the soil or groundwater SCGs since known contaminants exist in surface soils, subsurface soils and groundwater. This alternative would not limit the exposure to the remaining onsite soil and groundwater contamination and therefore the RAOs for soil would not be achieved. In addition, the "No Action" alternative may result in an unknown amount of future costs related to public health and/or future remedial action costs. As a result of the known residual contamination of the Site's surface and subsurface soil, and groundwater, the "No Action" alternative is an impractical alternative.

9.2 A-2 Track 4 Cleanup

Overall Protection of Public Health and Environment – This alternative would provide protection to both public health and the environment by reducing the exposure to soil and groundwater contaminants. This

alternative would control potential exposure pathways through the implementation of Institutional and Engineering controls, which will be managed via the Site Management Plan. It is expected the groundwater SCGs would be achieved in an estimated time of five years. This alternative would achieve the RAOs for soils and groundwater via the implementation of the Site Management Plan and associated ICs and ECs.

Compliance with SCGs – The SCGs for soils are satisfied under this remedial alternative. Contaminants in the subsurface soil (above RRSCO) would remain on-site below the concrete/asphalt cover. Where there is no concrete/asphalt covers, a 2-foot clean fill layer will be installed. Groundwater compliance with the SCGs would be achieved after a period of time through natural attenuation but would be managed through the implementation of Institutional and Engineering controls. Under this alternative, soil would remain above RRSCO and groundwater would remain above TOGS values until natural attenuation is complete.

Long Term Effectiveness and Permanence – This alternative would be effective long term due to: 1) restricting land use (restricted-residential); 2) groundwater contamination being addressed through source removal and long-term monitoring; 3) restricting the use of the on-site groundwater; and 4) reducing the exposure to soils via the maintenance of a composite covering system.

Reduction in Toxicity and Mobility – This alternative would reduce the mobility and toxicity of the known contaminants in the groundwater via source removal (by excavation of “hot spots”) and natural attenuation. This alternative would not reduce the toxicity of the contaminants in the subsurface soil but would manage the subsurface soil by Institutional Controls, Engineering Controls and Environmental Easement via Site Management Plan.

Short Term Effectiveness - This alternative would provide short term benefits in that large portion of the contaminated soil would be excavated and removed; and the composite cover will prevent contact with the subsurface soils. Potential human exposure, adverse environmental impacts and nuisance conditions at the Site resulting from this alternative are anticipated to be for a period of a few weeks during which time Site work would occur.

Implementability – For this alternative, soil excavation and composite covering system installation could be implemented during the proposed site construction. Construction dewatering will be performed if/as needed. A Site Management Plan, including groundwater monitoring, Institutional Control and Engineering Control activities, would be implemented after the site construction. This alternative is relatively easy to implement.

Cost - The cost to implement this alternative would be the second most expensive of the alternatives. Costs would include limited soil excavation, installation of vapor barrier, installation of composite covering system, re-installation of groundwater monitoring wells, the preparation of a Site Management Plan, the periodic certification required by an easement and groundwater monitoring.

Key Assumptions Associated with Alternative 2 Track 4 Cleanup:

- Approximately 3,500 tons of impacted soil will be excavated and will require off-site disposal at NYSDEC approved facilities.
- Assumes excavation can be completed in 30 days.
- Assumes 1,200 cubic yards (1,600 tons) of clean fill/stone will be required.
- Assumes chemical injection will not be required.
- Assumes two (2) additional off-site groundwater monitoring wells (MW-4R and MW-9) are required.
- Assumes a vapor barrier system will be required.
- Assumes groundwater monitoring will continue for 5 years.

The remedial cost estimation for A-2 Track 4 Cleanup is approximately **\$469,215.00** during the construction phase, and **\$163,867.50** for the long-term site management. An itemized cost analysis is presented in **Table 11**.

Land Use - This alternative would comply with the planned Restricted Residential land use of the Site by implementing the ICs and ECs. The future planned land use under this alternative would be consistent with the current zoning.

A-2 Track 4 Cleanup would control potential exposure pathways through source removal and the implementation of Institutional and Engineering Controls. This alternative would achieve the SCGs for groundwater over time via natural attenuation. In addition, this alternative would provide significant reduction of the toxicity and mobility of contaminants in the groundwater via source removal and natural attenuation. This alternative would meet the Track 4 cleanup and RAOs for soils with the implementation of the Site Management Plan. Risk of exposure to soil contamination as well as the mobility of the soil contamination is eliminated via the maintenance of the composite covering system. Over time, this alternative would comply with the SCGs for groundwater and would provide adequate protection to both public health and the environment. RAOs for groundwater would be achieved through the implementation of Institutional and Engineering controls as set forth in the Environmental Easement. This alternative would provide the second highest level of protection to both public health and the environment. This

alternative would be the second most expensive alternative to implement; however, its implementation would not present technical challenges.

9.3 A-3 Track 1 Cleanup

Overall Protection of Public Health and Environment – Upon completion, this alternative would provide the highest level of protection to both public health and the environment by removing all contaminated surface and subsurface soil. The contaminated soil would be removed from the Site and the residual groundwater contamination would be actively treated by enhanced bio-degradation, there would be no residual public health or environmental risks remaining after remediation. This alternative would achieve the Site RAO's for soil and groundwater.

Compliance with SCGs – SCGs would be satisfied under this remedial alternative. All contaminated soil would be removed from the site, and the concentrations would be below the UUSCO. The groundwater quality is expected to achieve AWQS after the enhanced bio-degradation in 3 to 5 years.

Long Term Effectiveness and Permanence – This alternative would constitute an effective long term solution due to the removal of the contaminated soil, and the remediation of the groundwater. There would be no residual risks since the source(s) of the contamination would be removed.

Reduction in Toxicity and Mobility – This alternative would fully reduce the toxicity and mobility of the contaminants in the soils and groundwater.

Short Term Effectiveness – This alternative would provide significant benefits in the short term, notably the removal of contaminated soil. Groundwater would be remediated via enhanced bio-degradation, which would greatly reduce the groundwater contaminants in the short term. Potential human exposure, adverse environmental impacts and nuisance conditions at the Site resulting from this alternative are anticipated to be for a period of a few weeks during which time Site work would occur.

Implementability – This alternative would result in the remediation of the Site. This alternative would be implementable, through the excavation of the on-site soil, and use of available contractors under the supervision and oversight of qualified field personnel to excavate and dispose of contaminated soil and to perform groundwater remediation.

Compared to A-2 Track 4 Cleanup, A-3 Track 1 Cleanup will require deeper and larger excavation. It is implementable. However, it will require extra work associated with additional material removal/handling, re-design of footing and foundation system, deeper support of excavation (SOE) system, and installation of additional clean fill.

Cost – The cost to implement this alternative would be the most expensive alternative. Compared to A-2 Track 4 cleanup, additional cost for this alternative would include extra soil excavation and disposal, groundwater remediation, and extra clean fill material.

Key Assumptions Associated with Alternative 3 Track 1 Cleanup:

- Approximately 6,000 tons of impacted soil will be excavated and will require off-site disposal at NYSDEC approved facilities
- Approximately 4,000 cubic yards additional clean fill will be needed, compared to A-2 Track 4 Cleanup.
- Compared to A-2 Track 4, additional construction cost will be approximately \$930,000. This includes additional material removal/handling, re-design of footing and foundation system, deeper support of excavation, additional clean fill material, and additional insurance, etc.
- Assumes excavation can be completed in 45 days.
- Assumes chemical injections will be required for the “hot spots”.
- Assumes no additional off-site groundwater investigation and/or remediation is required.
- Assumes no SSDS will be required for this Site.
- Assumes a vapor barrier system will be required for the new building.
- Assumes groundwater monitoring will continue for 5 years.

The remedial cost estimation for A-3 Track 1 Cleanup is approximately **\$1,838,920.00** for the construction phase, and **\$148,867.50** for the long-term monitoring. An itemized cost analysis is presented in **Table 12**.

Land Use – Upon completion of the remedial action, unrestricted use of the Site would be possible. The future land use under this alternative would be consistent with current zoning and surrounding land use.

A-3 Track 1 cleanup would be the most protective alternative to public health and the environment as the soil and groundwater would be restored to pre-contamination conditions. This would achieve a final condition that is beyond the future planned land use of the Site (Restricted-Residential). Furthermore, this alternative would achieve standards beyond those required for the future planned use of the Site. This alternative would result in no restrictions to future land use and/or groundwater use. This alternative

would fully reduce the toxicity and mobility of contaminants and would comply with all SCGs and RAOs via the removal of contaminated soil and groundwater. This alternative is implementable as the most expensive remedial alternative, although with the highest degree of difficulty of the alternatives presented.

10 REMEDIAL ACTION PROGRAM

10.1 Summary of Selected Remedy

After considering the proposed future use of the site, as well as reviewing and comparing the three alternatives for the site, it appears that Alternative No. 2 Track 4 Cleanup would be the most appropriate remedy for the Site.

Alternative No. 2 will pursue a Track 4 cleanup, and will include:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures. The proposed excavation is shown in **Figure 16**.
- Endpoint soil sampling and analysis. The proposed endpoint sampling locations are shown in **Figure 17**.
- Backfill with clean fill to replace the excavated soil or complete backfilling of the excavation and establish the designed grades at the site.
- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development. The site covering system is shown in **Figure 18**.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring program. The groundwater monitoring network is shown in **Figure 20**.
- Imposition of an institutional control in the form of an Environmental Easement (EE) for the controlled property which will restrict land and groundwater use, and require compliance with a Site Management Plan (SMP).
- Implementation of a Site Management Plan, which includes an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the institutional and engineering controls remain in place and effective, and a Monitoring Plan to assess the performance and effectiveness of the remedy.

Although not considered a component of the remedy, a sub-slab vapor barrier has been incorporated into the building design to mitigate any potential risk of vapor intrusion on-site. The vapor barrier layouts are shown on **Figures 19**.

The remedial cost estimation for A-2 Track 4 Cleanup is approximately **\$469,215.00** during the construction phase, and **\$163,867.50** for the long-term site management. An itemized cost analysis is presented in **Table 11**.

A-2 Track 4 Cleanup would control potential exposure pathways through source removal and the implementation of Institutional and Engineering Controls. This alternative would achieve the SCGs for groundwater over time via natural attenuation. In addition, this alternative would provide significant reduction of the toxicity and mobility of contaminants in the groundwater via source removal and natural attenuation. This alternative would meet the Track 4 cleanup and RAOs for soils with the implementation of the Site Management Plan. Risk of exposure to soil contamination as well as the mobility of the soil contamination is eliminated via the maintenance of the composite covering system. Over time, this alternative would comply with the SCGs for groundwater and would provide adequate protection to both public health and the environment. RAOs for groundwater would be achieved through the implementation of Institutional and Engineering controls as set forth in the Environmental Easement. This alternative would provide the second highest level of protection to both public health and the environment. This alternative would be the second most expensive alternative to implement, however its implementation would not present technical challenges.

Therefore, Alternative No.2 Track 4 Cleanup is selected as the proposed remedy.

10.2 Governing Documents

All remedial work performed under this plan will be in full compliance with the governing documents described in this section of the RWP.

10.2.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Participant and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an appropriate Health and Safety Plan and for the appropriate performance of work according to that plan and applicable laws.

The Health and Safety Plan (HASP) and requirements defined in this Remedial Work Plan pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion. A copy of the HASP is provided as **Appendix 2**.

The site-specific HASP will be reviewed with Site personnel and appropriate sub-contractors prior to the initiation of fieldwork. All proposed work will be performed in "Level D" personal protective equipment unless field condition warrants additional protection.

Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses. Potential confined spaces on this project include utility trenches and other excavation areas.

10.2.2 Quality Assurance Project Plan (QAPP)

A QAPP, detailing procedures necessary to generate data of sufficient quality and quantity to represent successful performance of the Remedial Action at the Site, has been provided as **Appendix 3** of this report. The QAPP includes a Sampling and Analysis Plan (SAP), detailing sampling and analysis of all media (endpoint samples, waste characterization samples, fill and soil cover samples, etc.), and which identifies methods for sample collection and handling.

10.2.3 Soil/Materials Management Plan (SoMP)

All soil removal will follow the SoMP plan as specified in **Appendix 4**. The SoMP includes detailed plans for managing all soils/materials that are disturbed at the Site, including excavation, handling, storage, transport and disposal, and includes all controls that will be applied to these efforts to assure effective, nuisance-free performance in compliance with all applicable Federal, State and local laws and regulations.

All contaminant source removal areas will be surveyed at the completion of excavation. This information will be provided on maps in the FER.

10.2.4 Storm-Water Pollution Prevention Plan (SWPPP)

A storm water pollution prevention plan (SWPPP) has been prepared for the Site. The SWPPP is included as **Appendix 5**.

10.2.5 Community Air Monitoring Plan (CAMP)

The NYSDOH Generic CAMP (provided in **Appendix 6**) will be initiated during all ground intrusive activities, and during any other fieldwork that is reasonably likely to generate significant dust or vapors from known or suspected contaminated soils. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, backfilling and the installation of soil borings or monitoring wells. The implementation of the CAMP will document the presence or absence of VOCs and dust in the air surrounding the work zone, which may migrate off-site due to fieldwork

activities. This plan provides guidance on the need for implementing more stringent dust and emission controls based on air quality data.

10.2.6 Contractors Site Operations Plan (SOP)

The Remedial Engineer has reviewed all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) and confirms that they are in compliance with this RWP. The Remedial Engineer is responsible to ensure that all later document submittals for this remedial project, including contractor and sub-contractor document submittals, are in compliance with this RWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

10.2.7 Citizen Participation Plan

A Citizen Participation Plan (CPP) including an overview of the BCP program, background of the Site, a summary of the investigative findings for the Site, and citizen participation activities is included as **Appendix 7**.

10.2.8 Contingency Plan

If unknown conditions are encountered on-site during sub-grade removal (e.g., discovery of a previously unidentified UST), the Contingency Plan (included as part of SoMP) and all applicable NYSDEC guidelines will be followed to address the condition(s).

10.3 Soil/Fill Excavation and Removal

Soil and materials management, including excavation, handling and disposal, will be conducted in accordance with the Soil/Materials Management Plan in **Appendix 4**. Discrete contaminant sources (such as hotspots) identified during the remedial action will be identified by GPS or surveyed. This information will be provided in the Final Engineering Report.

The location of planned excavations is shown in **Figure 16**. The total quantity of soil/fill expected to be excavated and disposed off-Site is 3,500 tons.

For each disposal facilities to be used in the remedial action, a letter from the developer/QEP to the receiving facility requesting approval for disposal and a letter back to the developer/QEP providing approval for disposal will be submitted to NYSDEC prior to any transport and disposal of soil at a facility. Disposal facilities will be reported to NYSDEC when they are identified and prior to the start of remedial action.

10.4 End-point Sampling

Pursuant to DER-10, end point samples would be collected along the sidewalls and bottom of the excavated area; an estimated thirty (30) endpoint soil samples would be collected. The proposed endpoint sampling locations are shown in **Figure 17**. All soil samples would be labeled, preserved on ice in coolers, and sent to the analytical laboratory under chain of custody procedures.

Selected endpoint samples will be analyzed for:

- Full Target Compound List (TCL) suite [volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and pesticides/ polychlorinated biphenyls (PCBs)];
- Target Analyte List (TAL) suite (Metals, Mercury and Cyanide); and
- Per- and polyfluoroalkyl substances (PFAS).

New York State ELAP certified labs will be used for all end-point sample analyses. Labs performing end-point sample analyses will be reported in the FER. The FER will provide a tabular and map summary of all end-point sample results and will include all data including non-detects and applicable standards and/or guidance values.

10.4.1 *Documentation End-point Sampling*

Removal actions for development purposes under this plan will be performed in conjunction with documentation end-point soil sampling. Twenty-four (24) documentation samples will be collected from the base and the sidewall of the excavation. In addition, eight (8) selected samples from the RI will also be utilized as documentation samples. The location of the proposed sampling location can be referenced with **Figure 17**.

10.4.2 *Hotspot End-point Sampling*

Endpoint samples will be collected from the sidewalls and base of excavation at each of the two (2) hotspot locations (Zone-2 for the former fuel oil USTs and Zone-4 for the former gasoline USTs) identified in the Remedial Investigation. Six (6) documentation samples will be collected from the sidewalls of the hotspot excavation. It is expected that hotspot excavation will continue to bedrock, and therefore no bottom endpoint samples will be collected. The location of the proposed sampling location can be referenced with **Figure 17**.

For any hotspots identified during this remedial program, including any hotspots identified during the remedial action, hotspot removal actions will be performed to ensure that hot-spots are fully removed, and end point samples will be collected at the following frequency:

1. For excavations less than 20 feet in total perimeter, at least one bottom sample and one sidewall sample biased in the direction of surface runoff.
2. For excavations 20 to 300 feet in perimeter:
 - For surface removals, one sample from the top of each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.
 - For subsurface removals, one sample from each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.
3. For sampling of volatile organics, bottom samples should be taken within 24 hours of excavation, and should be taken from the zero to six-inch interval at the excavation floor. Samples taken after 24 hours will be taken at six to twelve inches.
4. For contaminated soil removal, post remediation soil samples for laboratory analysis will be taken immediately after contaminated soil removal. If the excavation is enlarged horizontally, additional soil samples will be taken pursuant to bullets 1-3 above.

Post-remediation end-point sample locations and depth will be biased towards the areas and depths of highest contamination identified during previous sampling episodes unless field indicators such as field instrument measurements or visual contamination identified during the remedial action indicate that other locations and depths may be more heavily contaminated. In all cases, post-remediation samples should be biased toward locations and depths of the highest expected/confirmed contamination.

If either LNAPL and/or DNAPL are detected, appropriate samples will be collected for characterization and “finger print analysis” and required regulatory reporting (i.e. spills hotline) will be performed.

10.5 Import of Soils

Upon completion of the site redevelopment, most of the Site will be covered by concrete/asphalt. For the areas that are not covered by concrete/asphalt, a two (2) feet layer of clean fill will be installed. In addition, clean fill will be required to level the site.

Import of soils onto the property will be performed in conformance with DER-10, Section 5.4(e) and the Soil/Materials Management Plan in **Appendix 4**.

The imported clean fill will meet the RRSCO and PGWSCO.

The estimated quantity of clean fill and clean stone to be imported into the Site for backfill and cover soil is 1,200 cubic yard.

The providers/facilities of the clean fill will be reported to NYSDEC when they are identified and prior to the start of remedial action in accordance with DER-10 Section 5.4(e)6.

10.6 Reuse of Onsite Soils

Soil reuse is not planned for this project. However, in the event that any on-site soil is to be reused, it will be performed in conformance with DER-10 Section 5.4(e)4 and the Soil/Materials Management Plan in **Appendix 4**. The reuse soils will meet the RRSCO and the PGWSCO.

10.7 Engineering Controls

Engineering Controls will be employed in the remedial action to address residual contamination remaining at the site. The primary engineering control will be the site cover. The vapor barrier is incorporated into the building design, but it is not considered components of the remedy.

10.7.1 *Composite Cover System*

Exposure to residual soil/fill will be prevented by an engineered, composite cover system to be built on the Site. This composite cover system will be comprised of 6 inches of reinforced concrete slab underlain by 8 inches of clean sub-base material in building areas; 4 inches of asphalt pavement underlain by 6 inches of clean sub-base material in parking areas, and 2 feet of clean soil in exposed soil areas.

Figure 18 shows the typical design for each remedial cover type to be used on this Site.

The composite cover system will be the primary engineering control. The system will be inspected, and its performance certified at specified intervals as required by the Site Management Plan. A Soil and Materials Management Plan will be included in the Site Management Plan and will outline the procedures to be followed in the event that the composite cover system and underlying residual soil/fill is disturbed

after the remedial action is complete. Maintenance of this composite cover system will be described in the Site Management Plan.

10.7.2 Vapor Barrier System

A vapor barrier system will be installed as part of the building construction to mitigate any potential future risk of soil vapor intrusion into the new building. The product to be used will be GCP Applied Technologies ("GCP") PREPRUFE® 300R membrane under the floor slab and 160R membrane behind the foundation wall. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier will be installed in accordance with manufacturer specifications.

A plan view showing the location of the proposed vapor barrier is provided in **Figure 19**. Product specification sheets are provided in **Appendix 8**. The Final Engineering Report will include as-built drawings and diagrams; manufacturer documentation; and photographs.

A Soil and Materials Management Plan will be included in the Site Management Plan and will outline the procedures to be followed in the event that the composite cover system and underlying vapor barrier system is disturbed after the remedial action is complete.

10.8 Groundwater Monitoring

The remediation program will include a long-term groundwater monitoring program to evaluate the effectiveness of natural attenuation processes in restoring groundwater quality. Groundwater monitoring would be conducted to track the reductions in contaminants of concern (COC) over time and confirm the protectiveness of the remedy. The on-site groundwater monitoring wells that will be decommissioned during redevelopment of the site will need to be re-installed (replaced by 2-inch wells). In order to monitor the PFAS exceedances in the groundwater, MW-4R will be relocated across Huguenot Street; and one additional monitoring well (identified as MW-9) will be installed along Pine Street, south of MW-6 and hydraulically downgradient of the former car wash. The groundwater monitoring network would consist of a total of nine (9) monitoring wells as shown on **Figure 20**.

Upon excavation of the "hot spots", it is anticipated that the natural attenuation will achieve AWQS for groundwater within 5 years (except of several inorganic compounds/metals, which have elevated regional background levels above AWQS).

Groundwater samples collected will be analyzed for:

- Full TCL suite (VOCs, SVOCs, and Pesticides/PCBs);
- TAL suite (Metals and Cyanide); and
- Per- and polyfluoroalkyl substances (PFAS)

The Site Management Plan will include a long-term groundwater monitoring plan that provides details regarding the monitoring and reporting of the groundwater conditions, maintenance and decommissioning of the monitoring well network, and duration of monitoring.

The re-installation and sampling of the monitoring wells will follow the same protocols as outlined in the RIR.

10.9 Institutional Controls

Institutional Controls (IC's) are required under this Remedial Action to assure permanent protection of public health by elimination of exposure to remaining contamination. These IC's define the program to operate, maintain, inspect and certify the performance of Engineering Controls and Institutional Controls on this property. Institutional Controls would be implemented in accordance with a designated environmental easement registered with the county clerk and a Site Management Plan included in the Final Engineering Report (FER). Institutional Controls would be:

- Registration of an environmental easement with the County Clerk. The easement will include a description of all ECs and ICs, will summarize the requirements of the SMP, and will note that the property owner and property owner's successors and assigns must comply with the DCR and the approved SMP. The recorded easement will be submitted in the Final Engineering Report. The easement will be recorded prior to NYSDEC issuance of the Notice of Completion; Submittal of a SMP in the FER for approval by NYSDEC that provides procedures for appropriate operation, maintenance, inspection, and certification of ECs and IC's. SMP will require that the property owner and property owner's successors and assigns will submit to NYSDEC a periodic written statement that certifies that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to enter the Site in order to evaluate the continued maintenance of any controls. This certification shall be submitted at a frequency to be determined by NYSDEC in the SMP;

- Vegetable gardens and farming on the Site are prohibited in contact with residual soil materials;
- Use of groundwater underlying the Site is prohibited without treatment rendering it safe for its intended use;
- All future activities on the Site that will disturb residual material must be conducted pursuant to the soil management provisions in an approved SMP;
- The Site will be used for restricted residential and commercial use and will not be used for a higher level of use without prior approval by NYSDEC.

10.9.1 ENVIRONMENTAL EASEMENT

An Environmental Easement, as defined in Article 71 Title 36 of the Environmental Conservation Law, is required when residual contamination is left on-site after the Remedial Action is complete. As part of this remedy, an Environmental Easement approved by NYSDEC will be filed and recorded with the Westchester County. The Environmental Easement will be submitted as part of the Final Engineering Report.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the Westchester County Clerk and notice provided to the City of New Rochelle before the Certificate of Completion can be issued by NYSDEC. A series of Institutional Controls are required under this remedy to prevent future exposure to residual contamination by controlling disturbances of the subsurface soil and restricting the use of the Site to Restricted Residential Use only. These Institutional Controls are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement.

The Controlled Property (Site) will also have a series of Institutional Controls in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming on the Controlled Property are prohibited;
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the Controlled Property that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the SMP;
- The Controlled Property may be used for Restricted Residential, commercial and industrial uses, provided the long-term Engineering and Institutional Controls included in the SMP are employed;

- The Controlled Property may not be used for a higher level of use, such as Unrestricted Use without an amendment or extinguishment of this Environmental Easement;
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

10.10 Site Management Plan

The Site Management Plan identifies and implements the ICs and ECs required for the site, as well as the necessary monitoring and operation and maintenance of the remedy after the Certificate of Completion (COC) is issued. The Site Management Plan (SMP) describes appropriate methods and procedures to ensure implementation of all ECs and ICs that are required by this RWP. The Site Management Plan is submitted as a stand-alone document that can be revised at any time, as necessary. Site Management continues until terminated in writing by NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Site Management Plan are implemented.

The SMP will provide a detailed description of the procedures required to manage residual soil/fill left in place following completion of the remedial action in accordance with the Brownfield Cleanup Agreement with NYSDEC. This includes a plan for: (1) implementation of EC's and ICs; (2) operation and maintenance of EC's; (3) inspection and certification of IC's and EC's; and (4) periodic reporting.

Site management activities and EC/IC certification will be scheduled by NYSDEC on a periodic basis to be established in the SMP and will be subject to review and modification by NYSDEC.

11 REMEDIAL ACTION MANAGEMENT

11.1 Project Organization and Oversight

Principal personnel who will participate in the remedial action include Sr. Consultant: James Cressy, Sr. Geologist: Shuangtao Zhang, and Sr. Engineer: Wenqing Fang. The Professional Engineer (PE) and Qualified Environmental Professionals (QEP) for this project are Mr. Wenqing Fang, P.E., and Mr. James Cressy, QEP.

Resumes of key personnel involved in the Remedial Action are included in **Appendix 9**.

11.2 Remedial Engineer and Qualified Environmental Professional

Remedial Engineer

The Remedial Engineer for this project will be Wenqing Fang, P.E. The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the remedial program for the Site. The Remedial Engineer will certify in the Final Engineering Report that the remedial activities were observed by qualified environmental professionals under her supervision and that the remediation requirements set forth in the Remedial Work Plan and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RWP.

The Remedial Engineer will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import of back fill material, and management of waste transport and disposal. The Remedial Engineer will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The Remedial Engineer will review all pre-remedial plans submitted by contractors for compliance with this Remedial Work Plan and will certify compliance in the Final Engineering Report.

The Remedial Engineer will provide the certifications listed in the Final Engineering Report.

Qualified Environmental Professional

The Qualified Environmental Professional (QEP) for this project will be James Cressy. The QEP will oversee environmental remedial activities on the Site, document the proper removal of contaminated soils, collect waste characterization as well as site integrity samples, inspect and certify the proper importation of approval fill soils, and assist the Remedial Engineer in the preparation of documents including the FER, the SMP, and periodic status reports.

11.3 Site Security

Site access will be controlled by a gated entrance to the fenced property.

11.4 Work Hours

The hours for operation will comply with the City of New Rochelle construction code requirements or according to specific variances issued by the city. The hours of operation will be conveyed to NYSDEC during the pre-construction meeting.

11.5 Construction Health and Safety Plan

The Health and Safety Plan is included in **Appendix 2**. Remedial work performed under this RWP will be in full compliance with applicable health and safety laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements. Confined space entry, if any, will comply with OSHA requirements and industry standards and will address potential risks. The parties performing the remedial construction work will ensure that performance of work is in compliance with the HASP and applicable laws and regulations. The HASP pertains to remedial and invasive work performed at the Site until the issuance of the Certificate of Completion.

All field personnel involved in remedial activities will participate in training required under 29 CFR 1910.120, such as 40-hour hazardous waste operator training and annual 8-hour refresher training. Site Safety Officer will be responsible for maintaining workers training records.

Personnel entering any exclusion zone will be trained in the provisions of the HASP and will comply with all requirements of 29 CFR 1910.120. Site-specific training will be provided to field personnel. Additional safety training may be added depending on the tasks performed. Emergency telephone numbers will be

posted at the site location before any remedial work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; PPE levels and other relevant safety topics. Meetings will be documented in a log book or specific form.

An emergency contact sheet with names and phone numbers is included in the CHASP. That document will define the specific project contacts for use in case of emergency.

11.6 Community Air Monitoring Plan

The community air monitoring plan (CAMP) is included as **Appendix 6**. Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media.

11.7 Contingency Plan

If unknown conditions are encountered on-site during sub-grade removal (e.g., discovery of a previously unidentified UST), the Contingency Plan (included as part of SoMP) and all applicable NYSDEC guidelines will be followed to address the condition(s).

11.8 Worker Training and Monitoring

The Participant is responsible for insuring that all Site contractors provide their workers with applicable training (i.e. HAZWOPER, site safety training and medical monitoring, as necessary).

11.9 Agency Approvals

All permits or government approvals required for remedial construction have been or will be obtained prior to the start of remedial construction. Approval of this RWP by NYSDEC does not constitute satisfaction of these requirements and will not be a substitute for any required permit.

The planned end use for the Site is in conformance with the current zoning for the property as determined by City of New Rochelle. A Certificate of Completion will not be issued for the project unless conformance with zoning designation is demonstrated.

11.10 NYSDEC BCP Signage

A project sign will be erected at the main entrance to the Site prior to the start of any remedial activities. The sign will indicate that the project is being performed under the New York State Brownfield Cleanup Program. The sign will meet the detailed specifications provided by the NYSDEC Project Manager.

11.11 Emergency Contact Information

An emergency contact list with names and telephone numbers that will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency is provided below:

Emergency Contact	Phone Number
EMERGENCY	911
Hospital: Montefiore New Rochelle Hospital	(914) 632-5000
Police Department	911
Fire Department	911
Site Health and Safety Officer, James Cressy	(631) 616-4000
Remedial Engineer, Wenqing Fang	(631) 616-4000
NYSDEC Project Manager, Dan Lanners	(518) 402-9662
NYSDOH Project Manager, Eamonn O'Neil	(518) 402-7860
Construction Manager	TBD

11.12 Remedial Action Costs

The remedial cost estimation for A-2 Track 4 Cleanup is approximately **\$469,215.00** during the construction phase, and **\$163,867.50** for the long-term site management. An itemized cost analysis is presented in **Table 11**. This will be revised based on actual costs and submitted as an Appendix to the Final Engineering Report.

12 SITE PREPARATION

12.1 Pre-Construction Meeting

NYSDEC will be invited to attend the pre-construction meeting at the Site with all parties involved in the remedial process prior to the start of remedial construction activities.

12.2 Mobilization

Mobilization will be conducted as necessary for each phase of work at the Site. Mobilization includes field personnel orientation, equipment mobilization (including securing all sampling equipment needed for the field investigation), marking/staking sampling locations and utility mark-outs. Each field team member will attend an orientation meeting to become familiar with the general operation of the Site, health and safety requirements, and field procedures.

12.3 Utility Marker Layouts, Easement Layouts

The presence of utilities and easements on the Site will be fully investigated prior to the performance of invasive work such as excavation or drilling under this plan by using, at a minimum, the One-Call System (811). Underground utilities may pose an electrocution, explosion, or other hazard during excavation or drilling activities. All invasive activities will be performed in compliance with applicable laws and regulations including City of New Rochelle Building Code to assure safety. Utility companies and other responsible authorities will be contacted to locate and mark the locations, and a copy of the Mark-Out Ticket will be retained by the contractor prior to the start of drilling, excavation or other invasive subsurface operations. Overhead utilities may also be present within the anticipated work zones. Electrical hazards associated with drilling in the vicinity of overhead utilities will be prevented by maintaining a safe distance between overhead power lines and drill rig masts.

Proper safety and protective measures pertaining to utilities and easements, and compliance with all laws and regulations will be employed during invasive and other work contemplated under this RWP. The integrity and safety of on-Site and off-Site structures will be maintained during all invasive, excavation or other remedial activity performed under the RWP.

12.4 Dewatering

Based on the RI and the previous investigation, the groundwater elevation fluctuates between 75 to 78 feet AMSL. The proposed excavation bottom for the basement is 76 feet AMSL, with the bottom of an elevator pit at approximately 72 feet AMSL. If groundwater is encountered during excavation, construction dewatering will be performed in compliance with city, state, and federal laws and regulations. Extracted groundwater will either be containerized for off-site disposal or will be treated under a city permit to meet pretreatment requirements prior to discharge to the sewer system. All required permits will be obtained from City of New Rochelle prior to any discharge of groundwater into the sewer system.

12.5 Erosion and Sedimentation Controls

This section describes preventative measures that will be taken to protect the Site from soil erosion and sedimentation during remedial activities. A final ESCP, reflecting final Site development plans and any approved modifications to the scope of remedial work, will be submitted to the NYSDEC for review and approval prior to the start of construction activities.

The final ESCP will include the following elements:

- A location map including the proximity of the Site to relevant off-site features;
- An Existing Conditions Site Plan;
- A grading plan and construction timetable including finished elevations and addressing the sequencing of the project; and,
- The location and type of all erosion and sediment control measures (e.g., silt fence, hay bale checks, stabilized construction entrance, etc.) and sequencing of the measures, if needed.

The Site remediation will occur in such a way as to permit on-site stormwater to remain on the Site.

12.6 Sheet piling and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities include excavation is the sole responsibility of the Participant and its contractors. The Participant and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Participant and its contractors must obtain any local, State or Federal permits or approvals that may be required to perform work under this Plan. Further, the Participant and its contractors are solely

responsible for the implementation of all required, appropriate, or necessary health and safety measures during performance of work under the approved Plan.

12.7 Decontamination Area

Decontamination of field equipment will be conducted to prevent Site cross-contamination, minimize the potential for off-site contamination and to reduce exposures to contaminated media. All decontamination activities will be documented in field logbooks.

Trucks and other heavy equipment remaining on-site will be brushed to remove easily accessible gross accumulations of soil at the end of each work day, and prior to moving between excavation areas or moving toward the Site exit. A dedicated decontamination area will be provided as part of the erosion and sedimentation control for vehicles exiting the Site, and will be designed such that there is continuity between the equipment wash area and the clean egress path. Heavy equipment will be brushed and sprayed with high-pressure water and/or steam to remove soil adhering to surfaces (including wheels and vehicle undercarriages), prior to exiting the Site.

Any non-disposable sampling equipment or personal protective equipment requiring decontamination will be conducted on a decontamination line setup on plastic sheeting, proceeding from dirty to clean. All items (disassembled as needed) will be washed/brushed thoroughly in an Alconox (or similar) solution, then rinsed with clean water (and/or nitric acid and methanol, as appropriate) per established USEPA decontamination protocols. All down-hole gauging and pumping equipment will be allowed to run fully submerged in both soapy and clean water. Rinse blanks will be collected as per the requirements of the QAPP.

Equipment known or suspected to be impacted by petroleum or solvent contamination, grossly contaminated media or materials subject to conditions specified in the Contingency Plan (Section 5.5), will be decontaminated on an engineered pad designed to capture and contain wash water, which will be containerized and characterized prior to off-site disposal at a permitted facility.

12.8 Equipment and Material Staging

Equipment and materials will be stored and staged in a manner that complies with applicable laws and regulations. Specific Site areas will be designated for the staging of equipment and materials. Staging areas will be located and managed such that: a) non-contaminated materials do not contact or become

intermixed with contaminated materials; and, b) the likelihood of worker and/or visitor exposures to contaminated media is minimized.

12.9 Stabilized Construction Entrance

Steps will be taken to ensure that trucks departing the site will not track soil, fill or debris off-Site. Such actions may include use of cleaned asphalt or concrete pads or use of stone or other aggregate-based egress paths between the truck inspection station and the property exit. Measures will be taken to ensure that adjacent roadways will be kept clean of project related soils, fill and debris.

12.10 Truck Inspection Station

An outbound-truck inspection station will be set up close to the Site exit. Before exiting the Site, trucks will be required to stop at the truck inspection station and will be examined for evidence of contaminated soil on the undercarriage, body, and wheels. Soil and debris will be removed. Brooms, shovels and clean water will be utilized for the removal of soil from vehicles and equipment, as necessary.

12.11 Traffic Control

Drivers of trucks leaving the Site with soil/fill will be instructed to proceed without stopping in the vicinity of the Site to prevent neighborhood impacts. The planned route on local roads for trucks leaving the site is shown on **Figure 21**.

12.12 Well Decommissioning

Any existing monitoring wells located within construction areas will be properly decommissioned according to technical guidance provided in NYSDEC CP-43: Groundwater Monitoring Well Decommissioning Policy. The monitoring well casing will be exposed to a depth corresponding to the depth of planned excavation in the immediate vicinity of the well, the exposed casing will be cut off at the level of the excavation floor and the remaining subsurface portion of the casing will be grouted in-place, as per CP-43 Section 6.0.

12.13 Demobilization

Demobilization will include:

- As necessary, restoration of temporary access areas and areas that may have been disturbed to accommodate support areas (e.g., staging areas, decontamination areas, storage areas, temporary water management areas, and access area);
- Removal of sediment from erosion control measures and truck wash and disposal of materials in accordance with applicable laws and regulations;
- Equipment decontamination, and;
- General refuse disposal.

Equipment will be decontaminated and demobilized at the completion of all field activities. Investigation equipment and large equipment (e.g., soil excavators) will be washed at the truck inspection station as necessary. In addition, all investigation and remediation derived waste will be appropriately disposed.

13 REPORTING AND RECORD KEEPING

13.1 Daily reports

Daily reports providing a general summary of activities for each day of active remedial work will be emailed to the NYSDEC Project Manager by the end of the following business day. Those reports will include:

- Project number and statement of the activities and an update of progress made and locations of excavation and other remedial work performed;
- Quantities of material imported and exported from the Site;
- Status of on-Site soil/fill stockpiles;
- A summary of all citizen complaints, with relevant details (basis of complaint; actions taken; etc.);
- A summary of CAMP results noting all exceedances and any actions taken. CAMP data may be reported;
- Photograph of notable Site conditions and activities.

The frequency of the reporting period may be revised in consultation with NYSDEC project manager based on planned project tasks. Daily email reports are not intended to be the primary mode of communication for notification to NYSDEC of emergencies (accidents, spills), requests for changes to the RWP or other sensitive or time critical information. However, such information will be included in the daily reports. Emergency conditions and changes to the RWP will be communicated directly to the NYSDEC project manager by personal communication. Daily reports will be included as an Appendix in the Final Engineering Report.

13.2 Record Keeping and Photo Documentation

Job-site record keeping for all remedial work will be performed. These records will be maintained on-Site during the project and will be available for inspection by NYSDEC staff. Representative photographs will be taken of the Site prior to any remedial activities and during major remedial activities to illustrate remedial program elements and contaminant source areas. Photographs will be submitted at the completion of the project in the FER in digital format (i.e. jpeg files).

13.3 Complaint Management

All complaints from citizens will be promptly reported to NYSDEC. Complaints will be addressed, and outcomes will also be reported to NYSDEC in daily reports. Notices to NYSDEC will include the nature of the complaint, the party providing the complaint, and the actions taken to resolve any problems.

13.4 Deviations from The Remedial Work Plan

All changes to the RWP will be reported to, and approved by, the NYSDEC Project Manager and will be documented in daily reports and reported in the Final Engineering Report. The process to be followed if there are any deviations from the RWP will include a request for approval for the change from NYSDEC noting the following:

- Reasons for deviating from the approved RWP;
- Effect of the deviations on overall remedy; and
- Determination with basis that the remedial action with the deviation(s) is protective of public health and the environment.

13.5 Final Engineering Report

A Final Engineering Report (FER) will be submitted to NYSDEC following implementation of the remedial action defined in this RWP. The FER will document that the remedial work required under this RWP has been completed and has been performed in compliance with this plan. The FER will include:

- Information required by this RWP;
- Text description with thorough detail of all engineering and institutional controls;
- As-built drawings for all constructed remedial elements;
- Manifests for all soil or fill disposal;
- Photographic documentation of remedial work performed under this remedy;
- Camp data generated during the course of remedial activities.
- Description of any changes in the remedial action from the elements provided in this RWP and associated design documents;
- Tabular summary of all end point sampling results (including all soil test results from the remedial investigation for soil that will remain on site) and all imported soil/fill and waste characterization results, QA/QC results for end-point sampling, and other sampling and chemical analysis performed as part of the remedial action;
- Test results or other evidence demonstrating that remedial systems are functioning properly;

- Account of the source area locations and characteristics of all soil or fill material removed from the Site including a map showing the location of these excavations and hotspots, tanks or other contaminant source areas;
- Full accounting of the disposal destination of all contaminated material removed from the Site. Documentation associated with disposal of all material will include transportation and disposal records, and letters approving receipt of the material;
- Account of the origin and required chemical quality testing for material imported onto the Site;
- Reports and supporting material will be submitted in digital form and final PDF's will include bookmarks for each appendix;
- Environmental easement.

13.6 Site Management Plan

A Track 4 remedial action is proposed, and Site Management is required. Site Management will be the last phase of remediation. Site Management will begin with the approval of the SMP and FER and issuance of the Certificate of Completion (COC).

The Site Management Plan (SMP) describes appropriate methods and procedures to ensure implementation of all ECs and ICs that are required by this RWP. The Site Management Plan is submitted as a stand-alone document that can be revised at any time, as necessary. Site Management continues until terminated in writing by NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Site Management Plan are implemented.

The SMP will provide a detailed description of the procedures required to manage remaining contamination left in place following completion of the remedial action in accordance with the Brownfield Cleanup Agreement with NYSDEC. This includes a plan for: (1) implementation of EC's and ICs; (2) operation and maintenance of EC's; (3) inspection and certification of IC's and EC's; and (4) periodic reporting.

Site management activities and EC/IC certification will be scheduled by NYSDEC on a periodic basis to be established in the SMP and will be subject to review and modification by NYSDEC.

14 SCHEDULE

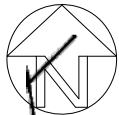
The table below presents a schedule for the proposed remedial action and reporting. If the schedule for remediation and development activities changes, it will be updated and submitted to NYSDEC.

Schedule Milestone	Expected Completion Date
Remediation Mobilization	February 2019
Remedial Excavation and Disposal of Impacted Soil/Fill	April 2019
Engineering Controls (site cover)	May 2019
Demobilization	June 2019
Environmental Easement	July 2019
Site Management Plan (SMP)	July 2019
Submit Final Engineering Report (FER)	August 2019
Obtain of Certificate of Completion (COC)	October 2019
Installation of Permanent Monitoring Wells	August 2019

15 REFERENCES

1. NYSDEC, May 2010, DER-10 Technical Guidance for Site Investigation and Remediation
2. NYSDEC, October 1993, Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Limitations
3. NYSDOH, October 2006, Guidance for Evaluating Soil Vapor Intrusion in the State of New York
4. Cider Environmental, February 2016, Phase I Environmental Site Assessment (ESA)
5. Cider Environmental, March 2016, Phase II ESA
6. Cider Environmental, February 2017, Supplemental Subsurface Investigation
7. C360157 Remedial Investigation Work Plan, dated 4/16/2018, by CE (approved by the NYSDEC)
8. C360157 Health and Safety Plan, dated 4/16/2018, by CE (approved by the NYSDEC)
9. C360157 Community Air Monitoring Program, dated 4/16/2018, by CE (approved by the NYSDEC)
10. C360157 Citizen Participation Plan, dated March 2018, by CE (approved by the NYSDEC)
11. C360157 Remedial Investigation Report, dated 11/28/2018, by CE (pending approval by the NYSDEC)

FIGURES



IS AVE

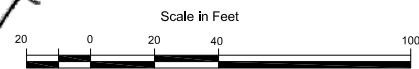
EA PL

SITE

HUGUENOT ST

10
(1.14 Ac.)

35
(0.57 Ac.)



WESTCHESTER, NY

CITY OF NEW ROCHELLE

Map ID: 0127

Legend

Site Boundary

Disclaimer
This map is not to be used for any purpose other than that for which it was prepared. It is not to be used for any purpose other than that for which it was prepared. It is not to be used for any purpose other than that for which it was prepared.



City of New Rochelle
Planning Department
381-393 Huguenot Street
New Rochelle, NY 10801
Tel: (914) 616-4000
Fax: (914) 616-7972
www.cityofnewrochelle.org

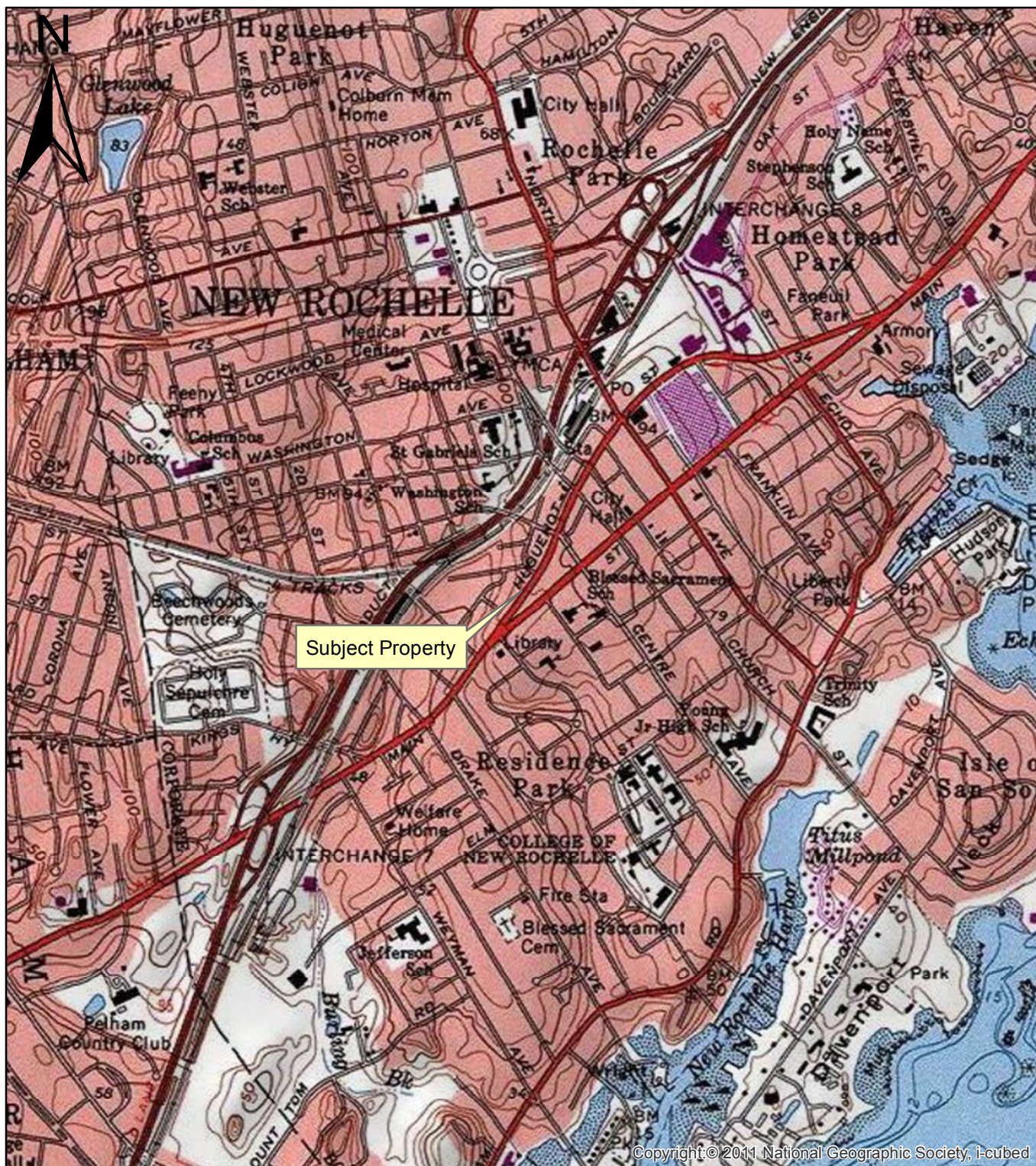
(in APN, Record Layout File)
Map Page 3 of 3
Block 13
Sheet 13
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Fax: (914) 616-7972
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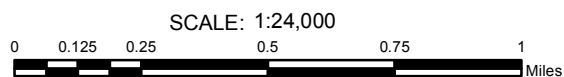
TITLE: County Tax Map			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY: WF	REVISD BY:	PROJECT No. 2015-188	
CHECKED BY: JC	REVISD DATE:	FIGURE No. 01	
DATE: 1-19-2017	APPROVED BY:		
SCALE: 1" = 60'	FILE NAME:		



Tel: (631) 616-4000 Fax: (631) 680-7972
www.ciderenvironmental.com
6268 Jericho Tpke, Suite 12, Commack, NY 11725



USGS 7.5 Minute Quadrangle Topographic Map
(2011)



TITLE	SITE LOCATION MAP		Figure No.
			02
PROJECT	381-393 Huguenot Street New Rochelle, New York		Project No.
			2015-188
	DESIGN	WF	1-18-2016
	CHECK		
	REVIEW		



SCALE: 1:1,200
 0 30 60 120 180 240 Feet

TITLE	SITE BASE MAP		Figure No.
			03
PROJECT	381-393 Huguenot Street New Rochelle, New York		Project No.
			2015-188
	DESIGN	WF	1-19-2017
	CHECK		
	REVIEW		



Note:

In March 2016, CE performed a Phase II ESA at the Subject Property. The soil samples showed several target VOC/SVOCs at levels above the Unrestricted Use Soil Cleanup Objectives. Elevated PID readings and strong petroleum odors were noted during soil sampling.

In February 2017, CE performed a Supplemental Subsurface Investigation (SSI) at the Subject Property. The SSI detected a 2-foot layer of urban fill material throughout the site. Lead (maximum 4,330 mg/Kg) was detected at levels exceeding the RRSCO (400 mg/Kg) within the urban fill layer at multiple locations. Mercury was detected at level (1.26 mg/Kg) exceeding the RRSCO (0.81 mg/Kg) at one (1) location (SB-21 [0'-2']). PCB was detected at level (3,000 ug/Kg) exceeding the RRSCO (1,000 ug/Kg) at one (1) location (SB-2B [5'-7']).

Parameters	RRSCO	SB-19 0'-2' 02/15/2017
Metals Total		mg/Kg
Lead, Pb	400	495

Parameters	RRSCO	SB-21 0'-2' 02/15/2017
Metals Total		mg/Kg
Lead, Pb	400	4330
Mercury	0.81	1.26

Parameters	Units	UUSCO	RRSCO	SB-1 3/3/2016
VOCs				
n-Propylbenzene	ug/Kg	3900	100,000a	4,100

Parameters	RRSCO	SB-2B 5'-7' 02/14/2017
PCBs		ug/Kg
Aroclor 1254	1000	3000

Parameters	RRSCO	SB-20 0'-2' 02/14/2017
Metals Total		mg/Kg
Lead, Pb	400	1820
SVOCs		ug/Kg
Benzo-a-Pyrene	1,000f	1100
Indeno(1,2,3-cd)Pyrene	500f	870

Parameters	RRSCO	SB-16 0'-2' 02/14/2017
Metals Total		mg/Kg
Lead, Pb	400	440
SVOCs		ug/Kg
Benzo-a-Anthracene	1,000f	5800
Benzo-a-Pyrene	1,000f	5800
Benzo-b-Fluoranthene	1,000f	5600
Benzo-k-Fluoranthene	3900	5400
Chrysene	3900	5800
Dibenzo-a,h-Anthracene	330e	720
Indeno(1,2,3-cd)Pyrene	500f	3500

Parameters	RRSCO	SB-14 0'-2' 02/14/2017
Metals Total		mg/Kg
Lead, Pb	400	3210

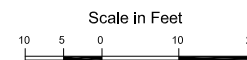
Huguenot Street

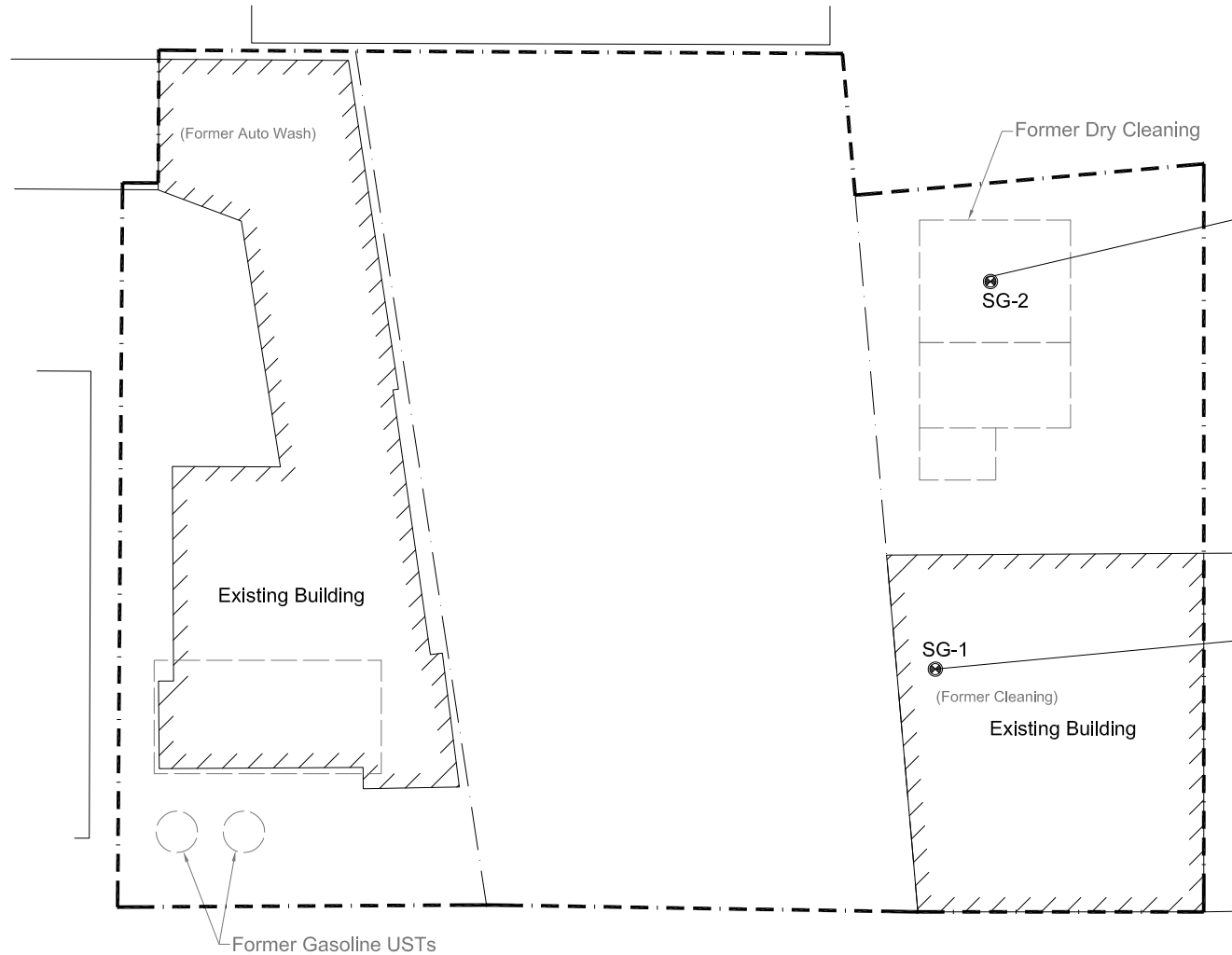
Legend

- SSI Groundwater Temporary Well
- SSI Soil Sampling Point
- Site Boundary
- Phase II Groundwater Temporary Well
- Phase II Soil Sampling Point
- Phase II Soil Gas Sampling Point

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TITLE: Summary of Exceedances- 2016 & 2017 Soil Sampling Results			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	JC	REVISED DATE:	
DATE:	2-23-2017	APPROVED BY:	
SCALE:	1" = 25'	FILE NAME:	
PROJECT No. 2015-188		FIGURE No. 04	



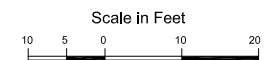


Parameters	DOH Actoin Level	SG-2 3/3/2016
VOCs		ug/m3
1,2,4-Trichlorobenzene		19.4
1,2,4-Trimethylbenzene		988
1,3,5-Trimethylbenzene		904
4-Ethyltoluene		194
p-Isopropyltoluene		150
Benzene		23.8
Carbon Disulfide		98.3
cis-1,2-Dichloroethene	1000	18.4
Cyclohexane		513
Ethylbenzene		133
Heptane		1,480
Hexane		497
Isopropylbenzene		223
Total Xylenes		397
o-Xylene		181
Propylene		253
Tetrachloroethene	300	4.37
Toluene		35.7
Trichloroethene	20	14.3
Vinyl Chloride	250	74.6

Parameters	DOH Actoin Level	SG-1 3/3/2016
VOCs		ug/m3
1,2,4-Trimethylbenzene		1.07
Acetone		11.3
Benzene		1.78
Carbon Disulfide		1.39
Carbon Tetrachloride	250	0.28
Chloroform		13.4
Dichlorodifluoromethane		1.73
Ethanol		3.58
Isopropylalcohol		3.34
2-Butanone		1.17
n-Butylbenzene		1.05
Propylene		2.99
Tetrachloroethene	300	1.02
Toluene		1.52
Trichlorofluoromethane		1.44

Note:
In March 2016, CE performed a Phase II
ESA at the Subject Property. The soil gas
samples detected several gasoline related
compounds and dry cleaning operation
related compounds.

Huguenot Street



Legend

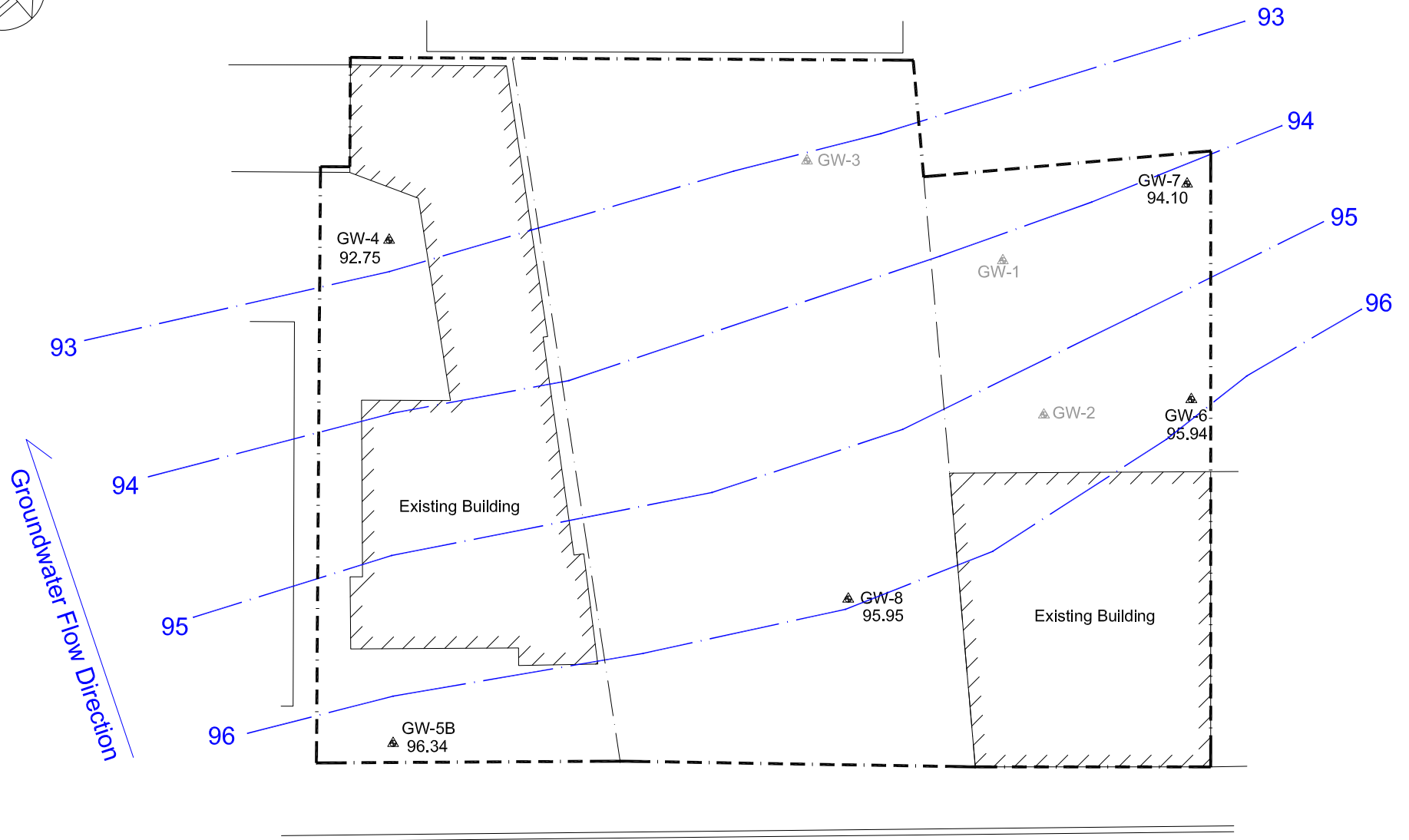
- Soil Gas Sampling Point
- Site Boundary

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TITLE: 2016 Soil Gas Sampling Results			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	JC	REVISED DATE:	
DATE:	2-23-2017	APPROVED BY:	
SCALE:	1" = 25'	FILE NAME:	

PROJECT No.
2015-188
FIGURE No.
06





MW ID	Top of Casing	ROD1	ROD2	Depth to Water	GW Elevation
	(ft)	(ft)	(ft)	(ft)	(ft)
GW-4	100.00	7.03		7.25	92.75
GW-5B	104.38	2.65	4.38	8.04	96.34
GW-8	104.05	4.71	1.75	8.10	95.95
GW-7	101.64	4.16	4.94	7.54	94.10
GW-6	102.48	4.10		6.54	95.94

Note:
 1. Set arbitrary elevation of 100 feet at top of casing of GW-4
 2. Survey was performed on 2/15/2017 by CE

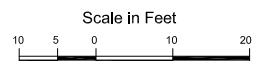
Huguenot Street

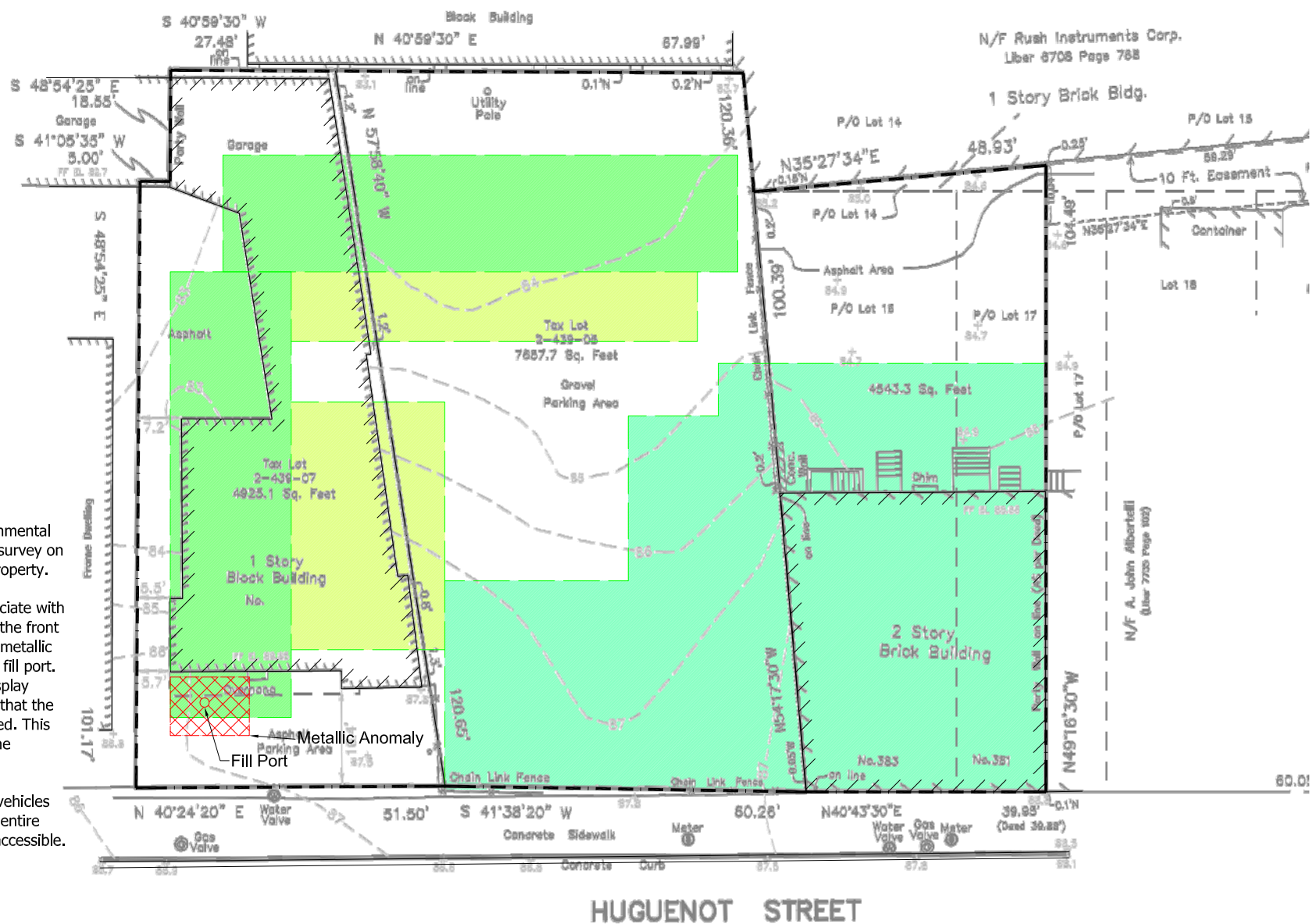
Legend

-  Groundwater Temporary Well
-  Former Groundwater Temporary Well
-  Site Boundary

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TITLE: 2017 Groundwater Potentiometric Map			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY: WF	REVISD BY:	PROJECT No. 2015-188	
CHECKED BY: JC	REVISD DATE:	FIGURE No. 07	
DATE: 2-23-2017	APPROVED BY:		
SCALE: 1" = 25'	FILE NAME:		





Site Boundary

Proposed Cellar Area



CIDER
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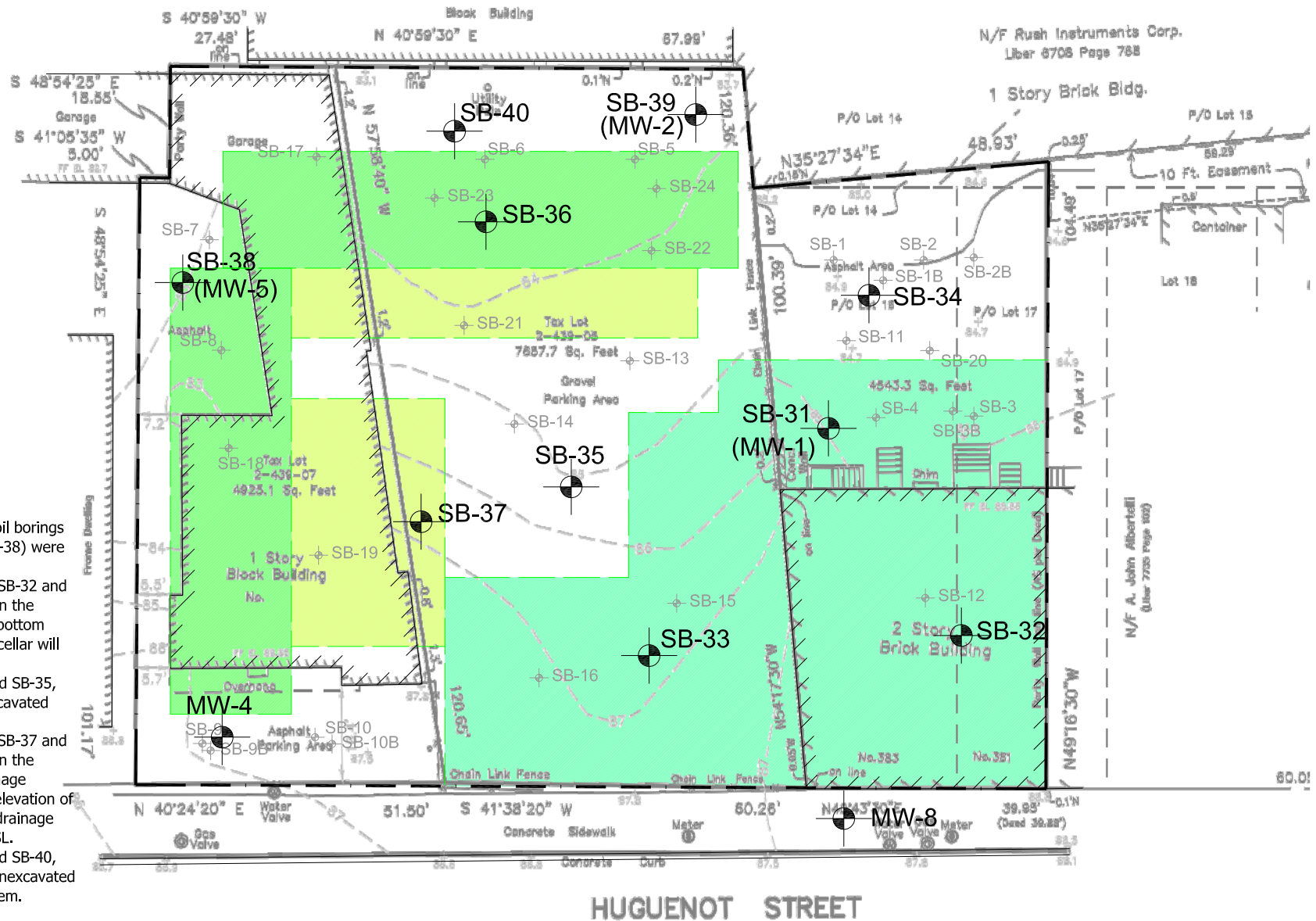
Tel: (631) 616-4000 Fax: (631) 980-7972
www.CiderEnvironmental.com
6268 Jericho Tpke, Suite 12, Commack, NY 11725



Note:

A total of eight (8) additional soil borings (identified as SB-31 through SB-38) were installed for this RI.

- Three (3) borings, SB-31, SB-32 and SB-33, were installed within the proposed cellar area. The bottom elevation of the proposed cellar will be 77 feet AMSL.
- Two (2) borings, SB-34 and SB-35, were installed within unexcavated area.
- Three (3) borings, SB-36, SB-37 and SB-38, were installed within the proposed garage and drainage system area. The bottom elevation of the proposed garage and drainage system will be 80 feet AMSL.
- Two (2) borings, SB-39 and SB-40, were installed within the unexcavated area with no covering system.



HUGUENOT STREET

Scale in Feet



Legend

- RI Soil Sampling Location
- Previous Soil Sampling Point

	Site Boundary
	Proposed Drainage Structure Area
	Proposed Parking Garage Area
	Proposed Cellar Area

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TITLE: RI Soil Sampling Locations			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY: WF	REVISED BY:	BCP Site No. C360157	
CHECKED BY: SZ	REVISED DATE:	FIGURE No. 09	
DATE: 5-30-2018	APPROVED BY:		
SCALE: 1" = 25'	FILE NAME:		





Columbus Avenue

Columbus Avenue

Pine Street

Huguenot Street

Main Street

MW-7

MW-3

MW-6

MW-2

MW-1

MW-8

MW-5

MW-4

MW-5B

GW-7

GW-1

GW-6

GW-3

GW-8

GW-4

Note:

During the RI, eight (8) permanent groundwater monitoring wells were installed.

The monitoring wells were installed using a standard drilling rig employing hollow-stem augers.

Scale In Feet



Legend

- RI Groundwater Monitoring Wells
- Former Groundwater Temporary Well

- Site
- Residential
- Mixed Commercial/Residential
- Commercial

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TITLE: RI Groundwater Sampling Locations

381-393 Huguenot Street, New Rochelle, New York

DRAWN BY:	WF	REVISED BY:		BCP Site No.	C360157
CHECKED BY:	SZ	REVISED DATE:		FIGURE No.	10
DATE:	6-5-2018	APPROVED BY:			
SCALE:	1" = 50'	FILE NAME:			



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Columbus Avenue

Columbus Avenue

Pine Street

Huguenot Street

Main Street

Note:

Access for air sampling were denied by many of the neighboring properties' owners. All objections were properly documented.

From 3/28/2018 to 3/29/2018, Cider Environmental collected one (1) sub-slab soil gas sample, two (2) indoor air samples and two (2) outdoor air samples for this RI. All samples were collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006).



Legend

- RI Sub-Slab Soil Gas Sampling Location
- RI Indoor Air Sampling Location
- RI Outdoor Air Sampling Location
- Former Soil Gas Sampling Point

- Site
- Residential
- Mixed Commercial/Residential
- Commercial

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TITLE: RI Air Sampling Locations			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	JC	REVISED DATE:	
DATE:	6-5-2018	APPROVED BY:	
SCALE:	1" = 50'	FILE NAME:	
		BCP Site No.	C360157
		FIGURE No.	11





Parameters	Units	RRSCO	SB-36 0-2 FT 4/23/2018
Metals			
Lead, Pb	mg/Kg	400	1,560
SVOCs			
Benzo-a-Pyrene	ug/Kg	1,000	1,400
Benzo-b-Fluoranthene	ug/Kg	1,000	1,400
Indeno(1,2,3-cd)Pyrene	ug/Kg	500	1,300

Parameters	Units	RRSCO	SB-39 0-2 FT 4/23/2018
SVOCs			
Indeno(1,2,3-cd)Pyrene	ug/Kg	500	620

Parameters	Units	RRSCO	SB-40 0-2 FT 4/23/2018
Metals			
Cadmium, Cd	mg/Kg	4.3	4.79
Lead, Pb	mg/Kg	400	1,490
SVOCs			
Benzo-a-Anthracene	ug/Kg	1,000	3,700
Benzo-a-Pyrene	ug/Kg	1,000	4,300
Benzo-b-Fluoranthene	ug/Kg	1,000	4,500
Chrysene	ug/Kg	3,900	4,000
Dibenzo-a,h-Anthracene	ug/Kg	330	510
Indeno(1,2,3-cd)Pyrene	ug/Kg	500	4,000

Parameters	Units	RRSCO	SB-38 0-2 FT 4/23/2018
Metals			
Lead, Pb	mg/Kg	400	838

Parameters	Units	RRSCO	SB-37 0-2 FT 4/23/2018
Metals			
Lead, Pb	mg/Kg	400	1,360

Parameters	Units	RRSCO	SB-35 0-2 FT 4/23/2018
Metals			
Lead, Pb	mg/Kg	400	1,140

Legend

- RI Soil Sampling Location
- Previous Soil Sampling Point
- Site Boundary

- Proposed Drainage Structure Area
- Proposed Parking Garage Area
- Proposed Cellar Area

Huguenot Street

Scale in Feet



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TITLE: Summary of Exceedances- RI Soil Sampling Results			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY: WF	REVISD BY:	BCP Site No. C360157	
CHECKED BY: SZ	REVISD DATE:	FIGURE No. 12	
DATE: 5-30-2018	APPROVED BY:		
SCALE: 1" = 25'	FILE NAME:		



Parameters	Units	AWQS	MW-6 5/9/2018
Metals			
Aluminum, Al	mg/L	0.1	3.82
Iron, Fe	mg/L	0.3	4.39
Manganese, Mn	mg/L	0.3	0.356
Sodium, Na	mg/L	20	97.7

Parameters	Units	AWQS	MW-7 5/8/2018
Metals			
Aluminum, Al	mg/L	0.1	0.869
Iron, Fe	mg/L	0.3	1.77
Manganese, Mn	mg/L	0.3	3.38
Sodium, Na	mg/L	20	53.5

Parameters	Units	AWQS	MW-3 5/8/2018
Metals			
Aluminum, Al	mg/L	0.1	0.791
Iron, Fe	mg/L	0.3	1.21
Manganese, Mn	mg/L	0.3	1.7
Sodium, Na	mg/L	20	143

Parameters	Units	AWQS	MW-2 5/8/2018
Metals			
Iron, Fe	mg/L	0.3	4.84
Manganese, Mn	mg/L	0.3	1.78
Sodium, Na	mg/L	20	46.6
VOCs			
1,3-Dichlorobenzene	ug/L	3	6
PFOA & PFOS			
Total PFOA & PFOS	ng/L	70	74

Parameters	Units	AWQS	MW-1 5/8/2018
Metals			
Aluminum, Al	mg/L	0.1	0.108
Iron, Fe	mg/L	0.3	39.9
Magnesium, Mg	mg/L	35	45
Manganese, Mn	mg/L	0.3	16
Sodium, Na	mg/L	20	54.9
VOCs			
1,3-Dichlorobenzene	ug/L	3	3.2
Naphthalene	ug/L	10	36
SVOCs			
Naphthalene	ug/L	10	16

Parameters	Units	AWQS	MW-8 5/8/2018
Metals			
Aluminum, Al	mg/L	0.1	3.95
Iron, Fe	mg/L	0.3	3.29
Magnesium, Mg	mg/L	35	54.4
Manganese, Mn	mg/L	0.3	1.43
Sodium, Na	mg/L	20	234
PCBs			
Aroclor 1248	ug/L	0.09	0.094
VOCs			
1,3-Dichlorobenzene	ug/L	3	4.9
SVOCs			
Phenol	ug/L	1	1.4

Parameters	Units	AWQS	MW-5 5/8/2018
Metals			
Aluminum, Al	mg/L	0.1	0.11
Selenium, Se	mg/L	0.01	0.012
Sodium, Na	mg/L	20	29.7
PFOA & PFOS			
Total PFOA & PFOS	ng/L	70	184

Parameters	Units	AWQS	MW-4 5/8/2018
Metals			
Aluminum, Al	mg/L	0.1	0.382
Iron, Fe	mg/L	0.3	52.5
Manganese, Mn	mg/L	0.3	4.06
Sodium, Na	mg/L	20	358
VOCs			
1,3-Dichlorobenzene	ug/L	3	6.8
Isopropylbenzene	ug/L	5	17
n-Propylbenzene	ug/L	5	15
p-Isopropyltoluene	ug/L	5	5.3
PFOA & PFOS			
Total PFOA & PFOS	ng/L	70	102



Legend

- RI Groundwater Monitoring Wells
- Former Groundwater Temporary Well



Site

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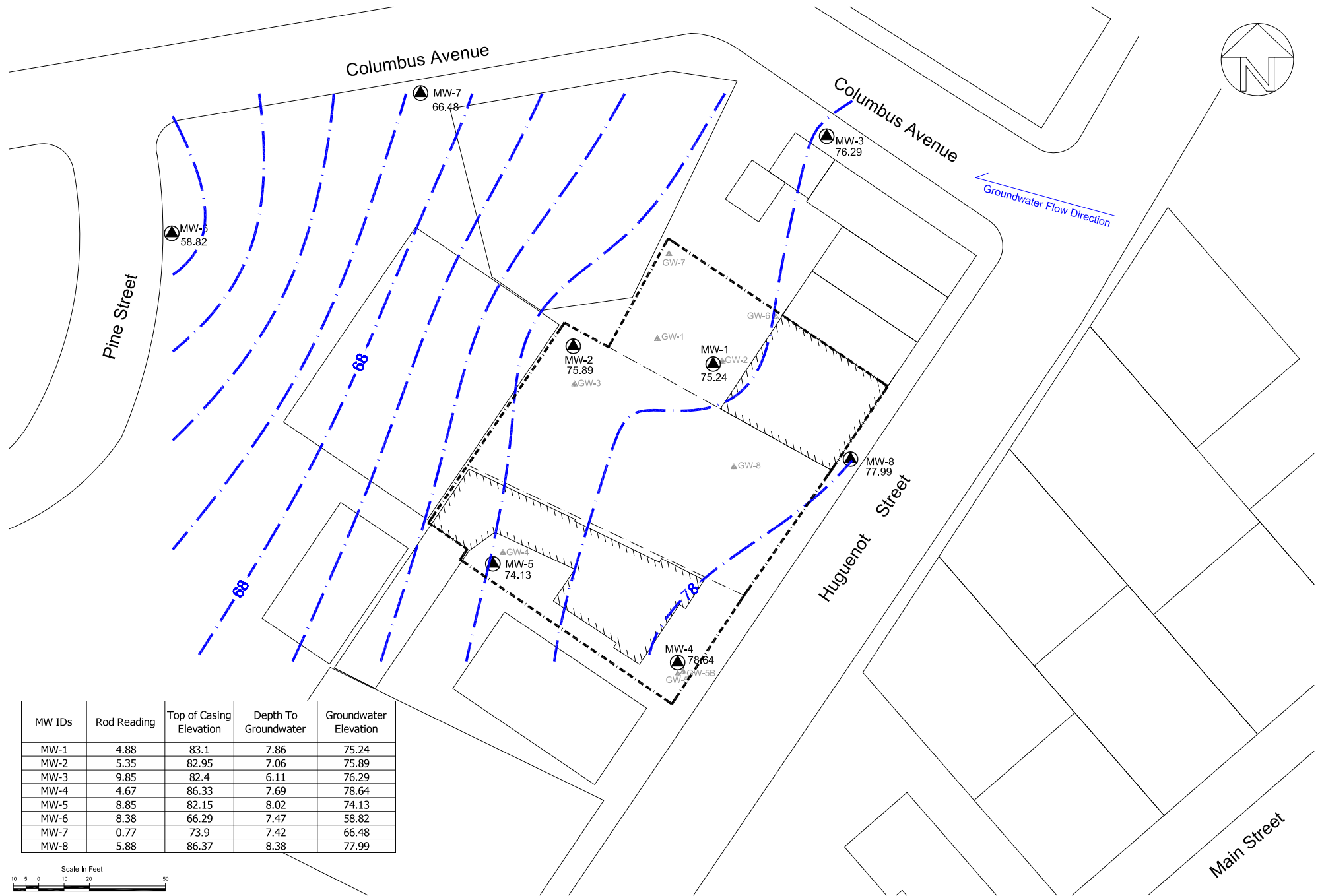
TITLE: Summary of Exceedances- RI Groundwater Sampling Results

381-393 Huguenot Street, New Rochelle, New York

DRAWN BY: WF	REVISED BY: WF	BCP Site No. C360157
CHECKED BY: SZ	REVISED DATE: 9-18-2018	FIGURE No. 13
DATE: 6-5-2018	APPROVED BY:	
SCALE: 1" = 50'	FILE NAME:	



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MW IDs	Rod Reading	Top of Casing Elevation	Depth To Groundwater	Groundwater Elevation
MW-1	4.88	83.1	7.86	75.24
MW-2	5.35	82.95	7.06	75.89
MW-3	9.85	82.4	6.11	76.29
MW-4	4.67	86.33	7.69	78.64
MW-5	8.85	82.15	8.02	74.13
MW-6	8.38	66.29	7.47	58.82
MW-7	0.77	73.9	7.42	66.48
MW-8	5.88	86.37	8.38	77.99

Legend

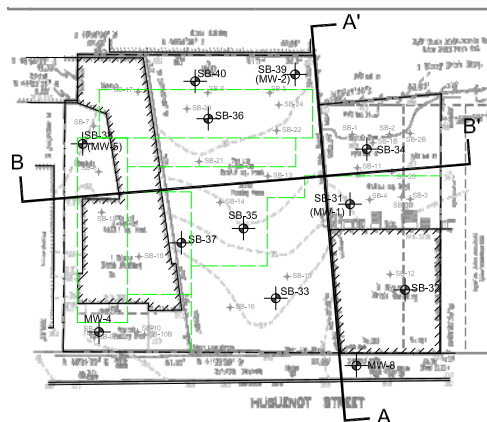
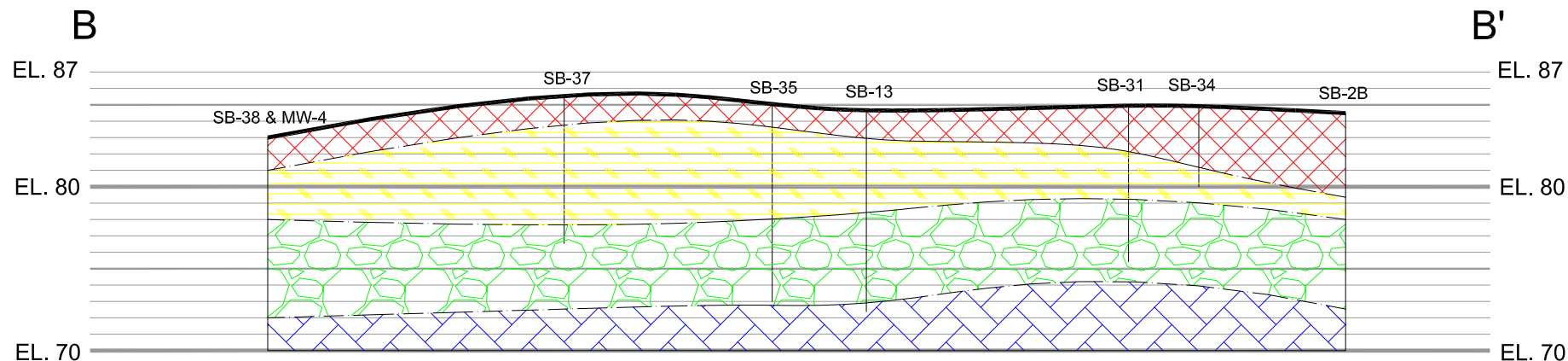
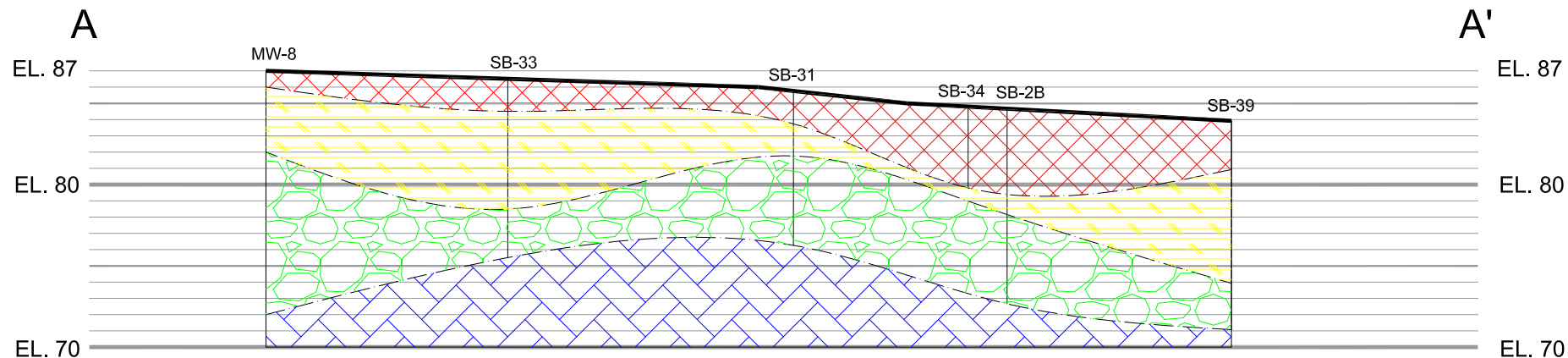
- RI Groundwater Monitoring Wells
- Former Groundwater Temporary Well
- Site

Note:
On May 8, 2018, a groundwater elevation survey was performed to determine the groundwater flow direction as part of the RI.

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TITLE: RI Groundwater Potentiometric Map			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	SZ	REVISED DATE:	
DATE:	6-5-2018	APPROVED BY:	
SCALE:	1" = 50'	FILE NAME:	
		BCP Site No.	C360157
		FIGURE No.	14





Legend

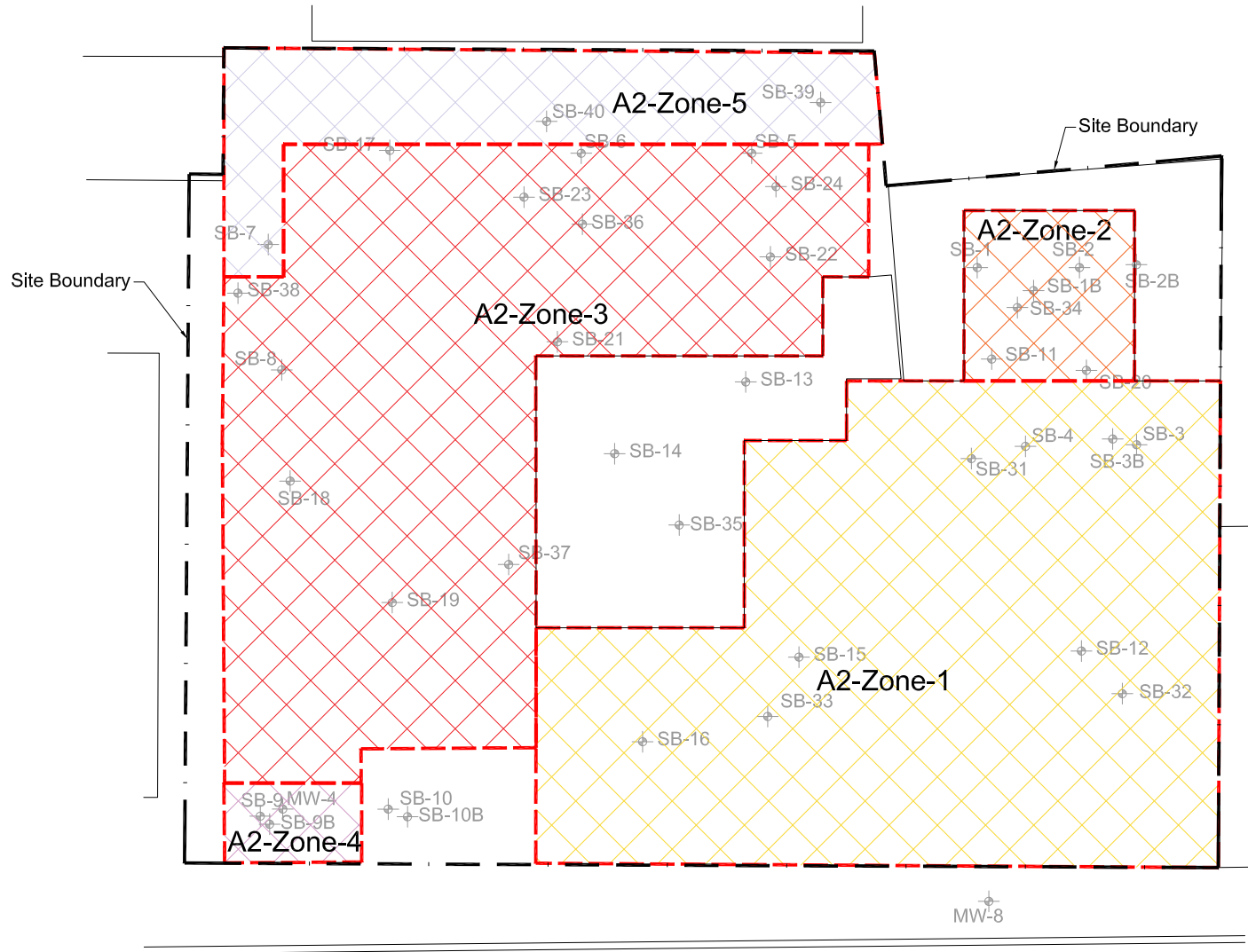
- ⊕ 2018 RI Soil Sampling Location
- ⊕ 2016 / 2017 Soil Sampling Point

- Urban Fill
- Native Soil
- Weathered Bedrock
- Solid Bedrock

Note:
Based on soil boring data from Phase II
Environmental Site Assessment (2016),
Supplemental Subsurface Investigation
(2017), and Remedial Investigation (2018).

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TITLE: Site Physical Setting			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY: WF	REVISD BY: WF	BCP Site No. C360157	
CHECKED BY: SZ	REVISD DATE: 11-21-2018	FIGURE No. 15	
DATE: 5-30-2018	APPROVED BY:		
SCALE: 1" = 25'	FILE NAME:		



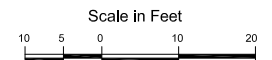
Legend

- Site Boundary
- A2-ZONE-1
- A2-ZONE-2
- A2-ZONE-3
- A2-ZONE-4
- A2-ZONE-5

Zone ID	Description	Area	Existing Grade EL	Excavation Bottom EL	Excavation Depth	Area of Existing Basement	Depth of Existing Basement	Volume of Existing Basement	Excavation Volume	Excavation Tonnage
	Unit	sq ft	ft. EL	ft. EL	ft	sq ft	ft	cubic yard	cubic yard	ton
Zone-1	Cellar	5917.0	87.0	76.0	11.0	2117.0	10.0	784.1	1,630.0	2,210.0
Zone-2	Former FO USTs	625.0	85.0	77.0	8.0	N/A	N/A	0.0	190.0	260.0
Zone-3	Garage/ drains	5434.0	85.0	80.0	5.0	1745.0	7.0	452.4	560.0	760.0
Zone-4	Former Gas USTs	234.0	87.0	79.0	8.0	N/A	N/A	0.0	70.0	100.0
Zone-5	Uncovered Area	1491.0	83.0	81.0	2.0	N/A	N/A	0.0	120.0	170.0
Total									2,570.0	3,500.0

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TITLE: Proposed Remedial Excavation Plan			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY: WF	REVISED BY:	BCP Site No. C360157	
CHECKED BY: SZ	REVISED DATE:	FIGURE No. 16	
DATE: 6-8-2018	APPROVED BY:		
SCALE: 1" = 25'	FILE NAME:		

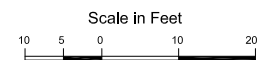
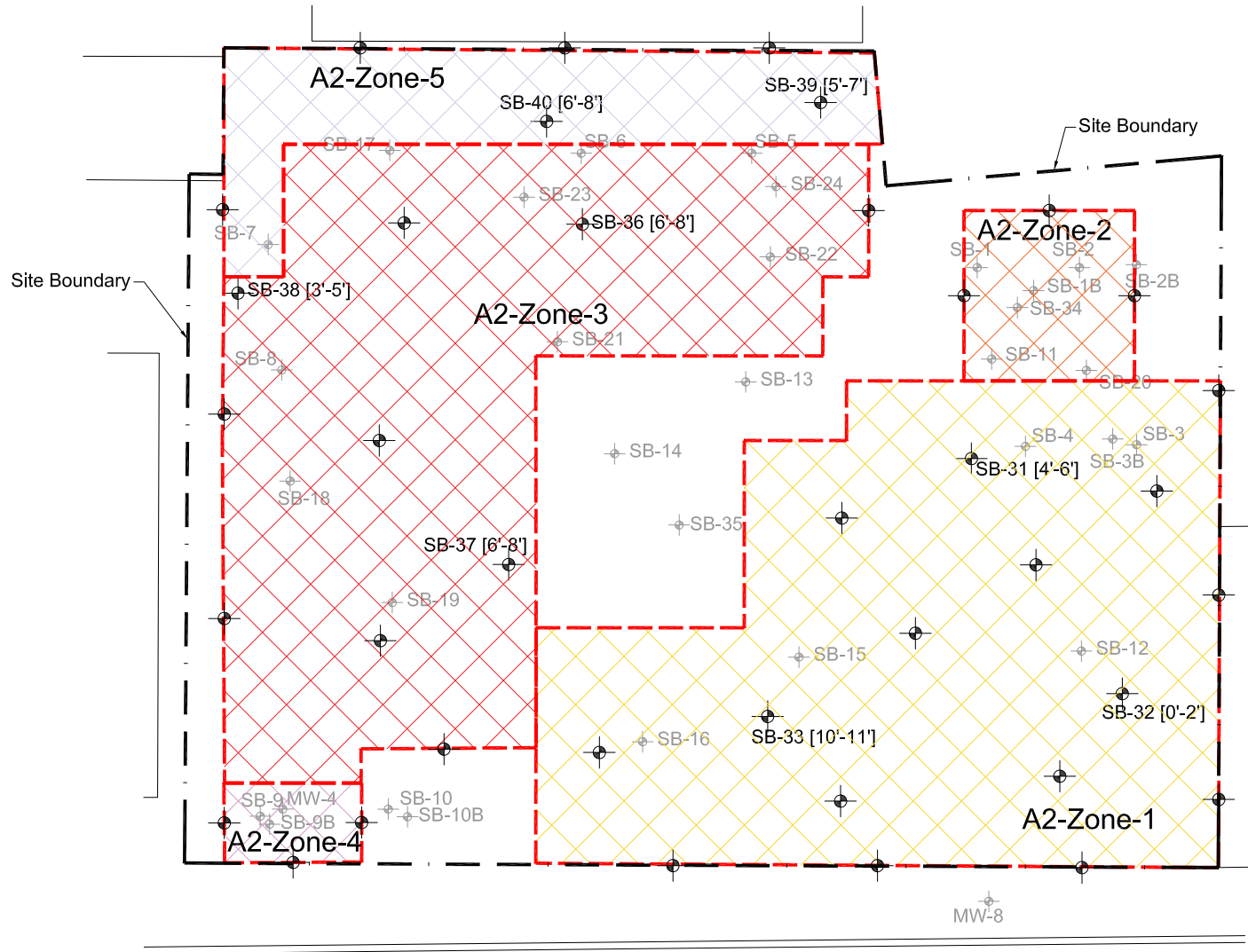




Legend

- Site Boundary
- A2-ZONE-1
- A2-ZONE-2
- A2-ZONE-3
- A2-ZONE-4
- A2-ZONE-5

- Endpoint Sampling Locations
- Previous Soil Sampling Points



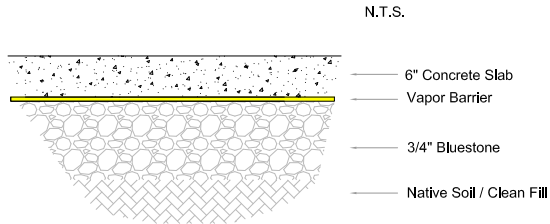
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TITLE: Proposed Endpoint Sampling Plan			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	SZ	REVISED DATE:	
DATE:	1-2-2019	APPROVED BY:	
SCALE:	1" = 25'	FILE NAME:	
		BCP Site No.	C360157
		FIGURE No.	17

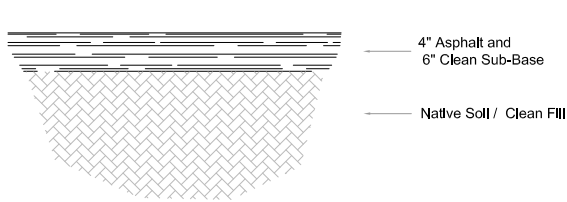




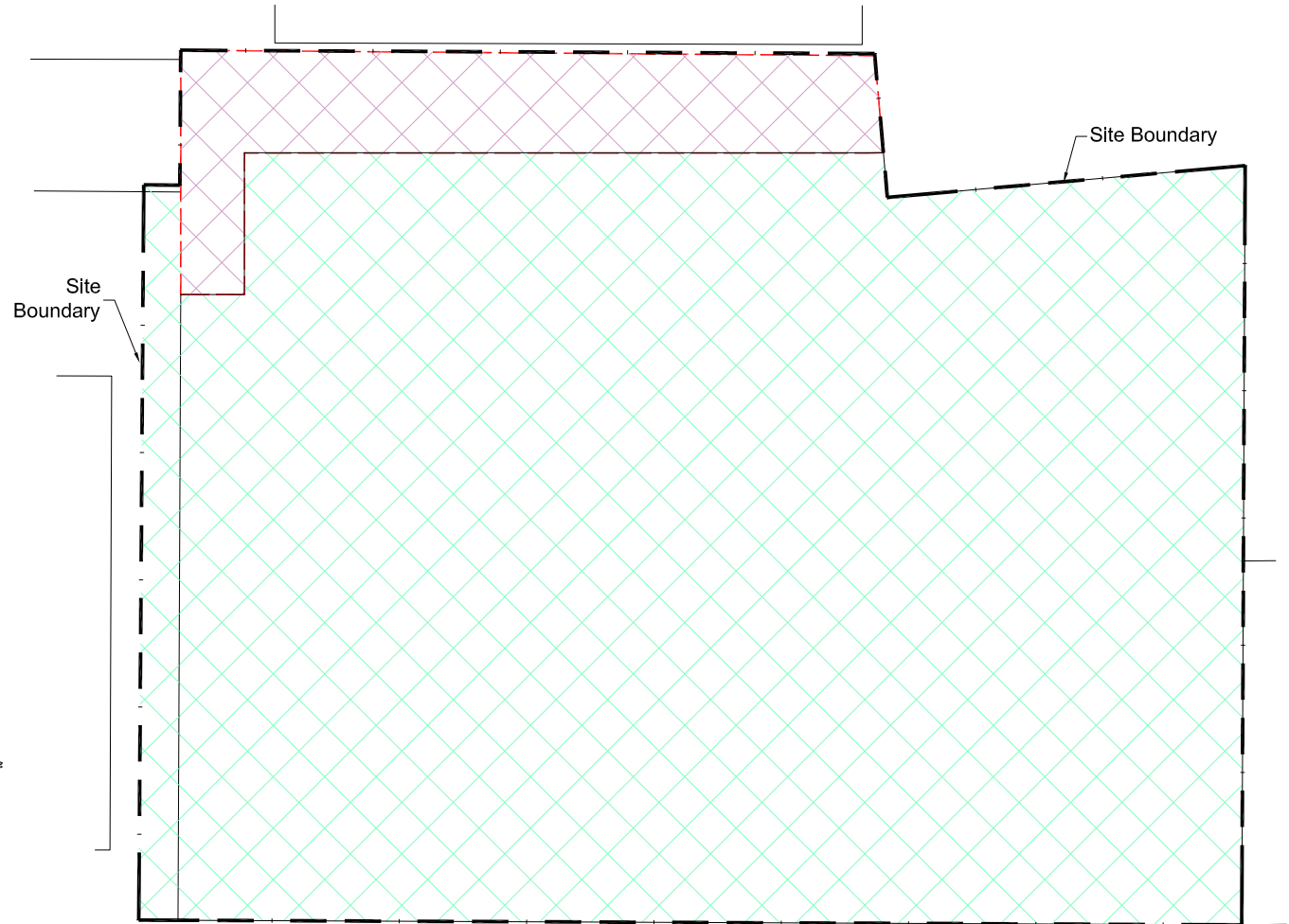
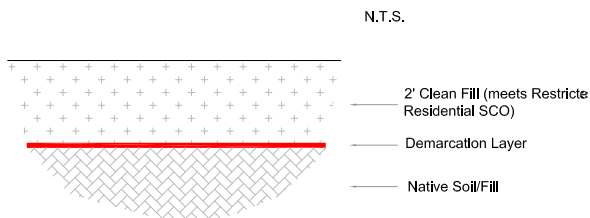
Typical Cover System Layout
Below Building/Basement Slab



Typical Cover System Layout
Below Exterior Parking Lot



Typical Unexcavated and
Landscaping Area



Legend



Site Boundary



Concrete/Asphalt



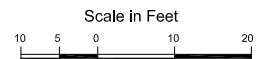
2-foot Clean Fill Material

Note:

Upon completion of the site redevelopment, most of the Site will be covered by concrete/asphalt. For the areas that are not covered by concrete/asphalt, a two (2) foot layer of clean fill will be installed. The clean fill will meet the RRSC requirements.

Note that part of the site will need to be leveled to grade. Any imported fill for site leveling purpose will need to meet the RRSC requirements.

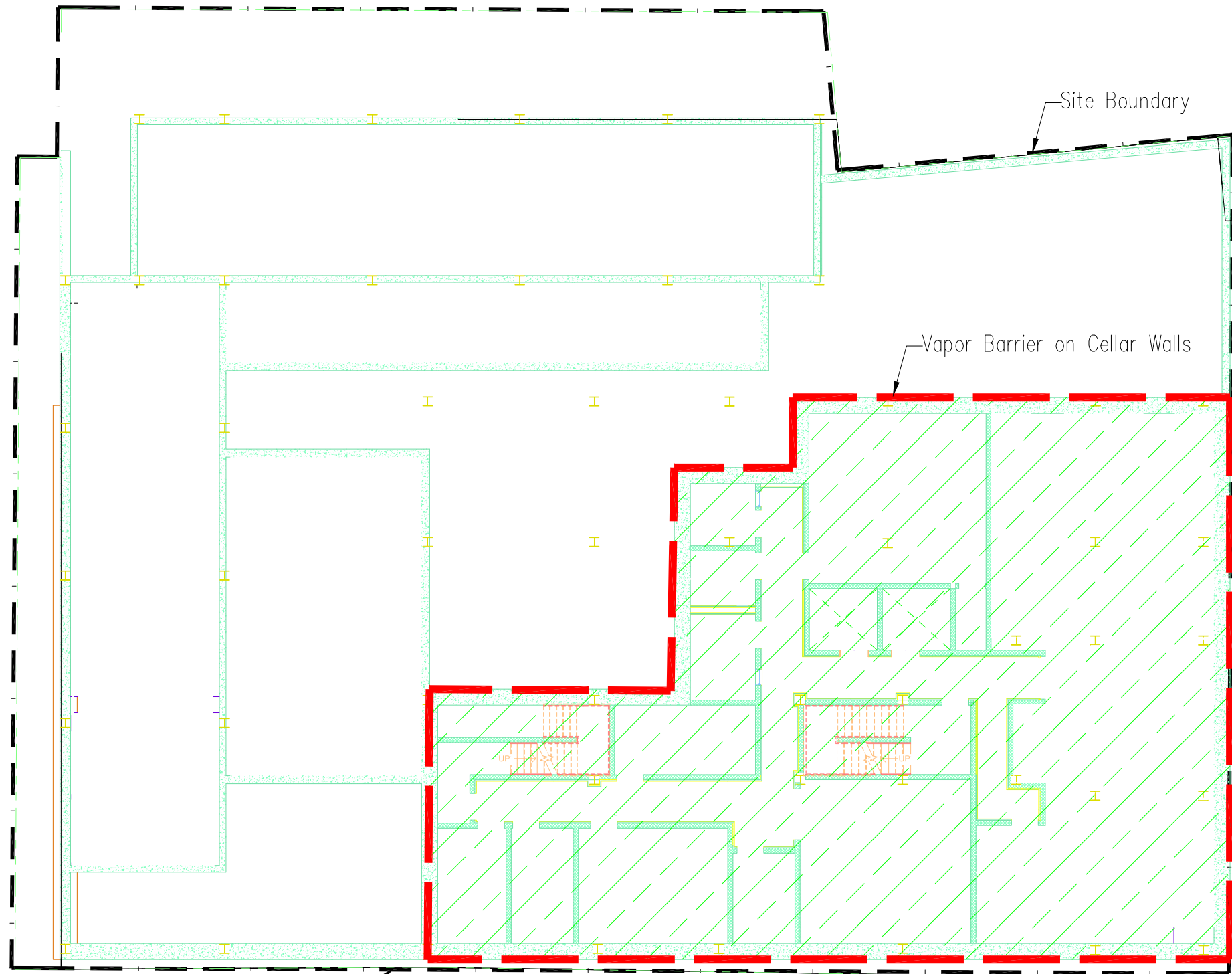
Huguenot Street



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TITLE: Site Covering System			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	SZ	REVISED DATE:	
DATE:	6-8-2018	APPROVED BY:	
SCALE:	1" = 25'	FILE NAME:	
		BCP Site No.	C360157
		FIGURE No.	18





Site Boundary

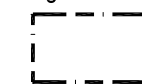
Vapor Barrier on Cellar Walls

Site Boundary

VAPOR BARRIER CONSTRUCTION NOTES:

1. Vapor barrier membrane to be approved by the project design engineer. Membrane shall at a minimum be a Class A Vapor Barrier (ASTM E 1745) and with a minimum thickness of 20 mils. The slab-side of the membrane shall have qualities to allow bonding with the poured concrete. In no case shall membrane contain recycled plastic product or have a permeance of greater than 0.04 Perms. Manufacturers samples and cut sheets shall be submitted to the design engineer for approval prior to delivery to site.
2. Vapor barrier materials to be stored in a clean, dry area or per manufacturer's instructions. Materials to be protected during handling and installation to prevent damage.
3. Prepare subsoil as specified by project architect, geotechnical engineer or structural engineer, or in accordance with ACI 302.1R-04 Section 4.1 Install vapor retarder membrane over leveled and compacted $\frac{3}{4}$ " 2B pea gravel, or an equivalent approved by design engineer. Gravel to be no more than 1-inch in diameter, with no sharp aggregate or projections. Do not begin installation until unacceptable conditions have been corrected.
4. Installation shall be in accordance with manufacturer's instructions, ASTM E 1643-98 (2005), best industry practices, and all applicable federal, state, and local codes. Membrane to be unrolled with the longest dimension parallel to the direction of the pour. Membrane to be installed with smooth side facing down and concrete-bonding side facing up. Succeeding sheets should be accurately positioned to overlap the adjacent sheet by a minimum of 6 inches. Lap membrane over footings and seal to foundation wall. Ensure there are no discontinuities in vapor retarder at seams and penetrations. Laps to be sealed with double-sided asphaltic tape, mastic or equivalent sealant with permeance of 0.3 perms or less approved by the design engineer. Ensure membrane surfaces to receive sealant are clean and dry.
5. Protect membrane from damage during installation of reinforcing steel and utilities, and during placement of concrete slab.
6. No penetrations shall be made except for reinforcing steel, foundations/pile caps, and permanent utilities. Vapor barrier to be inspected for holes or other damage. Small holes to be patched with mastic or approved equivalent, or per manufacturer's instructions. Larger holes to be patched with additional cut-out sections of membrane and sealed on all four sides, or per manufacturer's instructions. All allowed penetrations shall be sealed per manufacturer's instructions. Design engineer must be allowed to inspect final installation prior to pouring slab with sufficient lead-time for the contractor to implement required changes.
7. Place concrete within 30 days of vapor barrier installation.

Legend



Site Boundary



Vapor Barrier System

Note:
Base on building plan dated 4/28/2017 provided
by DOBAN Architecture

TITLE: Vapor Barrier System				
381-393 Huguenot Street, New Rochelle, New York				
DRAWN BY:	WF	REVISED BY:		PROJECT No.
CHECKED BY:	JC	REVISED DATE:		2015-188
DATE:	6-20-2018	APPROVED BY:		FIGURE No.
SCALE:	1/16"=1'	FILE NAME:		19
Tel: (631) 616-4000 Fax: (631)980-7972 www.CiderEnvironmental.com 6268 Jericho Tpke, Suite 12, Commack, NY 11725				



Columbus Avenue

Columbus Avenue

Pine Street

Huguenot Street

Main Street

MW-7

MW-3

MW-6

MW-1R

MW-2R

MW-5R

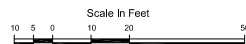
MW-8

MW-4R

Note:

The remediation program will include a long-term groundwater monitoring program to evaluate the effectiveness of natural attenuation processes in restoring groundwater quality. Groundwater monitoring would be conducted to track the reductions in contaminants of concern (COC) over time and confirm the protectiveness of the remedy. The on-site groundwater monitoring wells that will be decommissioned during redevelopment of the site will need to be re-installed (replaced by 2-inch wells). In order to monitor the PFAS exceedances in the groundwater, MW-4R will be relocated across Huguenot Street; and one additional monitoring well (identified as MW-9) will be installed along Pine Street, south of MW-6 and hydraulically downgradient of the former car wash. The groundwater monitoring network would consist of a total of nine (9) monitoring wells.

Upon excavation of the "hot spots", it is anticipated that the MNA will achieve AWQS for groundwater within 5 years (except of several inorganic compounds/metals, which have elevated regional background levels above AWQS).



Legend

 Groundwater Monitoring Wells

 Site Boundary

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TITLE: Long Term Monitoring Plan			
381-393 Huguenot Street, New Rochelle, New York			
DRAWN BY:	WF	REVISED BY:	
CHECKED BY:	SZ	REVISED DATE:	
DATE:	6-5-2018	APPROVED BY:	
SCALE:	1" = 50'	FILE NAME:	

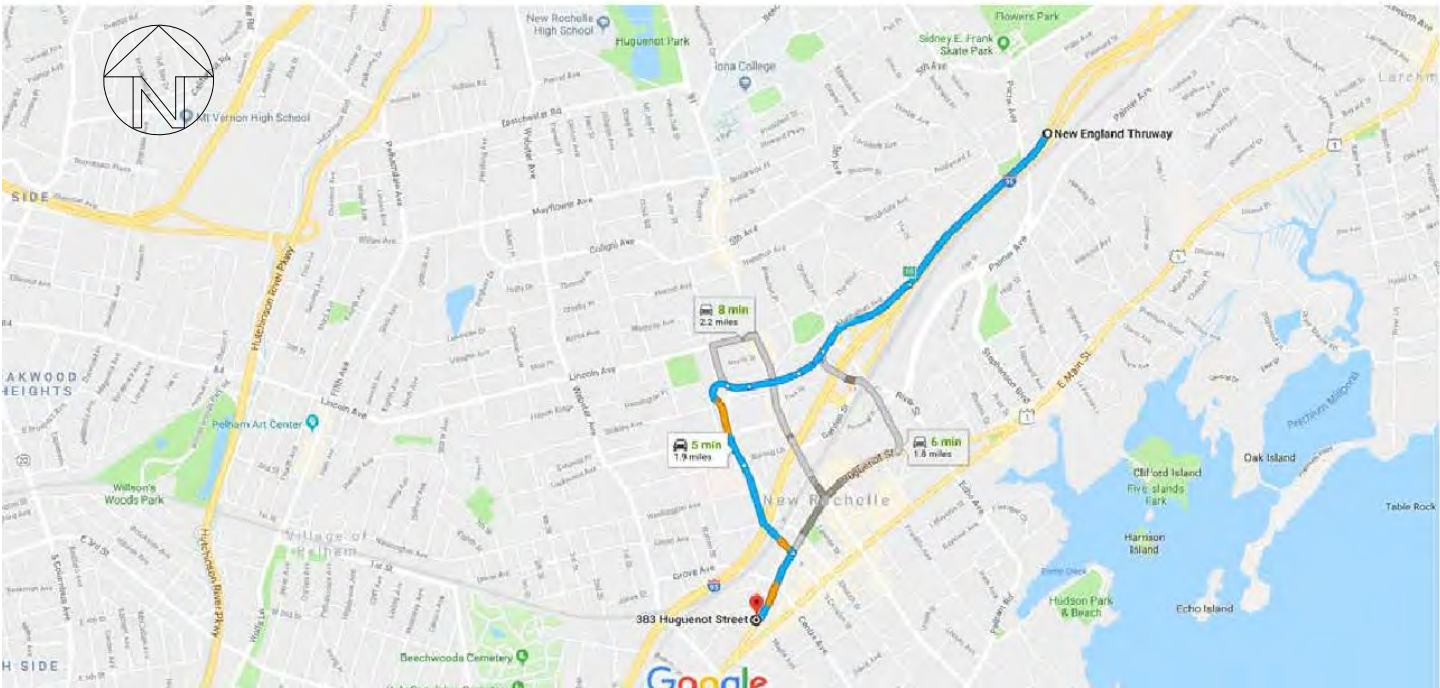
BCP Site No.
C360157
FIGURE No.
20



Truck Route To the Site

New England Thruway, New Rochelle, NY to 383 Huguenot St, New Rochelle, NY 10801

Drive 1.9 miles, 5 min

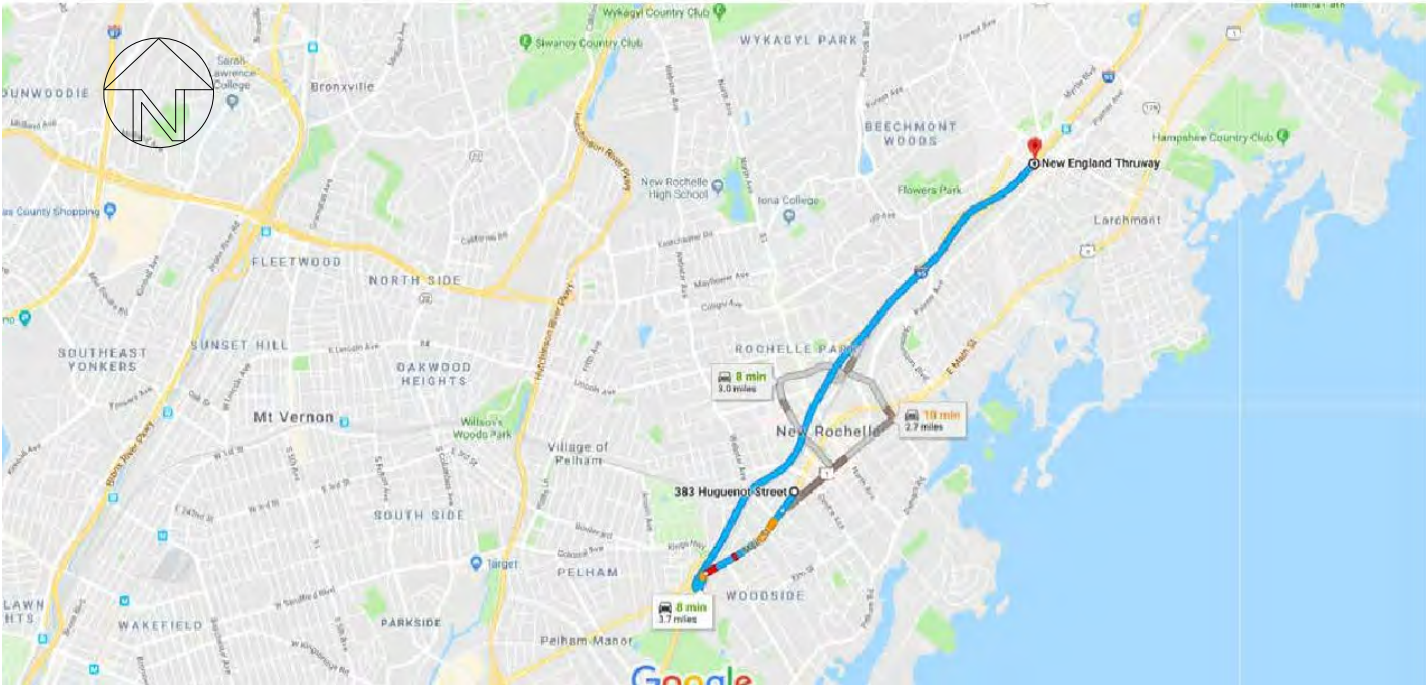


Truck Route From the Site



383 Huguenot St, New Rochelle, NY 10801 to New England Thruway, New Rochelle, NY

Drive 3.7 miles, 8 min



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TITLE: Truck Route Map			
393 Huguenot Street, New Rochelle, New York			
DRAWN BY: SZ	REVISED BY:	PROJECT No. 2015-188	
CHECKED BY: WF	REVISED DATE:	FIGURE No. 21	
DATE: 8-1-2018	APPROVED BY:		
SCALE: N. T. S.	FILE NAME:		



TABLES

Table 1: Summary of 2016 Soil Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10
	Sample Date				3/3/2016	3/3/2016	3/3/2016	3/3/2016	3/3/2016	3/3/2016	3/4/2016	3/4/2016	3/4/2016	3/4/2016
	CAS				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatiles By SW8260C														
1,1,1,2-Tetrachloroethane	630-20-6	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,1,1-Trichloroethane	71-55-6	µg/Kg	680	100,000a	< 1300	< 1100	< 250	< 640	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,1,2,2-Tetrachloroethane	79-34-5	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,1,2-Trichloroethane	79-00-5	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,1-Dichloroethane	75-34-3	µg/Kg	270	26000	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,1-Dichloroethene	75-35-4	µg/Kg	330	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,1-Dichloropropene	563-58-6	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2,3-Trichlorobenzene	87-61-6	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2,3-Trichloropropane	96-18-4	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2,4-Trimethylbenzene	95-63-6	µg/Kg	3600	52000	< 1300	< 1100	1,400	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2-Dibromo-3-Chloropropane	96-12-8	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2-Dibromoethane	106-93-4	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2-Dichlorobenzene	95-50-1	µg/Kg	1100	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2-Dichloroethane	107-06-2	µg/Kg	20c	3100	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,2-Dichloropropane	78-87-5	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,3,5-Trimethylbenzene	108-67-8	µg/Kg	8400	52000	< 1300	< 1100	230	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,3-Dichlorobenzene	541-73-1	µg/Kg	2400	49000	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,3-Dichloropropane	142-28-9	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
1,4-Dichlorobenzene	106-46-7	µg/Kg	1800	13000	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
2,2-Dichloropropane	594-20-7	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
2-Chlorotoluene	95-49-8	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
2-Hexanone	591-78-6	µg/Kg	NA	NA	< 1300	< 5700	< 1300	< 1300	< 25	< 12	< 21	< 17	< 3500	< 980
2-Isopropyltoluene	527-84-4	µg/Kg	NA	NA	1,400	< 1100	< 250	530	17	< 2.5	< 4.1	< 3.4	< 700	960
4-Chlorotoluene	106-43-4	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Methyl Isobutyl Ketone	108-10-1	µg/Kg	NA	NA	< 6500	< 5700	< 1300	< 1300	< 25	< 12	< 21	< 17	< 3500	< 980
Acetone	67-64-1	µg/Kg	50	100,000b	< 6500	< 5700	< 1300	< 1300	< 25	< 12	< 21	< 17	< 3500	< 980
Acrylonitrile	107-13-1	µg/Kg	NA	NA	< 1300	< 2300	< 510	< 250	< 9.9	< 4.9	< 8.3	< 6.7	< 700	< 390
Benzene	71-43-2	µg/Kg	60	4800	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Bromobenzene	108-86-1	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Bromochloromethane	74-97-5	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Bromodichloromethane	75-27-4	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Bromoform	75-25-2	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Bromomethane	74-83-9	µg/Kg	NA	NA	< 2600	< 1100	< 250	< 510	< 4.9	< 2.5	< 4.1	< 3.4	< 1400	< 200
Carbon Disulfide	75-15-0	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Carbon Tetrachloride	56-23-5	µg/Kg	760	2400	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Chlorobenzene	108-90-7	µg/Kg	1100	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Chloroethane	75-00-3	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Chloroform	67-66-3	µg/Kg	370	49000	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Chloromethane	74-87-3	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
cis-1,2-Dichloroethene	156-59-2	µg/Kg	250	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
cis-1,3-Dichloropropene	10061-01-5	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Chlorodibromomethane	124-48-1	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Dibromomethane	74-95-3	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Dichlorodifluoromethane	75-71-8	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Ethylbenzene	100-41-4	µg/Kg	1000	41000	< 1300	< 1100	340	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	270
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200

Table 1: Summary of 2016 Soil Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10
	Sample Date				3/3/2016	3/3/2016	3/3/2016	3/3/2016	3/3/2016	3/3/2016	3/4/2016	3/4/2016	3/4/2016	3/4/2016
	CAS				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Isopropylbenzene	98-82-8	µg/Kg	NA	NA	1,800	< 1100	220	590	7.3	< 2.5	< 4.1	< 3.4	1,400	2,300
m&p-Xylene	179601-23-1	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
2-Butanone	78-93-3	µg/Kg	NA	100,000a	< 1300	< 5700	< 1300	< 1300	< 25	< 12	< 21	< 17	< 3500	< 980
Methyl Tert-Butyl Ether	1634-04-4	µg/Kg	930	100,000a	< 1300	< 2300	< 510	< 250	< 9.9	< 4.9	< 8.3	< 6.7	< 700	< 390
Methylene Chloride	75-09-2	µg/Kg	50	100,000a	< 6500	< 2300	< 510	< 1300	< 9.9	< 4.9	< 8.3	< 6.7	< 3500	< 390
Naphthalene	91-20-3	µg/Kg	12000	100,000a	4,400	1,900	1,800	5,300	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
n-Butylbenzene	104-51-8	µg/Kg	12000	100,000a	3,200	1,100	370	2,300	31	< 2.5	< 4.1	< 3.4	900	2,200
n-Propylbenzene	103-65-1	µg/Kg	3900	100,000a	4,100	1,100	480	890	< 4.9	< 2.5	< 4.1	< 3.4	1,800	3,200
o-Xylene	95-47-6	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
p-Isopropyltoluene	99-87-6	µg/Kg	NA	NA	< 1300	< 1100	310	260	< 4.9	< 2.5	< 4.1	< 3.4	< 700	2,300
sec-Butylbenzene	135-98-8	µg/Kg	11000	100,000a	3,500	1,200	370	1,300	53	< 2.5	< 4.1	< 3.4	930	2,000
Styrene	100-42-5	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
tert-Butylbenzene	98-06-6	µg/Kg	5900	100,000a	< 1300	< 1100	< 250	< 250	8.2	< 2.5	< 4.1	< 3.4	< 700	350
Tetrachloroethene	127-18-4	µg/Kg	1300	19000	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Tetrahydrofuran	109-99-9	µg/Kg			< 3200	< 2300	< 510	< 250	< 9.9	< 4.9	< 8.3	< 6.7	< 1800	< 390
Toluene	108-88-3	µg/Kg	700	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Total Xylenes	1330-20-7	µg/Kg	260	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
trans-1,2-Dichloroethene	156-60-5	µg/Kg	190	100,000a	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
trans-1,3-Dichloropropene	10061-02-6	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
trans-1,4-dichloro-2-butene	110-57-6	µg/Kg			< 3200	< 2300	< 510	< 640	< 9.9	< 4.9	< 8.3	< 6.7	< 1800	< 390
Trichloroethene	79-01-6	µg/Kg	470	21000	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Trichlorofluoromethane	75-69-4	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Trichlorotrifluoroethane	76-13-1	µg/Kg	NA	NA	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Vinyl Chloride	75-01-4	µg/Kg	20	900	< 1300	< 1100	< 250	< 250	< 4.9	< 2.5	< 4.1	< 3.4	< 700	< 200
Semivolatiles-STARS/CP-51 By SW8270D														
Acenaphthene	83-32-9	µg/Kg	20000	100,000a	710	680	1,700	1,000	< 260	< 260	< 260	< 260	< 260	< 260
Acenaphthylene	208-96-8	µg/Kg	100,000a	100,000a	< 270	320	510	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Anthracene	120-12-7	µg/Kg	100,000a	100,000a	300	350	690	320	< 260	< 260	< 260	< 260	< 260	< 260
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000c	1,000f	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000c	1,000f	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000c	1,000f	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100000	100,000a	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800c	3900	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Chrysene	218-01-9	µg/Kg	1,000c	3900	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330b	330e	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Fluoranthene	206-44-0	µg/Kg	100000	100,000a	360	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Fluorene	86-73-7	µg/Kg	30000	100,000a	960	1,200	1,900	1,600	< 260	< 260	< 260	< 260	< 260	< 260
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500c	500f	< 270	< 260	< 260	< 280	< 260	< 260	< 260	< 260	< 260	< 260
Naphthalene	91-20-3	µg/Kg	12000	100,000a	3,100	6,100	3,500	2,400	< 260	< 260	< 260	< 260	< 260	< 260
Phenanthrene	85-01-8	µg/Kg	100000	100,000a	2,800	3,200	6,700	2,500	< 260	< 260	< 260	< 260	< 260	< 260
Pyrene	129-00-0	µg/Kg	100000	100,000a	450	< 260	400	< 280	< 260	< 260	< 260	< 260	< 260	< 260

Notes:

µg/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Table 2: Summary of 2016 Groundwater Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	GW-1	GW-2	GW-3	GW-4	GW-5
	Sample Date			3/3/2016	3/3/2016	3/3/2016	3/4/2016	3/4/2016
	CAS			Result	Result	Result	Result	Result
Volatiles By SW8260C								
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,1,1-Trichloroethane	71-55-6	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	5	< 50	< 50	< 5.0	< 0.50	< 10
1,1,2-Trichloroethane	79-00-5	µg/L	1	< 100	< 100	< 10	< 1.0	< 20
1,1-Dichloroethane	75-34-3	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,1-Dichloroethene	75-35-4	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,1-Dichloropropene	563-58-6	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,2,3-Trichlorobenzene	87-61-6	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,2,3-Trichloropropane	96-18-4	µg/L	0.04	< 100	< 100	< 10	< 1.0	< 20
1,2,4-Trichlorobenzene	120-82-1	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,2,4-Trimethylbenzene	95-63-6	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	0.04	< 100	< 100	< 10	< 1.0	< 20
1,2-Dibromoethane	106-93-4	µg/L	0.0006	< 100	< 100	< 10	< 1.0	< 20
1,2-Dichlorobenzene	95-50-1	µg/L	3	< 100	< 100	< 10	< 1.0	< 20
1,2-Dichloroethane	107-06-2	µg/L	0.6	< 60	< 60	< 6.0	< 0.60	< 12
1,2-Dichloropropane	78-87-5	µg/L	1	< 100	< 100	< 10	< 1.0	< 20
1,3,5-Trimethylbenzene	108-67-8	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,3-Dichlorobenzene	541-73-1	µg/L	3	< 100	< 100	< 10	< 1.0	< 20
1,3-Dichloropropane	142-28-9	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
1,4-Dichlorobenzene	106-46-7	µg/L	3	< 100	< 100	< 10	< 1.0	< 20
2,2-Dichloropropane	594-20-7	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
2-Chlorotoluene	95-49-8	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
2-Hexanone	591-78-6	µg/L	50	< 500	< 500	< 50	< 5.0	< 100
2-Isopropyltoluene	527-84-4	µg/L	NA	100	< 100	< 10	< 1.0	24
4-Chlorotoluene	106-43-4	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Methyl Isobutyl Ketone	108-10-1	µg/L	NA	< 500	< 500	< 50	< 5.0	< 100
Acetone	67-64-1	µg/L	50	< 2500	< 2500	< 250	< 25	< 500
Acrylonitrile	107-13-1	µg/L	5	< 500	< 500	< 50	< 5.0	< 100
Benzene	71-43-2	µg/L	1	< 70	< 70	< 7.0	< 0.70	< 14
Bromobenzene	108-86-1	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Bromochloromethane	74-97-5	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Bromodichloromethane	75-27-4	µg/L	50	< 50	< 50	< 5.0	< 0.50	< 10
Bromoform	75-25-2	µg/L	50	< 100	< 100	< 10	< 1.0	< 20
Bromomethane	74-83-9	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Carbon Disulfide	75-15-0	µg/L	60	< 500	< 500	< 50	< 5.0	< 100
Carbon Tetrachloride	56-23-5	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Chlorobenzene	108-90-7	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Chloroethane	75-00-3	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Chloroform	67-66-3	µg/L	7	< 100	< 100	< 10	< 1.0	< 20
Chloromethane	74-87-3	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
cis-1,2-Dichloroethene	156-59-2	µg/L	5	< 100	< 100	< 10	1.2	< 20
cis-1,3-Dichloropropene	10061-01-5	µg/L	0.4	< 40	< 40	< 4.0	< 0.40	< 8.0
Chlorodibromomethane	124-48-1	µg/L	50	< 50	< 50	< 5.0	< 0.50	< 10
Dibromomethane	74-95-3	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Dichlorodifluoromethane	75-71-8	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Ethylbenzene	100-41-4	µg/L	5	< 100	< 100	< 10	< 1.0	22
Hexachlorobutadiene	87-68-3	µg/L	0.01	< 40	< 40	< 4.0	< 0.40	< 8.0
Isopropylbenzene	98-82-8	µg/L	5	190	< 100	14	< 1.0	160
m&p-Xylene	179601-23-1	µg/L	NA	< 100	< 100	< 10	< 1.0	< 20
2-Butanone	78-93-3	µg/L	50	< 500	< 500	< 50	< 5.0	< 100
Methyl Tert-Butyl Ether	1634-04-4	µg/L	10	< 100	< 100	< 10	1.5	< 20
Methylene Chloride	75-09-2	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Naphthalene	91-20-3	µg/L	10	870	420	100	< 1.0	< 20
n-Butylbenzene	104-51-8	µg/L	5	240	150	16	< 1.0	41
n-Propylbenzene	103-65-1	µg/L	5	400	130	18	< 1.0	170
o-Xylene	95-47-6	µg/L	NA	< 100	< 100	< 10	< 1.0	< 20
p-Isopropyltoluene	99-87-6	µg/L	5	< 100	< 100	< 10	< 1.0	48
sec-Butylbenzene	135-98-8	µg/L	5	220	130	18	< 1.0	49
Styrene	100-42-5	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
tert-Butylbenzene	98-06-6	µg/L	NA	< 100	< 100	< 10	< 1.0	< 20
Tetrachloroethene	127-18-4	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Tetrahydrofuran	109-99-9	µg/L	50	< 250	< 250	< 25	< 2.5	< 50
Toluene	108-88-3	µg/L	5	< 100	< 100	< 10	< 1.0	< 20

Table 2: Summary of 2016 Groundwater Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	GW-1	GW-2	GW-3	GW-4	GW-5
	Sample Date			3/3/2016	3/3/2016	3/3/2016	3/4/2016	3/4/2016
	CAS			Result	Result	Result	Result	Result
Total Xylenes	1330-20-7	µg/L	15	< 100	< 100	< 10	< 1.0	< 20
trans-1,2-Dichloroethene	156-60-5	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
trans-1,3-Dichloropropene	10061-02-6	µg/L	0.4	< 40	< 40	< 4.0	< 0.40	< 8.0
trans-1,4-dichloro-2-butene	110-57-6	µg/L	5	< 500	< 500	< 50	< 5.0	< 100
Trichloroethene	79-01-6	µg/L	5	< 100	< 100	< 10	6.3	< 20
Trichlorofluoromethane	75-69-4	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Trichlorotrifluoroethane	76-13-1	µg/L	5	< 100	< 100	< 10	< 1.0	< 20
Vinyl Chloride	75-01-4	µg/L	2	< 100	< 100	< 10	< 1.0	< 20
Semivolatiles by SIM By SW8270D (SIM)								
2-Methylnaphthalene	91-57-6	µg/L	NA	950	5,500	110	< 0.10	190
Acenaphthene	83-32-9	µg/L	20	< 250	< 1300	14	< 0.10	1.5
Acenaphthylene	208-96-8	µg/L	NA	< 250	< 1300	8.2	< 0.10	< 1.1
Anthracene	120-12-7	µg/L	50	< 250	< 1300	7	< 0.10	1.2
Benzo-a-Anthracene	56-55-3	µg/L	0.002	< 250	< 1300	0.55	0.1	< 0.21
Benzo-a-Pyrene	50-32-8	µg/L	MDL	< 250	< 1300	0.29	0.07	< 0.21
Benzo-b-Fluoranthene	205-99-2	µg/L	0.002	< 250	< 1300	0.35	0.09	< 0.21
Benzo-g,h,i-Perylene	191-24-2	µg/L	NA	< 250	< 1300	< 1.0	< 0.10	< 1.1
Benzo-k-Fluoranthene	207-08-9	µg/L	0.002	< 250	< 1300	0.29	0.09	< 0.21
Chrysene	218-01-9	µg/L	0.002	< 250	< 1300	0.55	0.1	0.24
Dibenzo-a,h-Anthracene	53-70-3	µg/L	NA	< 250	< 1300	< 0.10	0.02	< 0.11
Fluoranthene	206-44-0	µg/L	50	< 250	< 1300	1.3	0.24	< 1.1
Fluorene	86-73-7	µg/L	50	< 250	1,700	32	< 0.10	4.7
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/L	0.002	< 250	< 1300	< 0.20	0.05	< 0.21
Naphthalene	91-20-3	µg/L	10	760	2,900	64	< 0.10	16
Phenanthrene	85-01-8	µg/L	50	340	2,900	40	0.18	6.1
Pyrene	129-00-0	µg/L	50	< 250	< 1300	2.2	0.24	< 1.1

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Table 3: Summary of 2016 Soil Gas Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYSDOH Action Levels	SG-1	SG-2
	Sample Date			3/3/2016	3/3/2016
	CAS			Result	Result
Volatiles (TO15) By TO15					
1,1,1,2-Tetrachloroethane	630-20-6	µg/m ³		< 1.00	< 15.0
1,1,1-Trichloroethane	71-55-6	µg/m ³	1000	< 1.00	< 15.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/m ³		< 1.00	< 15.0
1,1,2-Trichloroethane	79-00-5	µg/m ³		< 1.00	< 15.0
1,1-Dichloroethane	75-34-3	µg/m ³		< 1.00	< 15.0
1,1-Dichloroethene	75-35-4	µg/m ³	1000	< 1.00	< 15.0
1,2,4-Trichlorobenzene	120-82-1	µg/m ³		< 1.00	19.4
1,2,4-Trimethylbenzene	95-63-6	µg/m ³		1.07	988
1,2-Dibromoethane(EDB)	106-93-4	µg/m ³		< 1.00	< 15.0
1,2-Dichlorobenzene	95-50-1	µg/m ³		< 1.00	< 15.0
1,2-Dichloroethane	107-06-2	µg/m ³		< 1.00	< 15.0
1,2-Dichloropropane	78-87-5	µg/m ³		< 1.00	< 15.0
1,2-Dichlorotetrafluoroethane	76-14-2	µg/m ³		< 1.00	< 15.0
1,3,5-Trimethylbenzene	108-67-8	µg/m ³		< 1.00	904
1,3-Butadiene	106-99-0	µg/m ³		< 1.00	< 15.0
1,3-Dichlorobenzene	541-73-1	µg/m ³		< 1.00	< 15.0
1,4-Dichlorobenzene	106-46-7	µg/m ³		< 1.00	< 15.0
1,4-Dioxane	123-91-1	µg/m ³		< 1.00	< 15.0
2-Hexanone(MBK)	591-78-6	µg/m ³		< 1.00	< 15.0
4-Ethyltoluene	622-96-8	µg/m ³		< 1.00	194
p-Isopropyltoluene	99-87-6	µg/m ³		< 1.00	150
Methyl Isobutyl Ketone	108-10-1	µg/m ³		< 1.00	< 15.0
Acetone	67-64-1	µg/m ³		11.3	< 15.0
Acrylonitrile	107-13-1	µg/m ³		< 1.00	< 15.0
Benzene	71-43-2	µg/m ³		1.78	23.8
Benzyl chloride	100-44-7	µg/m ³		< 1.00	< 15.0
Bromodichloromethane	75-27-4	µg/m ³		< 1.00	< 15.0
Bromoform	75-25-2	µg/m ³		< 1.00	< 15.0
Bromomethane	74-83-9	µg/m ³		< 1.00	< 15.0
Carbon Disulfide	75-15-0	µg/m ³		1.39	98.3
Carbon Tetrachloride	56-23-5	µg/m ³	250	0.28	< 3.74
Chlorobenzene	108-90-7	µg/m ³		< 1.00	< 15.0
Chloroethane	75-00-3	µg/m ³		< 1.00	< 15.0
Chloroform	67-66-3	µg/m ³		13.4	< 15.0
Chloromethane	74-87-3	µg/m ³		< 1.00	< 15.0
cis-1,2-Dichloroethene	156-59-2	µg/m ³	1000	< 1.00	18.4
cis-1,3-Dichloropropene	10061-01-5	µg/m ³		< 1.00	< 15.0
Cyclohexane	110-82-7	µg/m ³		< 1.00	513
Chlorodibromomethane	124-48-1	µg/m ³		< 1.00	< 15.0
Dichlorodifluoromethane	75-71-8	µg/m ³		1.73	< 15.0
Ethanol	64-17-5	µg/m ³		3.58	< 15.0
Ethyl acetate	141-78-6	µg/m ³		< 1.00	< 15.0
Ethylbenzene	100-41-4	µg/m ³		< 1.00	133
Heptane	142-82-5	µg/m ³		< 1.00	1,480
Hexachlorobutadiene	87-68-3	µg/m ³		< 1.00	< 15.0

Table 3: Summary of 2016 Soil Gas Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYSDOH Action Levels	SG-1	SG-2
	Sample Date			3/3/2016	3/3/2016
	CAS			Result	Result
Hexane	110-54-3	$\mu\text{g}/\text{m}^3$		< 1.00	497
Isopropylalcohol	67-63-0	$\mu\text{g}/\text{m}^3$		3.34	< 15.0
Isopropylbenzene	98-82-8	$\mu\text{g}/\text{m}^3$		< 1.00	223
Total Xylenes	179601-23-1	$\mu\text{g}/\text{m}^3$		< 1.00	397
2-Butanone	78-93-3	$\mu\text{g}/\text{m}^3$		1.17	< 15.0
Methyl Tert-Butyl Ether	1634-04-4	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
Methylene Chloride	75-09-2	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
n-Butylbenzene	104-51-8	$\mu\text{g}/\text{m}^3$		1.05	< 15.0
o-Xylene	95-47-6	$\mu\text{g}/\text{m}^3$		< 1.00	181
Propylene	115-07-1	$\mu\text{g}/\text{m}^3$		2.99	253
sec-Butylbenzene	135-98-8	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
Styrene	100-42-5	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0

Table 3: Summary of 2016 Soil Gas Sampling Results
383-391 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYSDOH Action Levels	SG-1	SG-2
	Sample Date			3/3/2016	3/3/2016
	CAS			Result	Result
Tetrachloroethene	127-18-4	$\mu\text{g}/\text{m}^3$	300	1.02	4.37
Tetrahydrofuran	109-99-9	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
Toluene	108-88-3	$\mu\text{g}/\text{m}^3$		1.52	35.7
trans-1,2-Dichloroethene	156-60-5	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
trans-1,3-Dichloropropene	10061-02-6	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
Trichloroethene	79-01-6	$\mu\text{g}/\text{m}^3$	20	< 0.25	14.3
Trichlorofluoromethane	75-69-4	$\mu\text{g}/\text{m}^3$		1.44	< 15.0
Trichlorotrifluoroethane	76-13-1	$\mu\text{g}/\text{m}^3$		< 1.00	< 15.0
Vinyl Chloride	75-01-4	$\mu\text{g}/\text{m}^3$	250	< 0.25	74.6

Notes:

$\mu\text{g}/\text{m}^3$: microgram per cubic meter

Analyte detected

Detected at concentration above Action Levels based on NYSDOH Vapor Intrusion Decision Matrices

Table 4: Summary of 2017 Soil Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	6 NYCRR Part 375 Unrestricted Use SCO	6 NYCRR Part 375 Restricted Residential SCO	SB-2B	SB-9B	SB-10B	SB-12	SB-14	SB-15
	Sampling Depth				5'-7'	6'-8'	6'-8'	0'-2' /8'-10'	0'-2'	0'-2'
	Sample Date				02/14/2017	02/14/2017	02/15/2017	02/15/2017	02/14/2017	02/14/2017
	CAS				Result	Result	Result	Result	Result	Result
Metals Total										
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	5240	22900	10600	29400	9680	11000
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	< 3.4	< 3.5	< 3.8	< 3.9	24.7	< 3.4
Arsenic, As	7440-38-2	mg/Kg	13c	16f	4.22	0.79	1.64	< 0.78	7.06	3.19
Barium, Ba	7440-39-3	mg/Kg	350c	400	71.3	223	77.7	376	301	124
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	0.3	0.43	< 0.31	0.48	0.35	0.34
Cadmium, Cd	7440-43-9	mg/Kg	2.5c	4.3	0.91	< 0.35	< 0.38	< 0.39	1.24	0.62
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	33700	1620	1250	3130	13600	7060
Chromium, Cr	7440-47-3	mg/Kg	NA	110	15.6	75.6	29.5	91.6	24.9	26.5
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	7.73	22.4	9.49	26.9	10	9.69
Copper, Cu	7440-50-8	mg/kg	50	270	109	55	17.4	21.7	120	52.6
Iron, Fe	7439-89-6	mg/Kg	NA	NA	15300	40100	17300	47900	18800	18700
Lead, Pb	7439-92-1	mg/Kg	63c	400	95.9	1.47	2.78	0.61	3210	250
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	19600	10600	3340	16000	5660	3830
Manganese, Mn	7439-96-5	mg/Kg	1,600c	2,000f	163	829	426	798	443	576
Mercury, Hg	7439-97-6	mg/Kg	.18c	.81j	0.25	< 0.03	< 0.03	< 0.03	0.74	0.3
Nickel, Ni	7440-02-0	mg/Kg	30	310	22.4	58.3	40.8	57.6	24.7	28.8
Potassium, K	7440-09-7	mg/Kg	NA	NA	1200	14900	3450	21000	3190	2490
Selenium, Se	7782-49-2	mg/Kg	3.9c	180	< 1.4	< 1.4	< 1.5	< 1.6	< 1.6	< 1.4
Silver, Ag	7440-22-4	mg/Kg	2	180	< 0.34	< 0.35	< 0.38	< 0.39	< 0.41	< 0.34
Sodium, Na	7440-23-5	mg/Kg	NA	NA	417	465	182	278	210	228
Thallium, Tl	7440-28-0	mg/Kg	NA	NA	< 3.0	< 3.2	< 3.5	< 3.5	< 3.7	< 3.1
Vanadium, V	7440-62-2	mg/Kg	NA	NA	31.3	58.3	27.6	82.6	28.2	31.4
Zinc, Zn	7440-66-6	mg/Kg	109c	10,000d	171	81.7	29.6	94.8	235	112
Polychlorinated Biphenyls - SW8082A										
Aroclor 1016	12674-11-2	µg/Kg	100	1,000	< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1221	11104-28-2	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1232	11141-16-5	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1242	53469-21-9	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1248	12672-29-6	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1254	11097-69-1	µg/Kg			3000	< 77	< 73	< 75	< 78	< 74
Aroclor 1260	11096-82-5	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1262	37324-23-5	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Aroclor 1268	11100-14-4	µg/Kg			< 760	< 77	< 73	< 75	< 78	< 74
Semivolatiles - SW8270D										
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg			< 530	< 270	< 260	< 270	< 270	< 260
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
1,2-Dichlorobenzene	95-50-1	µg/Kg	1100	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
1,2- Diphenylhydrazine	122-66-7	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
1,3-Dichlorobenzene	541-73-1	µg/Kg	2400	49000	< 530	< 270	< 260	< 270	< 270	< 260
1,4-Dichlorobenzene	106-46-7	µg/Kg	1800	13000	< 530	< 270	< 260	< 270	< 270	< 260
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260

Table 4: Summary of 2017 Soil Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	6 NYCRR Part 375 Unrestricted Use SCO	6 NYCRR Part 375 Restricted Residential SCO	SB-2B	SB-9B	SB-10B	SB-12	SB-14	SB-15
	Sampling Depth				5'-7'	6'-8'	6'-8'	0'-2' / 8'-10'	0'-2'	0'-2'
	Sample Date				02/14/2017	02/14/2017	02/15/2017	02/15/2017	02/14/2017	02/14/2017
	CAS				Result	Result	Result	Result	Result	Result
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
2-Methylphenol	95-48-7	µg/Kg	330b	100,000a	< 350	< 270	< 260	< 270	< 270	< 260
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
3+4 Methylphenol	NA	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	< 1200	< 620	< 600	< 610	< 620	< 590
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Acenaphthene	83-32-9	µg/Kg	20000	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
Acenaphthylene	208-96-8	µg/Kg	100,000a	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
Acetophenone	98-86-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Aniline	62-53-3	µg/Kg	NA	100000	< 760	< 390	< 370	< 380	< 390	< 370
Anthracene	120-12-7	µg/Kg	100,000a	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000c	1,000f	< 530	< 270	< 260	< 270	< 270	< 260
Benzidine	92-87-5	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000c	1,000f	< 530	< 270	< 260	< 270	330	270
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000c	1,000f	< 530	< 270	< 260	< 270	370	< 260
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100000	100,000a	< 530	< 270	< 260	270	< 270	< 260
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800c	3900	< 530	< 270	< 260	< 270	350	270
Benzoic Acid	65-85-0	µg/Kg	NA	NA	< 1500	< 780	< 750	< 760	< 770	< 730
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Carbazole	86-74-8	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
Chrysene	218-01-9	µg/Kg	1,000c	3900	< 530	< 270	< 260	< 270	330	270
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330b	330e	< 330	< 270	< 260	< 270	< 270	< 260
Dibenzofuran	132-64-9	µg/Kg	7000	59000	< 530	< 270	< 260	< 270	< 270	< 260
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260

Table 4: Summary of 2017 Soil Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	6 NYCRR Part 375 Unrestricted Use SCO	6 NYCRR Part 375 Restricted Residential SCO	SB-2B	SB-9B	SB-10B	SB-12	SB-14	SB-15
	Sampling Depth				5'-7'	6'-8'	6'-8'	0'-2' /8'-10'	0'-2'	0'-2'
	Sample Date				02/14/2017	02/14/2017	02/15/2017	02/15/2017	02/14/2017	02/14/2017
	CAS				Result	Result	Result	Result	Result	Result
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Fluoranthene	206-44-0	µg/Kg	100000	100,000a	< 530	< 270	< 260	< 270	450	380
Fluorene	86-73-7	µg/Kg	30000	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
Hexachlorobenzene	118-74-1	µg/Kg	330	1200	< 530	< 270	< 260	< 270	< 270	< 260
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Hexachloroethane	67-72-1	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500c	500f	< 500	< 270	< 260	350	< 270	< 260
Isophorone	78-59-1	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	< 530	< 270	< 260	< 270	< 270	< 260
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	< 760	< 390	< 370	< 380	< 390	< 370
Naphthalene	91-20-3	µg/Kg	12000	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
Nitrobenzene	98-95-3	µg/Kg	NA	15000	< 530	< 270	< 260	< 270	< 270	< 260
Pentachloronitrobenzene	82-68-8	µg/Kg			< 760	< 390	< 370	< 380	< 390	< 370
Pentachlorophenol	87-86-5	µg/Kg	800b	6700	< 760	< 390	< 370	< 380	< 390	< 370
Phenanthrene	85-01-8	µg/Kg	100000	100,000a	< 530	< 270	< 260	< 270	< 270	< 260
Phenol	108-95-2	µg/Kg	330b	100,000a	< 330	< 270	< 260	< 270	< 270	< 260
Pyrene	129-00-0	µg/Kg	100000	100,000a	< 530	< 270	< 260	< 270	440	370
Pyridine	110-86-1	µg/Kg			< 760	< 390	< 370	< 380	< 390	< 370
		µg/Kg								
TPH DRO (C10-C28) - SW8015D DRO										
Diesel Range Organics (C10-C28)	PHNX - DRO	mg/Kg			< 280	< 59	< 54	< 57		

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Reporting Limit (RL) above the RRSCO

Table 4: Summary of 2017 Soil Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	6 NYCRR Part 375 Unrestricted Use SCO	6 NYCRR Part 375 Restricted Residential SCO	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21
	Sampling Depth				0'-2'	0'-2'	0'-2'	0'-2'	0'-2'	0'-2'
	Sample Date				02/14/2017	02/15/2017	02/15/2017	02/15/2017	02/14/2017	02/15/2017
	CAS				Result	Result	Result	Result	Result	Result
Metals Total										
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	12700	14900	15800	13900	8030	9940
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	< 4.3	< 3.8	< 3.9	< 3.7	< 3.6	24.8
Arsenic, As	7440-38-2	mg/Kg	13c	16f	6.57	3.94	5.3	4.45	3.22	11.7
Barium, Ba	7440-39-3	mg/Kg	350c	400	211	58.4	75	142	238	334
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	0.44	0.54	0.39	0.45	< 0.29	0.46
Cadmium, Cd	7440-43-9	mg/Kg	2.5c	4.3	0.72	< 0.38	0.42	< 0.37	1.11	1.36
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	19800	3020	5230	3170	23100	20000
Chromium, Cr	7440-47-3	mg/Kg	NA	110	30.5	43.2	30.1	37.7	25	29.3
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	11.2	11.4	10.7	11.5	11.5	9.39
Copper, Cu	7440-50-8	mg/kg	50	270	86.3	27.5	39.4	26.8	212	187
Iron, Fe	7439-89-6	mg/Kg	NA	NA	21500	24400	23800	20900	19300	20800
Lead, Pb	7439-92-1	mg/Kg	63c	400	440	8.96	147	495	1820	4330
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	9810	4370	4860	3950	10200	7030
Manganese, Mn	7439-96-5	mg/Kg	1,600c	2,000f	433	651	472	584	365	389
Mercury, Hg	7439-97-6	mg/Kg	.18c	.81j	0.37	< 0.03	0.15	0.32	0.27	1.26
Nickel, Ni	7440-02-0	mg/Kg	30	310	30.4	39	30.3	42.4	50.6	23.8
Potassium, K	7440-09-7	mg/Kg	NA	NA	2610	1890	1540	2310	2090	2010
Selenium, Se	7782-49-2	mg/Kg	3.9c	180	< 1.7	< 1.5	< 1.6	2.8	< 1.4	< 1.5
Silver, Ag	7440-22-4	mg/Kg	2	180	< 0.43	< 0.38	< 0.39	< 0.37	< 0.36	3.96
Sodium, Na	7440-23-5	mg/Kg	NA	NA	341	78.7	164	143	156	186
Thallium, Tl	7440-28-0	mg/Kg	NA	NA	< 3.9	< 3.4	< 3.5	< 3.4	< 3.2	< 3.4
Vanadium, V	7440-62-2	mg/Kg	NA	NA	35	35.3	34.9	31.7	22.5	30.4
Zinc, Zn	7440-66-6	mg/Kg	109c	10,000d	246	38.5	126	105	641	583
Polychlorinated Biphenyls - SW8082A										
Aroclor 1016	12674-11-2	µg/Kg	100	1,000	< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1221	11104-28-2	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1232	11141-16-5	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1242	53469-21-9	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1248	12672-29-6	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1254	11097-69-1	µg/Kg			< 92	< 77	< 77	< 75	490	< 80
Aroclor 1260	11096-82-5	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1262	37324-23-5	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Aroclor 1268	11100-14-4	µg/Kg			< 92	< 77	< 77	< 75	< 74	< 80
Semivolatiles - SW8270D										
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg			< 320	< 270	< 270	< 260	< 260	< 270
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
1,2-Dichlorobenzene	95-50-1	µg/Kg	1100	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
1,2- Diphenylhydrazine	122-66-7	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
1,3-Dichlorobenzene	541-73-1	µg/Kg	2400	49000	< 320	< 270	< 270	< 260	< 260	< 270
1,4-Dichlorobenzene	106-46-7	µg/Kg	1800	13000	< 320	< 270	< 270	< 260	< 260	< 270
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270

Table 4: Summary of 2017 Soil Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	6 NYCRR Part 375 Unrestricted Use SCO	6 NYCRR Part 375 Restricted Residential SCO	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21
	Sampling Depth				0'-2'	0'-2'	0'-2'	0'-2'	0'-2'	0'-2'
	Sample Date				02/14/2017	02/15/2017	02/15/2017	02/15/2017	02/14/2017	02/15/2017
	CAS				Result	Result	Result	Result	Result	Result
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
2-Methylphenol	95-48-7	µg/Kg	330b	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
3+4 Methylphenol	NA	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	< 730	< 610	< 630	< 600	< 590	< 630
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Acenaphthene	83-32-9	µg/Kg	20000	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
Acenaphthylene	208-96-8	µg/Kg	100,000a	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
Acetophenone	98-86-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Aniline	62-53-3	µg/Kg	NA	100000	< 460	< 380	< 390	< 380	< 370	< 390
Anthracene	120-12-7	µg/Kg	100,000a	100,000a	1000	< 270	< 270	< 260	< 260	< 270
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000c	1,000f	5800	< 270	< 270	< 260	790	390
Benzidine	92-87-5	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000c	1,000f	5800	< 270	< 270	< 260	1100	420
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000c	1,000f	5600	< 270	< 270	< 260	960	410
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100000	100,000a	2800	< 270	< 270	< 260	670	450
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800c	3900	5400	< 270	< 270	< 260	920	390
Benzoic Acid	65-85-0	µg/Kg	NA	NA	< 910	< 760	< 780	< 750	< 730	< 780
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	990	< 270
Carbazole	86-74-8	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
Chrysene	218-01-9	µg/Kg	1,000c	3900	5800	< 270	< 270	< 260	800	460
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330b	330e	720	< 270	< 270	< 260	< 260	< 270
Dibenzofuran	132-64-9	µg/Kg	7000	59000	< 320	< 270	< 270	< 260	< 260	< 270
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270

Table 4: Summary of 2017 Soil Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	6 NYCRR Part 375 Unrestricted Use SCO	6 NYCRR Part 375 Restricted Residential SCO	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21
	Sampling Depth				0'-2'	0'-2'	0'-2'	0'-2'	0'-2'	0'-2'
	Sample Date				02/14/2017	02/15/2017	02/15/2017	02/15/2017	02/14/2017	02/15/2017
	CAS				Result	Result	Result	Result	Result	Result
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Fluoranthene	206-44-0	µg/Kg	100000	100,000a	9800	< 270	< 270	< 260	1600	720
Fluorene	86-73-7	µg/Kg	30000	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
Hexachlorobenzene	118-74-1	µg/Kg	330	1200	< 320	< 270	< 270	< 260	< 260	< 270
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Hexachloroethane	67-72-1	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500c	500f	3500	< 270	< 270	< 260	870	460
Isophorone	78-59-1	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	< 320	< 270	< 270	< 260	< 260	< 270
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	< 460	< 380	< 390	< 380	< 370	< 390
Naphthalene	91-20-3	µg/Kg	12000	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
Nitrobenzene	98-95-3	µg/Kg	NA	15000	< 320	< 270	< 270	< 260	< 260	< 270
Pentachloronitrobenzene	82-68-8	µg/Kg			< 460	< 380	< 390	< 380	< 370	< 390
Pentachlorophenol	87-86-5	µg/Kg	800b	6700	< 460	< 380	< 390	< 380	< 370	< 390
Phenanthrene	85-01-8	µg/Kg	100000	100,000a	4000	< 270	< 270	< 260	1200	< 270
Phenol	108-95-2	µg/Kg	330b	100,000a	< 320	< 270	< 270	< 260	< 260	< 270
Pyrene	129-00-0	µg/Kg	100000	100,000a	8800	< 270	< 270	< 260	1400	690
Pyridine	110-86-1	µg/Kg			< 460	< 380	< 390	< 380	< 370	< 390
		µg/Kg								
TPH DRO (C10-C28) - SW8015D DRO										
Diesel Range Organics (C10-C28)	PHNX - DRO	mg/Kg							110	

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Reporting Limit (RL) above the RRSCO

Table 5: Summary of 2017 Groundwater Sampling Results
381-393 Huguenot Street, New Rochelle, New York

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. Ambient Water Quality Standards and Guidance Values	GW-6	GW-7	GW-8
	Sample Date			02/15/2017	02/15/2017	02/15/2017
	CAS			Result	Result	Result
Volatiles- Stars/CP-51 - SW8260C						
1,2,4-Trimethylbenzene	95-63-6	µg/L	5	20	< 1.0	< 1.0
1,3,5-Trimethylbenzene	108-67-8	µg/L	5	6	< 1.0	< 1.0
Benzene	71-43-2	µg/L	1	< 0.70	< 0.70	< 0.70
Ethylbenzene	100-41-4	µg/L	5	5.9	< 1.0	3.7
Isopropylbenzene	98-82-8	µg/L	5	3.8	< 1.0	3.5
m&p-Xylene	179601-23-1	µg/L	NA	5.6	< 2.0	< 2.0
Methyl Tert-Butyl Ether	1634-04-4	µg/L	10	< 1.0	< 1.0	< 1.0
n-Butylbenzene	104-51-8	µg/L	5	1.5	< 1.0	< 1.0
n-Propylbenzene	103-65-1	µg/L	5	5.9	< 1.0	2.7
Naphthalene	91-20-3	µg/L	10	23	< 1.0	1.7
o-Xylene	95-47-6	µg/L	NA	< 2.0	< 2.0	< 2.0
p-Isopropyltoluene	99-87-6	µg/L	5	1.1	< 1.0	< 1.0
sec-Butylbenzene	135-98-8	µg/L	5	2.7	< 1.0	< 1.0
tert-Butylbenzene	98-06-6	µg/L	NA	< 1.0	< 1.0	< 1.0
Toluene	108-88-3	µg/L	5	< 1.0	< 1.0	< 1.0
Total Xylenes	1330-20-7	µg/L	15	5.6	< 2.0	< 2.0
Semivolatiles by SIM - SW8270D (SIM)						
2-Methylnaphthalene	91-57-6	µg/L	NA	220	0.57	1.2
Acenaphthene	83-32-9	µg/L	20	20	< 0.10	< 0.10
Acenaphthylene	208-96-8	µg/L	NA	7.4	< 0.10	< 0.10
Anthracene	120-12-7	µg/L	50	7	< 0.10	< 0.10
Benzo-a-Anthracene	56-55-3	µg/L	0.002	< 0.42	< 0.02	< 0.02
Benzo-a-Pyrene	50-32-8	µg/L	MDL	< 0.42	< 0.02	< 0.02
Benzo-b-Fluoranthene	205-99-2	µg/L	0.002	< 0.42	< 0.02	< 0.02
Benzo-g,h,i-Perylene	191-24-2	µg/L	NA	< 2.1	< 0.10	< 0.10
Benzo-k-Fluoranthene	207-08-9	µg/L	0.002	< 0.42	< 0.02	< 0.02
Chrysene	218-01-9	µg/L	0.002	0.57	< 0.02	< 0.02
Dibenzo-a,h-Anthracene	53-70-3	µg/L	NA	< 0.21	< 0.01	< 0.01
Fluoranthene	206-44-0	µg/L	50	< 2.1	< 0.10	< 0.10
Fluorene	86-73-7	µg/L	50	27	0.1	< 0.10
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/L	0.002	< 0.42	< 0.02	< 0.02
Naphthalene	91-20-3	µg/L	10	68	< 0.10	0.65
Phenanthrene	85-01-8	µg/L	50	59	0.11	< 0.07
Pyrene	129-00-0	µg/L	50	3.8	< 0.10	< 0.10

Notes:

mg/L: miligram per liter (ppm)

ug/L: microgram per liter (ppb)

Analyte detected

Reporting Limit (RL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Table 6: Summary of RI Samples and Analytical Tests
381-393 Huguenot Street, New Rochelle, New York

Sample ID	Matrix	Depth / Location	Date	USEPA Test Method	Target Analytes
SB-31	Soil	0'-2' /4'-5'	4/24/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-32	Soil	0'-2' /	4/23/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-33	Soil	0'-2' /10'-11'	4/24/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-34	Soil	0'-2' /3'-5'	4/24/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-35	Soil	0'-2' / 5'-7'	4/23/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-36	Soil	0'-2' / 6'-8'	4/24/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-37	Soil	0'-2' / 6'-8'	4/24/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-38	Soil	0'-2' /3'-5'	4/23/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-39	Soil	0'-2' /5'-7'	4/23/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
SB-40	Soil	0'-2' / 6'-8'	4/23/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
MW-3	Soil	4'-5' /6'-8'	4/28/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
MW-4	Soil	5'-7' /8'-10'	4/23/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
MW-6	Soil	6'-8'	4/28/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
MW-7	Soil	12'-14'	4/28/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
MW-8	Soil	12'-14'	4/26/2018	8260B /8270 /8081A /8082 /6010 /9012 /7471A	TCL VOCs +TICs; TCL SVOCs+ TICs, TCL Pesticides/ PCBs; TAL Metals+ Total Cyanide; Total Mercury
MW-1	Groundwater		5/9/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-2	Groundwater		5/8/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-3	Groundwater		5/8/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-4	Groundwater		5/8/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-5	Groundwater		5/8/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-6	Groundwater		5/9/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-7	Groundwater		5/8/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
MW-8	Groundwater		5/8/2018	8260B /8270 /8270 SIM /6010/ 9012/ 537	TCL VOCs +TICs; TCL SVOCs+ TICs, 1,4-Dioxane; TCL Pesticides/PCBs; TAL Metals+Total Cyanide, TCL PFAS
OA-1	Outdoor Air	Outdoor	3/29/2018	TO-15	VOCs
OA-2	Outdoor Air	Outdoor	3/29/2018	TO-15	VOCs
IA-3-1	Indoor Air	Indoor	3/29/2018	TO-15	VOCs
IA-3-2	Indoor Air	Indoor	3/29/2018	TO-15	VOCs
SG-3	Soil gas	Soil gas	3/29/2018	TO-15 plus helium	VOCs and helium

Qualifiers for Table 7 and Table 8

- U The compound was analyzed but not detected at or above the MDL.
The number immediately preceding the "U" represents the PQL reporting level corrected for percent solids, weight and/or volume calculations, and dilution factors.
- J The value is estimated. This flag is used
a) on form 1 when the compound is reported above the MDL, but below the PQL, and
b) on the Tentatively Identified Compounds (TIC) form for all compounds identified.
- N The concentration is based on the response to the nearest internal. This flag is used on the TIC form for all compounds identified.
- S This compound is a solvent that is used in the laboratory. Laboratory contamination is suspected if concentration is less than five times the reporting level.
- D The reported concentration is the result of a diluted analysis.
- (*) See report for comment.

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-31 0-2 FT		SB-31 4-6 FT		SB-32 0-2 FT		SB-33 0-2 FT		SB-33 10-11 FT	
	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total															
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	NA	11,700		10,800		10,400		8,620		9,980	
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	NA	< 3.6	U	< 3.7	U	< 3.8	U	< 3.3	U	< 3.8	U
Arsenic, As	7440-38-2	mg/Kg	13	16	16	3.92		0.91		1.72		1.3		< 0.76	U
Barium, Ba	7440-39-3	mg/Kg	350	400	820	130		104		99.1		129		108	
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	47	0.54		0.34		0.38		0.24	J	0.3	J
Cadmium, Cd	7440-43-9	mg/Kg	2.5	4.3	7.5	< 0.36	U	< 0.37	U	< 0.38	U	< 0.33	U	< 0.38	U
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	NA	18,300		920		4,030		2,240		1,460	
Chromium, Cr	7440-47-3	mg/Kg	30	110	NA	26.9		30.6		29.1		18.3		29.6	
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	NA	8.73		9.65		10.6		6.56		11.2	
Copper, Cu	7440-50-8	mg/Kg	50	270	1720	22.7		19.6		38.7		32.9		21.3	
Iron, Fe	7439-89-6	mg/Kg	NA	NA	NA	16,500		19,300		20,500		16,700		21,600	
Lead, Pb	7439-92-1	mg/Kg	63	400	450	257		12.1		28.8		200		2.9	
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	NA	3,590		4,140		4,000		3,500		4,670	
Manganese, Mn	7439-96-5	mg/Kg	1600	2000	2000	301		352		380		310		506	
Mercury, Hg	7439-97-6	mg/Kg	0.18	0.81	0.73	0.06		0.04		0.19	N	0.12	N	< 0.03	UN
Nickel, Ni	7440-02-0	mg/Kg	30	310	130	18.9		29.6		35.9		13		26.4	
Potassium, K	9/7/7440	mg/Kg	NA	NA	NA	1,580		4,430		3,520	*	4,110	*	5,670	*
Selenium, Se	7782-49-2	mg/Kg	3.9	180	4	< 1.4	U	< 1.5	U	< 1.5	U	< 1.3	U	< 1.5	U
Silver, Ag	7440-22-4	mg/Kg	2	180	8.3	< 0.36	U	< 0.37	U	< 0.38	U	< 0.33	U	< 0.38	U
Sodium, Na	7440-23-5	mg/Kg	NA	NA	NA	136	N	109	N	111	N	113	N	232	N
Thallium, Tl	7440-28-0	mg/Kg	NA	NA	NA	< 1.4	U	< 1.5	U	< 1.5	U	< 1.3	U	< 1.5	U
Vanadium, V	7440-62-2	mg/Kg	NA	NA	NA	28.4		30.4		33.9		23.7		32.4	
Zinc, Zn	7440-66-6	mg/Kg	109	10000	2480	81.9		36.4		46.5		81.2		41.4	
Cyanide	57-12-5	mg/Kg	27	27	40	< 0.51	U	< 0.51	U	< 0.52	U	< 0.49	U	< 0.60	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-31 0-2 FT		SB-31 4-6 FT		SB-32 0-2 FT		SB-33 0-2 FT		SB-33 10-11 FT	
	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A															
Aroclor 1016	12674-11-2	µg/Kg	100	1000	3200	< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1221	11104-28-2	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1232	11141-16-5	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1242	53469-21-9	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1248	12672-29-6	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1254	11097-69-1	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1260	11096-82-5	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1262	37324-23-5	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U
Aroclor 1268	11100-14-4	µg/Kg				< 76	U	< 74	U	< 76	U	< 72	U	< 79	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-31 0-2 FT		SB-31 4-6 FT		SB-32 0-2 FT		SB-33 0-2 FT		SB-33 10-11 FT	
	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides - Soil By SW8081B															
4,4-DDD	72-54-8	µg/Kg	3.3	13000	14000	< 2.3	U	< 2.2	U	< 2.3	U	< 2.2	U	< 2.4	U
4,4-DDE	72-55-9	µg/Kg	3.3	8900	17000	< 2.3	U	< 2.2	U	< 2.3	U	< 2.2	U	< 2.4	U
4,4-DDT	50-29-3	µg/Kg	3.3	7900	136000	< 2.3	U	< 2.2	U	< 2.3	U	< 2.2	U	< 2.4	U
alpha-BHC	319-84-6	µg/Kg	20	480	20	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Chlordane	5103-71-9	µg/Kg	94	4200	2900	< 3.8	U	< 3.7	U	< 3.8	U	< 3.6	U	< 3.9	U
Aldrin	309-00-2	µg/Kg	5	97	190	< 3.8	U	< 3.7	U	< 3.8	U	< 3.6	U	< 3.9	U
beta-BHC	319-85-7	µg/Kg	36	360	90	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Chlordane	57-74-9	µg/Kg	94	4200	2900	< 38	U	< 37	U	< 38	U	NR	U	< 39	U
delta-BHC	319-86-8	µg/Kg	40	100000	250	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Dieldrin	60-57-1	µg/Kg	5	200	100	< 3.8	U	< 3.7	U	< 3.8	U	< 3.6	U	< 3.9	U
Endosulfan I	959-98-8	µg/Kg	2400	24000	102000	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Endosulfan II	33213-65-9	µg/Kg	2400	24000	102000	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Endosulfan Sulfate	1031-07-8	µg/Kg	2400	24000	1000000	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Endrin	72-20-8	µg/Kg	14	11000	60	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Endrin Aldehyde	7421-93-4	µg/Kg	NA	NA	NA	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Endrin Ketone	53494-70-5	µg/Kg	NA	NA	NA	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
gamma-BHC	58-89-9	µg/Kg	100	1300	100	< 1.5	U	< 1.5	U	< 1.5	U	< 1.4	U	< 1.6	U
gamma-chlordane	5103-74-2	µg/Kg	NA	NA	14000	< 3.8	U	< 3.7	U	< 3.8	U	< 3.6	U	< 3.9	U
Heptachlor	76-44-8	µg/Kg	42	2100	380	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Heptachlor Epoxide	1024-57-3	µg/Kg	NA	NA	20	< 7.6	U	< 7.4	U	< 7.6	U	< 7.2	U	< 7.9	U
Methoxychlor	72-43-5	µg/Kg	NA	NA	900000	< 38	U	< 37	U	< 38	U	< 36	U	< 39	U
Toxaphene	8001-35-2	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	NR	U	< 160	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-31 0-2 FT		SB-31 4-6 FT		SB-32 0-2 FT		SB-33 0-2 FT		SB-33 10-11 FT	
	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C															
1,1,1-Trichloroethane	71-55-6	µg/Kg	680	100,000	680	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/Kg	NA	NA	600	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,1,2-Trichloroethane	79-00-5	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,1-Dichloroethane	75-34-3	µg/Kg	270	26,000	270	< 5.2	U	<78 MDL	U	<74 MDL	U	< 5.3	U	< 5.0	U
1,1-Dichloroethene	75-35-4	µg/Kg	330	100,000	330	< 5.2	U	<39 MDL	U	<37 MDL	U	< 5.3	U	< 5.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	3400	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,2-Dibromoethane	106-93-4	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,2-Dichlorobenzene	95-50-1	µg/Kg	1,100	100,000	1,100	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,2-Dichloroethane	107-06-2	µg/Kg	20	3,100	20	< 5.2	U	<39 MDL	U	<37 MDL	U	< 5.3	U	< 5.0	U
1,2-Dichloropropane	78-87-5	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,3-Dichlorobenzene	541-73-1	µg/Kg	2,400	49,000	2,400	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
1,4-Dichlorobenzene	106-46-7	µg/Kg	1,800	13,000	1,800	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
2-Butanone	78-93-3	µg/Kg	NA	100,000	120	< 31	U	< 2300	U	< 2200	U	< 32	U	< 30	U
2-Hexanone	591-78-6	µg/Kg	NA	NA	NA	< 26	U	< 1900	U	< 1800	U	< 27	U	< 25	U
Acetone	67-64-1	µg/Kg	50	100,000	50	5.5	JS	<390 MDL	U	<370 MDL	U	12	JS	5.5	JS
Benzene	71-43-2	µg/Kg	60	4,800	60	< 5.2	U	< 60	U	< 60	U	< 5.3	U	< 5.0	U
Bromochloromethane	74-97-5	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Bromodichloromethane	75-27-4	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Bromoform	75-25-2	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Bromomethane	74-83-9	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Carbon Disulfide	75-15-0	µg/Kg	NA	NA	2700	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Carbon Tetrachloride	56-23-5	µg/Kg	760	2,400	760	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Chlorobenzene	108-90-7	µg/Kg	1,100	100,000	1,100	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Chlorodibromomethane	124-48-1	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

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mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-31 0-2 FT		SB-31 4-6 FT		SB-32 0-2 FT		SB-33 0-2 FT		SB-33 10-11 FT	
	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroethane	75-00-3	µg/Kg	NA	NA	1900	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Chloroform	67-66-3	µg/Kg	370	49,000	370	< 5.2	U	<39 MDL	U	< 370	U	< 5.3	U	< 5.0	U
Chloromethane	74-87-3	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
cis-1,2-Dichloroethene	156-59-2	µg/Kg	250	100,000	250	< 5.2	U	<39 MDL	U	<37 MDL	U	< 5.3	U	< 5.0	U
cis-1,3-Dichloropropene	10061-01-5	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Cyclohexane	110-82-7	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Dichlorodifluoromethane	75-71-8	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Ethylbenzene	100-41-4	µg/Kg	1,000	41,000	1,000	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Isopropylbenzene	98-82-8	µg/Kg	NA	NA	2300	< 5.2	U	90	J	< 370	U	< 5.3	U	< 5.0	U
m&p-Xylene	179601-23-1	µg/Kg				< 5.2	U	< 250	U	< 250	U	< 5.3	U	< 5.0	U
Methyl Isobutyl Ketone	108-10-1	µg/Kg	NA	NA	1000	< 26	U	< 1900	U	< 1800	U	< 27	U	< 25	U
Methyl Tert-Butyl Ether	1634-04-4	µg/Kg	930	100,000	930	< 10	U	< 780	U	< 740	U	< 11	U	< 10	U
Methylacetate	79-20-9	µg/Kg				< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Methylcyclohexane	108-87-2	µg/Kg				< 5.2	U	200	J	< 370	U	< 5.3	U	< 5.0	U
Methylene Chloride	75-09-2	µg/Kg	50	100,000	50	< 5.2	U	<39 MDL	U	<37 MDL	U	< 5.3	U	< 5.0	U
o-Xylene	95-47-6	µg/Kg	NA	NA	NA	< 5.2	U	< 250	U	< 250	U	< 5.3	U	< 5.0	U
Styrene	100-42-5	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Tetrachloroethene	127-18-4	µg/Kg	1,300	19,000	1,300	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Toluene	108-88-3	µg/Kg	700	100,000	700	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Total Xylenes	1330-20-7	µg/Kg	260	100000	1600	< 5.2	U	< 250	U	< 250	U	< 5.3	U	< 5.0	U
trans-1,2-Dichloroethene	156-60-5	µg/Kg	190	100,000	190	< 5.2	U	<39 MDL	U	<370 MDL	U	< 5.3	U	< 5.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Trichloroethene	79-01-6	µg/Kg	470	21,000	470	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Trichlorofluoromethane	75-69-4	µg/Kg	NA	NA	NA	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Trichlorotrifluoroethane	76-13-1	µg/Kg	NA	NA	6000	< 5.2	U	< 390	U	< 370	U	< 5.3	U	< 5.0	U
Vinyl Chloride	75-01-4	µg/Kg	20	900	20	< 5.2	U	<39 MDL	U	<37 MDL	U	< 5.3	U	< 5.0	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-31 0-2 FT		SB-31 4-6 FT		SB-32 0-2 FT		SB-33 0-2 FT		SB-33 10-11 FT	
	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D															
1,1- Biphenyl	92-52-4	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2,3,4,6-tetrachlorophenol	58-90-2	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	100	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	400	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	200	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	170	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	36400	< 260	U	120	J	1,500		< 250	U	< 270	U
2-Methylphenol	95-48-7	µg/Kg	330	100,000	330	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	400	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	300	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
3+4 Methylphenol	NA	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	500	< 740	U	< 740	U	< 760	U	< 720	U	< 780	U
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	220	< 740	U	< 740	U	< 760	U	< 720	U	< 780	U
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	NA	< 1900	U	< 1800	U	< 1900	U	< 1800	U	< 1900	U
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	100	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Acenaphthene	83-32-9	µg/Kg	20,000	100,000	98,000	< 260	U	< 260	U	510		< 250	U	< 270	U
Acenaphthylene	208-96-8	µg/Kg	100,000	100,000	107,000	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Acetophenone	98-86-2	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Anthracene	120-12-7	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 260	U	320		< 250	U	< 270	U
Atrazine	1912-24-9	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Benzaldehyde	100-52-7	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000	1,000	1,000	< 260	U	220	J	< 260	U	< 250	U	< 270	U

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	Lab ID					CA34773		CA34774		CA34770		CA34758		CA34759	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000	1,000	22,000	< 150	U	190		< 150	U	< 140	U	< 160	U
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000	1,000	1,700	< 260	U	160	J	< 260	U	< 250	U	< 270	U
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800	3,900	1,700	< 260	U	180	J	< 260	U	< 250	U	< 270	U
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	435000	< 260	U	< 260	U	120	J	< 250	U	< 270	U
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	122000	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Caprolactam	105-60-2	µg/Kg	NA	NA	NA	< 260	U	< 260	U	2,900		< 250	U	< 270	U
Carbazole	86-74-8	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Chrysene	218-01-9	µg/Kg	1,000	3,900	1,000	< 260	U	210	J	130	J	< 250	U	< 270	U
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330	330	1000000	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Dibenzofuran	132-64-9	µg/Kg	7000	59,000	6,200	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	7100	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	27000	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	8100	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	120000	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Fluoranthene	206-44-0	µg/Kg	100,000	100,000	1,000,000	150	J	430		210	J	160	J	< 270	U
Fluorene	86-73-7	µg/Kg	30,000	100,000	386,000	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Hexachlorobenzene	118-74-1	µg/Kg	330	1,200	1400	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Hexachloroethane	67-72-1	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500	500	8200	< 260	U	130	J	< 260	U	< 250	U	< 270	U
Isophorone	78-59-1	µg/Kg	NA	NA	4400	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Naphthalene	91-20-3	µg/Kg	12,000	100,000	12,000	< 260	U	< 260	U	450		< 250	U	< 270	U
Nitrobenzene	98-95-3	µg/Kg	NA	15000	170	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	NA	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 150	U	< 140	U	< 160	U
Pentachlorophenol	87-86-5	µg/Kg	800b	6,700	800e	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Phenanthrene	85-01-8	µg/Kg	100,000	100,000	1,000,000	< 150	U	480		1,900		< 140	U	< 160	U
Phenol	108-95-2	µg/Kg	330	100,000	330	< 260	U	< 260	U	< 260	U	< 250	U	< 270	U
Pyrene	129-00-0	µg/Kg	100,000	100,000	1,000,000	140	J	380		430		160	J	< 270	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-34 0-2 FT		SB-34 3-5 FT		SB-35 0-2 FT		SB-35 5-7 FT		SB-36 0-2 FT		SB-36 6-8 FT	
	Lab ID					CA34771		CA34772		CA34760		CA34761		CA34766		CA34767	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total																	
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	NA	5,810		24,500		11,200		18,000		7,860		8,870	
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	NA	< 3.4	U	3.4	J	12.9		2.3	J	8.2		2.4	J
Arsenic, As	7440-38-2	mg/Kg	13	16	16	3.66		< 0.70	U	7.19		1.3		8.54		< 0.72	U
Barium, Ba	7440-39-3	mg/Kg	350	400	820	102		312		169		110		260		57.4	
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	47	0.29		0.24	J	0.51		0.63		0.43		0.46	
Cadmium, Cd	7440-43-9	mg/Kg	2.5	4.3	7.5	< 0.34	U	< 0.35	U	0.79		< 0.39	U	1.19		< 0.36	U
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	NA	88,600		16,300		3,730		2,090		8,760		918	
Chromium, Cr	7440-47-3	mg/Kg	30	110	NA	12.7		70.8		32.1		80.9		29.7		77	
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	NA	4.49		24.1		10.2		15.5		8.89		18.5	
Copper, Cu	7440-50-8	mg/Kg	50	270	1720	76.9		6.67		105		22.8		193		20.5	
Iron, Fe	7439-89-6	mg/Kg	NA	NA	NA	10,300		46,600		26,200		25,200		17,600		23,900	
Lead, Pb	7439-92-1	mg/Kg	63	400	450	29.7		< 0.7	U	1,140		3.4		1,560		3.8	
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	NA	44,100		13,000		3,680		9,190		6,110		2,840	
Manganese, Mn	7439-96-5	mg/Kg	1600	2000	2000	235		510		326		710		239		553	
Mercury, Hg	7439-97-6	mg/Kg	0.18	0.81	0.73	0.11	N	0.03	JN	0.06	N	< 0.03	UN	0.58	N	< 0.03	UN
Nickel, Ni	7440-02-0	mg/Kg	30	310	130	10.2		39.2		31.7		54.3		33.2		62.8	
Potassium, K	9/7/7440	mg/Kg	NA	NA	NA	1,840	*	17,800	*	1,710	*	4,880	*	1,350	*	1,760	*
Selenium, Se	7782-49-2	mg/Kg	3.9	180	4	< 1.4	U	< 1.4	U	< 1.6	U	< 1.6	U	< 1.4	U	< 1.4	U
Silver, Ag	7440-22-4	mg/Kg	2	180	8.3	< 0.34	U	< 0.35	U	< 0.40	U	< 0.39	U	0.76		< 0.36	U
Sodium, Na	7440-23-5	mg/Kg	NA	NA	NA	347	N	384	N	213	N	221	N	315	N	75	N
Thallium, Tl	7440-28-0	mg/Kg	NA	NA	NA	< 1.4	U	< 1.4	U	< 1.6	U	< 1.6	U	< 1.4	U	< 1.4	U
Vanadium, V	7440-62-2	mg/Kg	NA	NA	NA	22.6		108		31.8		42.2		27.2		24.7	
Zinc, Zn	7440-66-6	mg/Kg	109	10000	2480	67.3		92.6		297		56.2		403		27.9	
Cyanide	57-12-5	mg/Kg	27	27	40	< 0.48	U	< 0.52	U	< 0.58	U	< 0.57	U	0.82		< 0.53	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

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Method Detection Limit (MDL) above the UUSCO

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Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-34 0-2 FT		SB-34 3-5 FT		SB-35 0-2 FT		SB-35 5-7 FT		SB-36 0-2 FT		SB-36 6-8 FT	
	Lab ID					CA34771		CA34772		CA34760		CA34761		CA34766		CA34767	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A																	
Aroclor 1016	12674-11-2	µg/Kg	100	1000	3200	< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1221	11104-28-2	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1232	11141-16-5	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1242	53469-21-9	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1248	12672-29-6	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1254	11097-69-1	µg/Kg				120		< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1260	11096-82-5	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1262	37324-23-5	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U
Aroclor 1268	11100-14-4	µg/Kg				< 70	U	< 68	U	< 76	U	< 74	U	< 76	U	< 78	U

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	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides - Soil By SW8081B																	
4,4-DDD	72-54-8	µg/Kg	3.3	13000	14000	20		< 2.1	U	< 2.3	U	< 2.2	U	< 2.3	U	< 2.3	U
4,4-DDE	72-55-9	µg/Kg	3.3	8900	17000	< 5.0 MDL	U	< 2.1	U	< 2.3	U	< 2.2	U	< 2.3	U	< 2.3	U
4,4-DDT	50-29-3	µg/Kg	3.3	7900	136000	16		< 2.1	U	< 2.3	U	< 2.2	U	< 2.3	U	< 2.3	U
alpha-BHC	319-84-6	µg/Kg	20	480	20	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Chlordane	5103-71-9	µg/Kg	94	4200	2900	< 3.5	U	< 3.4	U	< 3.8	U	< 3.7	U	< 3.8	U	< 3.9	U
Aldrin	309-00-2	µg/Kg	5	97	190	< 3.5	U	< 3.4	U	< 3.8	U	< 3.7	U	< 3.8	U	< 3.9	U
beta-BHC	319-85-7	µg/Kg	36	360	90	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Chlordane	57-74-9	µg/Kg	94	4200	2900	< 35	U	< 34	U	< 38	U	< 37	U	< 38	U	< 39	U
delta-BHC	319-86-8	µg/Kg	40	100000	250	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Dieldrin	60-57-1	µg/Kg	5	200	100	< 3.5	U	< 3.4	U	< 3.8	U	< 3.7	U	< 3.8	U	< 3.9	U
Endosulfan I	959-98-8	µg/Kg	2400	24000	102000	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Endosulfan II	33213-65-9	µg/Kg	2400	24000	102000	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Endosulfan Sulfate	1031-07-8	µg/Kg	2400	24000	1000000	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Endrin	72-20-8	µg/Kg	14	11000	60	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Endrin Aldehyde	7421-93-4	µg/Kg	NA	NA	NA	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Endrin Ketone	53494-70-5	µg/Kg	NA	NA	NA	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
gamma-BHC	58-89-9	µg/Kg	100	1300	100	< 1.4	U	< 1.4	U	< 1.5	U	< 1.5	U	< 1.5	U	< 1.6	U
gamma-chlordane	5103-74-2	µg/Kg	NA	NA	14000	< 3.5	U	< 3.4	U	< 3.8	U	< 3.7	U	< 3.8	U	< 3.9	U
Heptachlor	76-44-8	µg/Kg	42	2100	380	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Heptachlor Epoxide	1024-57-3	µg/Kg	NA	NA	20	< 7.0	U	< 6.8	U	< 7.6	U	< 7.4	U	< 7.6	U	< 7.8	U
Methoxychlor	72-43-5	µg/Kg	NA	NA	900000	< 35	U	< 34	U	< 38	U	< 37	U	< 38	U	< 39	U
Toxaphene	8001-35-2	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U

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The Huguenot Site, New Rochelle, New York

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

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	Lab ID					CA34771		CA34772		CA34760		CA34761		CA34766		CA34767	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C																	
1,1,1-Trichloroethane	71-55-6	µg/Kg	680	100,000	680	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,1,1,2,2-Tetrachloroethane	79-34-5	µg/Kg	NA	NA	600	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,1,2-Trichloroethane	79-00-5	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,1-Dichloroethane	75-34-3	µg/Kg	270	26,000	270	< 4.5	U	< 74 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,1-Dichloroethene	75-35-4	µg/Kg	330	100,000	330	< 4.5	U	< 37 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2,3-Trichlorobenzene	87-61-6	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	3400	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2-Dibromoethane	106-93-4	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2-Dichlorobenzene	95-50-1	µg/Kg	1,100	100,000	1,100	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2-Dichloroethane	107-06-2	µg/Kg	20	3,100	20	< 4.5	U	< 37 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,2-Dichloropropane	78-87-5	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,3-Dichlorobenzene	541-73-1	µg/Kg	2,400	49,000	2,400	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
1,4-Dichlorobenzene	106-46-7	µg/Kg	1,800	13,000	1,800	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
2-Butanone	78-93-3	µg/Kg	NA	100,000	120	< 27	U	< 2200	U	< 34	U	< 30	U	< 42	U	< 31	U
2-Hexanone	591-78-6	µg/Kg	NA	NA	NA	< 22	U	< 1800	U	< 28	U	< 25	U	< 35	U	< 26	U
Acetone	67-64-1	µg/Kg	50	100,000	50	17	JS	< 370 MDL	U	9.5	JS	9.5	JS	12	JS	7.2	JS
Benzene	71-43-2	µg/Kg	60	4,800	60	< 4.5	U	< 60	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Bromochloromethane	74-97-5	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Bromodichloromethane	75-27-4	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Bromoform	75-25-2	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Bromomethane	74-83-9	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Carbon Disulfide	75-15-0	µg/Kg	NA	NA	2700	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Carbon Tetrachloride	56-23-5	µg/Kg	760	2,400	760	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Chlorobenzene	108-90-7	µg/Kg	1,100	100,000	1,100	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Chlorodibromomethane	124-48-1	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U

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	Lab ID					CA34771		CA34772		CA34760		CA34761		CA34766		CA34767	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroethane	75-00-3	µg/Kg	NA	NA	1900	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Chloroform	67-66-3	µg/Kg	370	49,000	370	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Chloromethane	74-87-3	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
cis-1,2-Dichloroethene	156-59-2	µg/Kg	250	100,000	250	< 4.5	U	< 37 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
cis-1,3-Dichloropropene	10061-01-5	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Cyclohexane	110-82-7	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Dichlorodifluoromethane	75-71-8	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Ethylbenzene	100-41-4	µg/Kg	1,000	41,000	1,000	590	R	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Isopropylbenzene	98-82-8	µg/Kg	NA	NA	2300	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	+++IND	U	< 5.1	U
m&p-Xylene	179601-23-1	µg/Kg				2,700		< 250	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Methyl Isobutyl Ketone	108-10-1	µg/Kg	NA	NA	1000	< 22	U	< 1800	U	< 28	U	< 25	U	< 35	U	< 26	U
Methyl Tert-Butyl Ether	1634-04-4	µg/Kg	930	100,000	930	< 8.9	U	< 740	U	< 11	U	< 10	U	< 14	U	< 10	U
Methylacetate	79-20-9	µg/Kg				< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Methylcyclohexane	108-87-2	µg/Kg				< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Methylene Chloride	75-09-2	µg/Kg	50	100,000	50	< 4.5	U	37 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
o-Xylene	95-47-6	µg/Kg	NA	NA	NA	790	R	< 250	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Styrene	100-42-5	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Tetrachloroethene	127-18-4	µg/Kg	1,300	19,000	1,300	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Toluene	108-88-3	µg/Kg	700	100,000	700	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Total Xylenes	1330-20-7	µg/Kg	260	100000	1600	3,490		< 250	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
trans-1,2-Dichloroethene	156-60-5	µg/Kg	190	100,000	190	< 4.5	U	< 37 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
trans-1,3-Dichloropropene	10061-02-6	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Trichloroethene	79-01-6	µg/Kg	470	21,000	470	< 4.5	U	< 370	U	2.2	J	< 5.0	U	3,100	D	5.2	
Trichlorofluoromethane	75-69-4	µg/Kg	NA	NA	NA	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Trichlorotrifluoroethane	76-13-1	µg/Kg	NA	NA	6000	< 4.5	U	< 370	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U
Vinyl Chloride	75-01-4	µg/Kg	20	900	20	< 4.5	U	< 37 MDL	U	< 5.6	U	< 5.0	U	< 7.1	U	< 5.1	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-34 0-2 FT		SB-34 3-5 FT		SB-35 0-2 FT		SB-35 5-7 FT		SB-36 0-2 FT		SB-36 6-8 FT	
	Lab ID					CA34771		CA34772		CA34760		CA34761		CA34766		CA34767	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D																	
1,1- Biphenyl	92-52-4	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2,3,4,6-tetrachlorophenol	58-90-2	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	100	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	400	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	200	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	170	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	36400	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2-Methylphenol	95-48-7	µg/Kg	330	100,000	330	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	400	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	300	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
3+4 Methylphenol	NA	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	500	< 700	U	< 680	U	< 750	U	< 750	U	< 760	U	< 780	U
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	220	< 700	U	< 680	U	< 750	U	< 750	U	< 760	U	< 780	U
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	NA	< 1700	U	< 1700	U	< 1900	U	< 1900	U	< 1900	U	< 2000	U
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	100	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Acenaphthene	83-32-9	µg/Kg	20,000	100,000	98,000	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Acenaphthylene	208-96-8	µg/Kg	100,000	100,000	107,000	< 140	U	< 140	U	< 150	U	< 150	U	710		< 160	U
Acetophenone	98-86-2	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Anthracene	120-12-7	µg/Kg	100,000	100,000	1,000,000	< 240	U	130	J	< 260	U	< 260	U	290		< 270	U
Atrazine	1912-24-9	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Benzaldehyde	100-52-7	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000	1,000	1,000	< 240	U	< 240	U	410		< 260	U	910		< 270	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-34 0-2 FT		SB-34 3-5 FT		SB-35 0-2 FT		SB-35 5-7 FT		SB-36 0-2 FT		SB-36 6-8 FT	
	Lab ID					CA34771		CA34772		CA34760		CA34761		CA34766		CA34767	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000	1,000	22,000	< 140	U	< 140	U	460		< 150	U	1,400		< 160	U
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000	1,000	1,700	< 240	U	< 240	U	530		< 260	U	1,400		< 270	U
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100,000	100,000	1,000,000	< 240	U	< 240	U	390		< 260	U	1,100		< 270	U
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800	3,900	1,700	< 240	U	< 240	U	430		< 260	U	1,100		< 270	U
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	435000	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	122000	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Caprolactam	105-60-2	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Carbazole	86-74-8	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Chrysene	218-01-9	µg/Kg	1,000	3,900	1,000	< 240	U	< 240	U	500		< 260	U	980		< 270	U
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330	330	1000000	< 140	U	< 140	U	< 150	U	< 150	U	280		< 160	U
Dibenzofuran	132-64-9	µg/Kg	7000	59,000	6,200	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	7100	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	27000	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	8100	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	120000	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Fluoranthene	206-44-0	µg/Kg	100,000	100,000	1,000,000	< 240	U	< 240	U	630		< 260	U	1,100		< 270	U
Fluorene	86-73-7	µg/Kg	30,000	100,000	386,000	< 240	U	280		< 260	U	< 260	U	< 270	U	< 270	U
Hexachlorobenzene	118-74-1	µg/Kg	330	1,200	1400	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Hexachloroethane	67-72-1	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500	500	8200	< 240	U	< 240	U	450		< 260	U	1,300		< 270	U
Isophorone	78-59-1	µg/Kg	NA	NA	4400	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
Naphthalene	91-20-3	µg/Kg	12,000	100,000	12,000	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Nitrobenzene	98-95-3	µg/Kg	NA	15000	170	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	NA	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	NA	< 140	U	< 140	U	< 150	U	< 150	U	< 150	U	< 160	U
Pentachlorophenol	87-86-5	µg/Kg	800b	6,700	800e	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Phenanthrene	85-01-8	µg/Kg	100,000	100,000	1,000,000	< 140	U	570		150		< 150	U	310		< 160	U
Phenol	108-95-2	µg/Kg	330	100,000	330	< 240	U	< 240	U	< 260	U	< 260	U	< 270	U	< 270	U
Pyrene	129-00-0	µg/Kg	100,000	100,000	1,000,000	< 240	U	< 240	U	590		< 260	U	1,100		< 270	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

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Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
	Lab ID					CA34768		CA34769		CA34753		CA34754		CA34762		CA34763	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total																	
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	NA	12,400		13,000		11,800		11,800		6,020		14,300	
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	NA	5.4		< 3.6	U	6.1		< 3.7	U	< 3.7	U	2.6	J
Arsenic, As	7440-38-2	mg/Kg	13	16	16	8.77		< 0.72	U	9.93		5.12		1.81		< 0.75	U
Barium, Ba	7440-39-3	mg/Kg	350	400	820	201		93.3		142		120		81.8		101	
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	47	0.59		0.44		0.67		0.59		0.25	J	0.52	
Cadmium, Cd	7440-43-9	mg/Kg	2.5	4.3	7.5	0.92		< 0.36	U	1.54		< 0.37	U	< 0.37	U	< 0.37	U
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	NA	5,400		1,220		2,190		2,130		11,900		1,700	
Chromium, Cr	7440-47-3	mg/Kg	30	110	NA	30.7		39.6		35.6		27.2		18.8		37.5	
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	NA	11.2		11.2		11		10.7		6.39		10.8	
Copper, Cu	7440-50-8	mg/kg	50	270	1720	63.6		21.7		59.4		55.6		27.5		27.8	
Iron, Fe	7439-89-6	mg/Kg	NA	NA	NA	22,800		21,100		19,100		17,500		12,900		23,200	
Lead, Pb	7439-92-1	mg/Kg	63	400	450	1,360		3.1		838		357		46.9		3.3	
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	NA	4,800		4,700		4,610		2,720		4,980		5,580	
Manganese, Mn	7439-96-5	mg/Kg	1600	2000	2000	461		647		393		497		181		1,200	
Mercury, Hg	7439-97-6	mg/Kg	0.18	0.81	0.73	0.36		< 0.03	UN	0.32	N	0.08	N	0.12	N	< 0.03	UN
Nickel, Ni	7440-02-0	mg/Kg	30	310	130	34.2		43		47.3		35.5		13		46	
Potassium, K	97/7440	mg/Kg	NA	NA	NA	2,060	*	4,470		1,560	*	1,490	*	2,070	*	6,430	*
Selenium, Se	7782-49-2	mg/Kg	3.9	180	4	< 1.5	U	< 1.4	*	< 1.6	U	< 1.5	U	< 1.5	U	< 1.5	U
Silver, Ag	7440-22-4	mg/Kg	2	180	8.3	< 0.38	U	< 0.36	U	< 0.41	U	< 0.37	U	< 0.37	U	< 0.37	U
Sodium, Na	7440-23-5	mg/Kg	NA	NA	NA	195	N	73	N	116	N	191	N	152	N	108	N
Thallium, Ti	7440-28-0	mg/Kg	NA	NA	NA	< 1.5	U	< 1.4	U	< 1.6	U	< 1.5	U	< 1.5	U	< 1.5	U
Vanadium, V	7440-62-2	mg/Kg	NA	NA	NA	39.7		33.5		32.3		31		32.6		41.1	
Zinc, Zn	7440-66-6	mg/Kg	109	10000	2480	358		38.9		355		94.2		70.3		48.6	
Cyanide	57-12-5	mg/Kg	27	27	40	< 0.56	UJ	< 0.49	U	< 0.66	U	< 0.59	U	< 0.48	U	< 0.52	U

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Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

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Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
	Lab ID					CA34768		CA34769		CA34753		CA34754		CA34762		CA34763	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A																	
Aroclor 1016	12674-11-2	µg/Kg	100	1000	3200	< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1221	11104-28-2	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1232	11141-16-5	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1242	53469-21-9	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1248	12672-29-6	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1254	11097-69-1	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1260	11096-82-5	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1262	37324-23-5	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U
Aroclor 1268	11100-14-4	µg/Kg				< 80	U	< 70	U	< 87	U	< 78	U	< 71	U	< 760	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
	Lab ID					CA34768		CA34769		CA34753		CA34754		CA34762		CA34763	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides - Soil By SW8081B																	
4,4-DDD	72-54-8	µg/Kg	3.3	13000	14000	< 2.4	U	< 2.1	U	< 2.6	U	< 2.4	U	< 2.1	U	< 2.3	U
4,4-DDE	72-55-9	µg/Kg	3.3	8900	17000	< 2.4	U	< 2.1	U	< 2.6	U	< 2.4	U	< 3.3	U	< 2.3	U
4,4-DDT	50-29-3	µg/Kg	3.3	7900	136000	< 2.4	U	< 2.1	U	< 2.6	U	< 2.4	U	9.4		< 2.3	U
alpha-BHC	319-84-6	µg/Kg	20	480	20	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Chlordane	5103-71-9	µg/Kg	94	4200	2900	< 4.0	U	< 3.5	U	< 4.3	U	< 3.9	U	5.2		< 3.8	U
Aldrin	309-00-2	µg/Kg	5	97	190	< 4.0	U	< 3.5	U	< 4.3	U	< 3.9	U	< 3.5	U	< 3.8	U
beta-BHC	319-85-7	µg/Kg	36	360	90	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Chlordane	57-74-9	µg/Kg	94	4200	2900	< 40	U	< 35	U	< 43	U	< 39	U	32		< 38	U
delta-BHC	319-86-8	µg/Kg	40	100000	250	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Dieldrin	60-57-1	µg/Kg	5	200	100	< 4.0	U	< 3.5	U	< 4.3	U	< 3.9	U	< 3.5	U	< 3.8	U
Endosulfan I	959-98-8	µg/Kg	2400	24000	102000	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Endosulfan II	33213-65-9	µg/Kg	2400	24000	102000	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Endosulfan Sulfate	1031-07-8	µg/Kg	2400	24000	1000000	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Endrin	72-20-8	µg/Kg	14	11000	60	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Endrin Aldehyde	7421-93-4	µg/Kg	NA	NA	NA	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Endrin Ketone	53494-70-5	µg/Kg	NA	NA	NA	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
gamma-BHC	58-89-9	µg/Kg	100	1300	100	< 1.6	U	< 1.4	U	< 1.7	U	< 1.6	U	< 1.4	U	< 1.5	U
gamma-chlordane	5103-74-2	µg/Kg	NA	NA	14000	< 4.0	U	< 3.5	U	< 4.3	U	< 3.9	U	3.5		< 3.8	U
Heptachlor	76-44-8	µg/Kg	42	2100	380	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Heptachlor Epoxide	1024-57-3	µg/Kg	NA	NA	20	< 8.0	U	< 7.0	U	< 8.7	U	< 7.8	U	< 7.1	U	< 7.6	U
Methoxychlor	72-43-5	µg/Kg	NA	NA	900000	< 40	U	< 35	U	< 43	U	< 39	U	< 35	U	< 38	U
Toxaphene	8001-35-2	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U

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The Huguenot Site, New Rochelle, New York

Notes:

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
	Lab ID					CA34768		CA34769		CA34753		CA34754		CA34762		CA34763	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C																	
1,1,1-Trichloroethane	71-55-6	µg/Kg	680	100,000	680	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/Kg	NA	NA	600	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,1,2-Trichloroethane	79-00-5	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,1-Dichloroethane	75-34-3	µg/Kg	270	26,000	270	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 75 MDL	U
1,1-Dichloroethene	75-35-4	µg/Kg	330	100,000	330	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 37 MDL	U
1,2,3-Trichlorobenzene	87-61-6	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	3400	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,2-Dibromoethane	106-93-4	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,2-Dichlorobenzene	95-50-1	µg/Kg	1,100	100,000	1,100	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,2-Dichloroethane	107-06-2	µg/Kg	20	3,100	20	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 37 MDL	U
1,2-Dichloropropane	78-87-5	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,3-Dichlorobenzene	541-73-1	µg/Kg	2,400	49,000	2,400	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
1,4-Dichlorobenzene	106-46-7	µg/Kg	1,800	13,000	1,800	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
2-Butanone	78-93-3	µg/Kg	NA	100,000	120	< 37	U	< 31	U	< 47	U	< 36	U	< 33	U	< 2200	U
2-Hexanone	591-78-6	µg/Kg	NA	NA	NA	< 31	U	< 26	U	< 39	U	< 30	U	< 27	U	< 1900	U
Acetone	67-64-1	µg/Kg	50	100,000	50	17	JS	< 26	U	8.9	JS	19	JS	8.3	JS	< 370 MDL	U
Benzene	71-43-2	µg/Kg	60	4,800	60	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 60	U
Bromochloromethane	74-97-5	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Bromodichloromethane	75-27-4	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Bromoform	75-25-2	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Bromomethane	74-83-9	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Carbon Disulfide	75-15-0	µg/Kg	NA	NA	2700	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Carbon Tetrachloride	56-23-5	µg/Kg	760	2,400	760	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Chlorobenzene	108-90-7	µg/Kg	1,100	100,000	1,100	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Chlorodibromomethane	124-48-1	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
	Lab ID					CA34768		CA34769		CA34753		CA34754		CA34762		CA34763	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroethane	75-00-3	µg/Kg	NA	NA	1900	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Chloroform	67-66-3	µg/Kg	370	49,000	370	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Chloromethane	74-87-3	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
cis-1,2-Dichloroethene	156-59-2	µg/Kg	250	100,000	250	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 37 MDL	U
cis-1,3-Dichloropropene	10061-01-5	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Cyclohexane	110-82-7	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Dichlorodifluoromethane	75-71-8	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Ethylbenzene	100-41-4	µg/Kg	1,000	41,000	1,000	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Isopropylbenzene	98-82-8	µg/Kg	NA	NA	2300	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	560	
m&p-Xylene	179601-23-1	µg/Kg				< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 250	U
Methyl Isobutyl Ketone	108-10-1	µg/Kg	NA	NA	1000	< 31	U	< 26	U	< 39	U	< 30	U	< 27	U	< 1900	U
Methyl Tert-Butyl Ether	1634-04-4	µg/Kg	930	100,000	930	< 12	U	< 10	U	< 16	U	< 12	U	< 11	U	< 750	U
Methylacetate	79-20-9	µg/Kg				< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Methylcyclohexane	108-87-2	µg/Kg				< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	1,100	D
Methylene Chloride	75-09-2	µg/Kg	50	100,000	50	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 37 MDL	U
o-Xylene	95-47-6	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 250	U
Styrene	100-42-5	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Tetrachloroethene	127-18-4	µg/Kg	1,300	19,000	1,300	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Toluene	108-88-3	µg/Kg	700	100,000	700	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Total Xylenes	1330-20-7	µg/Kg	260	100000	1600	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 250	U
trans-1,2-Dichloroethene	156-60-5	µg/Kg	190	100,000	190	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 37 MDL	U
trans-1,3-Dichloropropene	10061-02-6	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Trichloroethene	79-01-6	µg/Kg	470	21,000	470	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Trichlorofluoromethane	75-69-4	µg/Kg	NA	NA	NA	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Trichlorotrifluoroethane	76-13-1	µg/Kg	NA	NA	6000	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 370	U
Vinyl Chloride	75-01-4	µg/Kg	20	900	20	< 6.2	U	< 5.1	U	< 7.8	U	< 6.0	U	< 5.4	U	< 37 MDL	U

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Analyte detected

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Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
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	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D																	
1,1- Biphenyl	92-52-4	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2,3,4,6-tetrachlorophenol	58-90-2	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	100	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	400	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	200	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	170	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	36400	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2-Methylphenol	95-48-7	µg/Kg	330	100,000	330	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	400	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	300	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
3+4 Methylphenol	NA	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	500	< 810	U	< 710	U	< 870	U	< 780	U	< 710	U	< 760	U
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	220	< 810	U	< 710	U	< 870	U	< 780	U	< 710	U	< 760	U
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	NA	< 2000	U	< 1800	U	< 2200	U	< 2000	U	< 1800	U	< 1900	U
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	100	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Acenaphthene	83-32-9	µg/Kg	20,000	100,000	98,000	< 290	U	< 250	U	< 300	U	< 270	U	130	J	< 270	U
Acenaphthylene	208-96-8	µg/Kg	100,000	100,000	107,000	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
Acetophenone	98-86-2	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Anthracene	120-12-7	µg/Kg	100,000	100,000	1,000,000	< 290	U	< 250	U	< 300	U	< 270	U	340		< 270	U
Atrazine	1912-24-9	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Benzaldehyde	100-52-7	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000	1,000	1,000	220	J	< 250	U	450		< 270	U	920		< 270	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-37 0-2 FT		SB-37 6-8 FT		SB-38 0-2 FT		SB-38 3-5 FT		SB-39 0-2 FT		SB-39 5-7 FT	
	Lab ID					CA34768		CA34769		CA34753		CA34754		CA34762		CA34763	
	Sample Date					4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000	1,000	22,000	240		< 140	U	490		< 160	U	880		< 150	U
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000	1,000	1,700	230	J	< 250	U	440		< 270	U	720		< 270	U
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100,000	100,000	1,000,000	190	J	< 250	U	410		< 270	U	570		< 270	U
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800	3,900	1,700	230	J	< 250	U	410		< 270	U	700		< 270	U
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	435000	190	J	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	122000	140	J	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Caprolactam	105-60-2	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	630	
Carbazole	86-74-8	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Chrysene	218-01-9	µg/Kg	1,000	3,900	1,000	230	J	< 250	U	470		< 270	U	880		< 270	U
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330	330	1000000	< 160	U	< 140	U	< 170	U	< 160	U	110	J	< 150	U
Dibenzofuran	132-64-9	µg/Kg	7000	59,000	6,200	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	7100	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	27000	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	8100	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	120000	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Fluoranthene	206-44-0	µg/Kg	100,000	100,000	1,000,000	350		< 250	U	710		< 270	U	1,700		< 270	U
Fluorene	86-73-7	µg/Kg	30,000	100,000	386,000	< 290	U	< 250	U	< 300	U	< 270	U	140	J	< 270	U
Hexachlorobenzene	118-74-1	µg/Kg	330	1,200	1400	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Hexachloroethane	67-72-1	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500	500	8200	200	J	< 250	U	410		< 270	U	620		< 270	U
Isophorone	78-59-1	µg/Kg	NA	NA	4400	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
Naphthalene	91-20-3	µg/Kg	12,000	100,000	12,000	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Nitrobenzene	98-95-3	µg/Kg	NA	15000	170	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	NA	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	NA	< 160	U	< 140	U	< 170	U	< 160	U	< 140	U	< 150	U
Pentachlorophenol	87-86-5	µg/Kg	800b	6,700	800e	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Phenanthrene	85-01-8	µg/Kg	100,000	100,000	1,000,000	180		< 140	U	180		< 160	U	1,300		< 150	U
Phenol	108-95-2	µg/Kg	330	100,000	330	< 290	U	< 250	U	< 300	U	< 270	U	< 250	U	< 270	U
Pyrene	129-00-0	µg/Kg	100,000	100,000	1,000,000	310		< 250	U	650		< 270	U	1,700		< 270	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total																	
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	NA	7,750		12,900		9,970		9,580		24,400		22,900	
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	NA	27		< 3.7	U	< 3.4	U	< 3.5	U	2.7	J	3.4	J
Arsenic, As	7440-38-2	mg/Kg	13	16	16	8.49		0.77		0.9		1.4		2.22		< 0.78	U
Barium, Ba	7440-39-3	mg/Kg	350	400	820	291		80.4		70.1		59.6		202		250	
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	47	0.41		0.46		0.28		0.31		0.57		0.61	
Cadmium, Cd	7440-43-9	mg/Kg	2.5	4.3	7.5	4.79		< 0.37	U	< 0.34	U	< 0.35	U	< 0.38	U	< 0.39	U
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	NA	12,900		858		1,650	*	3,050	*	1,470		1,510	
Chromium, Cr	7440-47-3	mg/Kg	30	110	NA	28.1		24.9		26	*	36.7	*	53.8		82.4	
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	NA	8.6		9.24		8.39		10.1		22.1		25.9	
Copper, Cu	7440-50-8	mg/kg	50	270	1720	149		21.9		15.3		14.8		35.6		70.2	
Iron, Fe	7439-89-6	mg/Kg	NA	NA	NA	17,900		19,000		13,700		17,700		39,400		40,800	
Lead, Pb	7439-92-1	mg/Kg	63	400	450	1,490		3.1		1.3		1.6		5.4		3.3	
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	NA	7,620		2,910		2,940		3,530		8,760		11,100	
Manganese, Mn	7439-96-5	mg/Kg	1600	2000	2000	378		461		150	*	196		503		636	
Mercury, Hg	7439-97-6	mg/Kg	0.18	0.81	0.73	0.68	N	< 0.03	UN	< 0.03	U	< 0.03	U	< 0.03	UN	< 0.03	UN
Nickel, Ni	7440-02-0	mg/Kg	30	310	130	31.4		38.7		46.8	*	59.8		45.4		69.9	
Potassium, K	9/7/7440	mg/Kg	NA	NA	NA	1,090	*	2,800	*	2,450		2,400		11,100	*	12,500	*
Selenium, Se	7782-49-2	mg/Kg	3.9	180	4	< 1.6	U	< 1.5	U	< 1.3	U	< 1.4	U	< 1.5	U	< 1.6	U
Silver, Ag	7440-22-4	mg/Kg	2	180	8.3	< 0.41	U	< 0.37	U	< 0.34	U	< 0.35	U	< 0.38	U	< 0.39	U
Sodium, Na	7440-23-5	mg/Kg	NA	NA	NA	223	N	129	N	168		186		387	N	351	N
Thallium, Tl	7440-28-0	mg/Kg	NA	NA	NA	< 1.6	U	< 1.5	U	< 1.3	U	< 1.4	U	< 1.5	U	< 1.6	U
Vanadium, V	7440-62-2	mg/Kg	NA	NA	NA	49.8		29		23.1		27.8		62.4		68.3	
Zinc, Zn	7440-66-6	mg/Kg	109	10000	2480	533		33.1		28		29.7		76.2		85.1	
Cyanide	57-12-5	mg/Kg	27	27	40	0.91		< 0.56	U	< 0.50	U	< 0.51	U	< 0.59	U	< 0.57	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: miligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A																	
Aroclor 1016	12674-11-2	µg/Kg	100	1000	3200	< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1221	11104-28-2	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1232	11141-16-5	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1242	53469-21-9	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1248	12672-29-6	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1254	11097-69-1	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1260	11096-82-5	µg/Kg				130		< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1262	37324-23-5	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U
Aroclor 1268	11100-14-4	µg/Kg				< 81	U	< 73	U	< 73	U	< 74	U	< 76	U	< 75	U

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Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides - Soil By SW8081B																	
4,4-DDD	72-54-8	µg/Kg	3.3	13000	14000	< 2.4	U	< 2.2	U	< 2.2	U	< 2.2	U	< 2.3	U	< 2.2	U
4,4-DDE	72-55-9	µg/Kg	3.3	8900	17000	< 2.4	U	< 2.2	U	< 2.2	U	< 2.2	U	< 2.3	U	< 2.2	U
4,4-DDT	50-29-3	µg/Kg	3.3	7900	136000	< 2.4	U	< 2.2	U	< 2.2	U	< 2.2	U	< 2.3	U	< 2.2	U
alpha-BHC	319-84-6	µg/Kg	20	480	20	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Chlordane	5103-71-9	µg/Kg	94	4200	2900	< 4.0	U	< 3.6	U	< 3.6	U	< 3.7	U	< 3.8	U	< 3.7	U
Aldrin	309-00-2	µg/Kg	5	97	190	< 4.0	U	< 3.6	U	< 3.6	U	< 3.7	U	< 3.8	U	< 3.7	U
beta-BHC	319-85-7	µg/Kg	36	360	90	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Chlordane	57-74-9	µg/Kg	94	4200	2900	< 40	U	< 36	U	< 36	U	< 37	U	< 38	U	< 37	U
delta-BHC	319-86-8	µg/Kg	40	100000	250	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Dieldrin	60-57-1	µg/Kg	5	200	100	< 4.0	U	< 3.6	U	< 3.6	U	< 3.7	U	< 3.8	U	< 3.7	U
Endosulfan I	959-98-8	µg/Kg	2400	24000	102000	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Endosulfan II	33213-65-9	µg/Kg	2400	24000	102000	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Endosulfan Sulfate	1031-07-8	µg/Kg	2400	24000	1000000	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Endrin	72-20-8	µg/Kg	14	11000	60	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Endrin Aldehyde	7421-93-4	µg/Kg	NA	NA	NA	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Endrin Ketone	53494-70-5	µg/Kg	NA	NA	NA	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
gamma-BHC	58-89-9	µg/Kg	100	1300	100	< 1.6	U	< 1.5	U	< 1.5	U	< 1.5	U	< 1.5	U	< 1.5	U
gamma-chlordane	5103-74-2	µg/Kg	NA	NA	14000	< 4.0	U	< 3.6	U	< 3.6	U	< 3.7	U	< 3.8	U	< 3.7	U
Heptachlor	76-44-8	µg/Kg	42	2100	380	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Heptachlor Epoxide	1024-57-3	µg/Kg	NA	NA	20	< 8.1	U	< 7.3	U	< 7.3	U	< 7.4	U	< 7.6	U	< 7.5	U
Methoxychlor	72-43-5	µg/Kg	NA	NA	900000	< 40	U	< 36	U	< 36	U	< 37	U	< 38	U	< 37	U
Toxaphene	8001-35-2	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 150	U	< 150	U	< 150	U	< 150	U

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The Huguenot Site, New Rochelle, New York

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C																	
1,1,1-Trichloroethane	71-55-6	µg/Kg	680	100,000	680	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/Kg	NA	NA	600	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,1,2-Trichloroethane	79-00-5	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,1-Dichloroethane	75-34-3	µg/Kg	270	26,000	270	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 71 MDL	U	< 70 MDL	U
1,1-Dichloroethene	75-35-4	µg/Kg	330	100,000	330	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 35 MDL	U	< 35 MDL	U
1,2,3-Trichlorobenzene	87-61-6	µg/Kg	NA	NA	NA	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	3400	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/Kg	NA	NA	NA	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,2-Dibromoethane	106-93-4	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,2-Dichlorobenzene	95-50-1	µg/Kg	1,100	100,000	1,100	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,2-Dichloroethane	107-06-2	µg/Kg	20	3,100	20	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 35 MDL	U	< 35 MDL	U
1,2-Dichloropropane	78-87-5	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,3-Dichlorobenzene	541-73-1	µg/Kg	2,400	49,000	2,400	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
1,4-Dichlorobenzene	106-46-7	µg/Kg	1,800	13,000	1,800	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
2-Butanone	78-93-3	µg/Kg	NA	100,000	120	< 47	U	< 29	U	< 33	U	< 33	U	< 2100	U	< 2100	U
2-Hexanone	591-78-6	µg/Kg	NA	NA	NA	< 39	U	< 24	U	< 27	U	< 28	U	< 1800	U	< 1800	U
Acetone	67-64-1	µg/Kg	50	100,000	50	11	JS	5.7	JS	20	JS	18	JS	< 350 MDL	U	< 350 MDL	U
Benzene	71-43-2	µg/Kg	60	4,800	60	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 60	U	< 60	U
Bromochloromethane	74-97-5	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Bromodichloromethane	75-27-4	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Bromoform	75-25-2	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Bromomethane	74-83-9	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Carbon Disulfide	75-15-0	µg/Kg	NA	NA	2700	< 7.8	U	< 4.9	U	< 5.5	U	1.9	J	< 350	U	< 350	U
Carbon Tetrachloride	56-23-5	µg/Kg	760	2,400	760	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Chlorobenzene	108-90-7	µg/Kg	1,100	100,000	1,100	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Chlorodibromomethane	124-48-1	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroethane	75-00-3	µg/Kg	NA	NA	1900	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Chloroform	67-66-3	µg/Kg	370	49,000	370	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Chloromethane	74-87-3	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
cis-1,2-Dichloroethene	156-59-2	µg/Kg	250	100,000	250	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	<35 MDL	U	<35 MDL	U
cis-1,3-Dichloropropene	10061-01-5	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Cyclohexane	110-82-7	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	<5.5	U	<5.6	U	1,200		400	
Dichlorodifluoromethane	75-71-8	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Ethylbenzene	100-41-4	µg/Kg	1,000	41,000	1,000	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Isopropylbenzene	98-82-8	µg/Kg	NA	NA	2300	< 400	U	< 4.9	U	< 5.5	U	< 5.6	U	800		200	J
m&p-Xylene	179601-23-1	µg/Kg				< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 250	U	< 250	U
Methyl Isobutyl Ketone	108-10-1	µg/Kg	NA	NA	1000	< 39	U	< 24	U	< 27	U	< 28	U	< 1800	U	< 1800	U
Methyl Tert-Butyl Ether	1634-04-4	µg/Kg	930	100,000	930	< 16	U	< 9.8	U	< 11	U	< 11	U	< 710	U	< 700	U
Methylacetate	79-20-9	µg/Kg				< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Methylcyclohexane	108-87-2	µg/Kg				< 7.8	U	< 4.9	U	2	J	<5.6	U	15,000	D	5,800	
Methylene Chloride	75-09-2	µg/Kg	50	100,000	50	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	<35 MDL	U	<35 MDL	U
o-Xylene	95-47-6	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 250	U	< 250	U
Styrene	100-42-5	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Tetrachloroethene	127-18-4	µg/Kg	1,300	19,000	1,300	84	J	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Toluene	108-88-3	µg/Kg	700	100,000	700	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Total Xylenes	1330-20-7	µg/Kg	260	100000	1600	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 250	U	< 250	U
trans-1,2-Dichloroethene	156-60-5	µg/Kg	190	100,000	190	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	<35 MDL	U	<35 MDL	U
trans-1,3-Dichloropropene	10061-02-6	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Trichloroethene	79-01-6	µg/Kg	470	21,000	470	1,800		0.92	J	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Trichlorofluoromethane	75-69-4	µg/Kg	NA	NA	NA	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Trichlorotrifluoroethane	76-13-1	µg/Kg	NA	NA	6000	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	< 350	U	< 350	U
Vinyl Chloride	75-01-4	µg/Kg	20	900	20	< 7.8	U	< 4.9	U	< 5.5	U	< 5.6	U	<35 MDL	U	<35 MDL	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D																	
1,1- Biphenyl	92-52-4	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2,3,4,6-tetrachlorophenol	58-90-2	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	100	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	400	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	200	< 280	U	< 260	U	< 250	R	< 260	U	< 270	U	< 260	U
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	170	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	36400	210	J	< 260	U	< 250	U	< 260	U	300		3,700	
2-Methylphenol	95-48-7	µg/Kg	330	100,000	330	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	400	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	300	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
3+4 Methylphenol	NA	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	500	< 810	U	< 730	U	< 360	U	< 370	U	< 770	U	< 750	U
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	R	< 220	U	< 270	U	< 260	U
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	220	< 810	U	< 730	U	< 290	U	< 290	U	< 770	U	< 750	U
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	NA	< 2000	U	< 1800	U	< 360	U	< 370	U	< 1900	U	< 1900	U
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	100	< 280	U	< 260	U	< 360	U	< 370	U	< 270	U	< 260	U
Acenaphthene	83-32-9	µg/Kg	20,000	100,000	98,000	310		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Acenaphthylene	208-96-8	µg/Kg	100,000	100,000	107,000	1,200		< 150	U	< 250	U	< 260	U	< 150	U	< 150	U
Acetophenone	98-86-2	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Anthracene	120-12-7	µg/Kg	100,000	100,000	1,000,000	1,000		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Atrazine	1912-24-9	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Benzaldehyde	100-52-7	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000	1,000	1,000	3,700		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	SB-40 0-2 FT		SB-40 6-8 FT		MW-3 4-5 FT		MW-3 6-8 FT		MW-4 5-7 FT		MW-4 8-10 FT	
	Lab ID					CA34764		CA34765		CA38294		CA38295		CA34755		CA34756	
	Sample Date					4/23/2018		4/23/2018		4/28/2018		4/28/2018		4/23/2018		4/23/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000	1,000	22,000	4,300		< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000	1,000	1,700	4,500		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100,000	100,000	1,000,000	4,100		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800	3,900	1,700	3,500		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	435000	590		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	122000	720		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Caprolactam	105-60-2	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 260	U	< 270	U	< 270	U	< 260	U
Carbazole	86-74-8	µg/Kg	NA	NA	NA	490		< 260	U	< 180	U	< 180	U	< 270	U	< 260	U
Chrysene	218-01-9	µg/Kg	1,000	3,900	1,000	4,000		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330	330	1000000	510		< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
Dibenzofuran	132-64-9	µg/Kg	7000	59,000	6,200	200	J	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	7100	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	27000	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	8100	170	J	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	120000	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Fluoranthene	206-44-0	µg/Kg	100,000	100,000	1,000,000	6,000		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Fluorene	86-73-7	µg/Kg	30,000	100,000	386,000	370		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Hexachlorobenzene	118-74-1	µg/Kg	330	1,200	1400	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Hexachloroethane	67-72-1	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500	500	8200	4,000		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Isophorone	78-59-1	µg/Kg	NA	NA	4400	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
Naphthalene	91-20-3	µg/Kg	12,000	100,000	12,000	490		< 260	U	< 250	U	< 260	U	< 270	U	130	J
Nitrobenzene	98-95-3	µg/Kg	NA	15000	170	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	NA	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 180	U	< 180	U	< 150	U	< 150	U
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	NA	< 160	U	< 150	U	< 250	U	< 260	U	< 150	U	< 150	U
Pentachlorophenol	87-86-5	µg/Kg	800b	6,700	800e	< 280	U	< 260	U	< 220	U	< 220	U	< 270	U	< 260	U
Phenanthrene	85-01-8	µg/Kg	100,000	100,000	1,000,000	3,000		< 150	U	< 250	U	< 260	U	< 150	U	< 150	U
Phenol	108-95-2	µg/Kg	330	100,000	330	< 280	U	< 260	U	< 250	U	< 260	U	< 270	U	< 260	U
Pyrene	129-00-0	µg/Kg	100,000	100,000	1,000,000	5,400		< 260	U	< 250	U	< 260	U	< 270	U	< 260	U

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mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	MW-6 6-8 FT		MW-7 12-14 FT		MW-8 12-14 FT		D-1		D-2	
	Lab ID					CA38296		CA38297		CA37521		CA34757		CA38298	
	Sample Date					4/28/2018		4/28/2018		4/26/2018		4/23/2018		4/28/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total															
Aluminum, Al	7429-90-5	mg/Kg	NA	NA	NA	13,000		8,450		20,100		28,800		12,000	
Antimony, Sb	7440-36-0	mg/Kg	NA	NA	NA	< 4.0	U	< 3.3	U	< 3.6	U	3.3	J	< 3.8	U
Arsenic, As	7440-38-2	mg/Kg	13	16	16	1.29		< 0.66	U	< 0.72	U	< 0.78	U	1.06	
Barium, Ba	7440-39-3	mg/Kg	350	400	820	72.7		95.8		201		307		73.1	
Beryllium, Be	7440-41-7	mg/Kg	7.2	72	47	0.45		0.44		0.34		0.52		0.41	
Cadmium, Cd	7440-43-9	mg/Kg	2.5	4.3	7.5	< 0.40	U	< 0.33	U	< 0.36	U	< 0.39	U	< 0.38	U
Calcium, Ca	7440-70-2	mg/Kg	NA	NA	NA	997	*	1,020	*	1,160		1,680		827	*
Chromium, Cr	7440-47-3	mg/Kg	30	110	NA	29.4	*	20.9	*	39.6		61.9		24.4	*
Cobalt, Co	7440-48-4	mg/Kg	NA	NA	NA	7.98		7.3		18.2		26.9		7.9	
Copper, Cu	7440-50-8	mg/kg	50	270	1720	17.3		3.84		31.5		48.9		15.4	
Iron, Fe	7439-89-6	mg/Kg	NA	NA	NA	18,900		11,700		38,200		47,900		17,800	
Lead, Pb	7439-92-1	mg/Kg	63	400	450	1.6		3.4		< 0.7	U	2.8		0.9	
Magnesium, Mg	7439-95-4	mg/Kg	NA	NA	NA	3,250		4,500		8,330		10,600		2,820	
Manganese, Mn	7439-96-5	mg/Kg	1600	2000	2000	554	*	178	*	411	*	1,120		509	*
Mercury, Hg	7439-97-6	mg/Kg	0.18	0.81	0.73	< 0.03	U	< 0.03	U	< 0.03	U	< 0.03	UN	< 0.03	U
Nickel, Ni	7440-02-0	mg/Kg	30	310	130	37.5	*	20.5	*	31		46.6		34.3	*
Potassium, K	9/7/7440	mg/Kg	NA	NA	NA	2,580		4,420		13,000		15,400	*	2,390	
Selenium, Se	7782-49-2	mg/Kg	3.9	180	4	< 1.6	U	< 1.3	U	< 1.4	U	< 1.6	U	< 1.5	U
Silver, Ag	7440-22-4	mg/Kg	2	180	8.3	< 0.40	U	< 0.33	U	< 0.36	U	< 0.39	U	< 0.38	U
Sodium, Na	7440-23-5	mg/Kg	NA	NA	NA	210		63		300		402	N	189	
Thallium, Ti	7440-28-0	mg/Kg	NA	NA	NA	< 1.6	U	< 1.3	U	< 1.4	U	< 1.6	U	< 1.5	U
Vanadium, V	7440-62-2	mg/Kg	NA	NA	NA	28.6		15		56.5		79.5		25.9	
Zinc, Zn	7440-66-6	mg/Kg	109	10000	2480	33		28.2		78.7		97.4		26	
Cyanide	57-12-5	mg/Kg	27	27	40	< 0.51	U	< 0.50	U	< 0.54	U	< 0.52	U	< 0.55	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

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Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	MW-6 6-8 FT		MW-7 12-14 FT		MW-8 12-14 FT		D-1		D-2	
	Lab ID					CA38296		CA38297		CA37521		CA34757		CA38298	
	Sample Date					4/28/2018		4/28/2018		4/26/2018		4/23/2018		4/28/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A															
Aroclor 1016	12674-11-2	µg/Kg	100	1000	3200	< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1221	11104-28-2	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1232	11141-16-5	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1242	53469-21-9	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1248	12672-29-6	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1254	11097-69-1	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1260	11096-82-5	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1262	37324-23-5	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U
Aroclor 1268	11100-14-4	µg/Kg				< 74	U	< 73	U	< 72	U	< 770	U	< 73	U

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	Sample Date					4/28/2018		4/28/2018		4/26/2018		4/23/2018		4/28/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides - Soil By SW8081B															
4,4-DDD	72-54-8	µg/Kg	3.3	13000	14000	< 2.2	U	< 2.2	U	< 2.2	U	< 2.3	U	< 2.2	U
4,4-DDE	72-55-9	µg/Kg	3.3	8900	17000	< 2.2	U	< 2.2	U	< 2.2	U	< 2.3	U	< 2.2	U
4,4-DDT	50-29-3	µg/Kg	3.3	7900	136000	< 2.2	U	< 2.2	U	< 2.2	U	< 2.3	U	< 2.2	U
alpha-BHC	319-84-6	µg/Kg	20	480	20	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Chlordane	5103-71-9	µg/Kg	94	4200	2900	< 3.7	U	< 3.6	U	< 3.6	U	< 3.9	U	< 3.6	U
Aldrin	309-00-2	µg/Kg	5	97	190	< 3.7	U	< 3.6	U	< 3.6	U	< 3.9	U	< 3.6	U
beta-BHC	319-85-7	µg/Kg	36	360	90	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Chlordane	57-74-9	µg/Kg	94	4200	2900	< 37	U	< 36	U	< 36	U	< 39	U	< 36	U
delta-BHC	319-86-8	µg/Kg	40	100000	250	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Dieldrin	60-57-1	µg/Kg	5	200	100	< 3.7	U	< 3.6	U	< 3.6	U	< 3.9	U	< 3.6	U
Endosulfan I	959-98-8	µg/Kg	2400	24000	102000	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Endosulfan II	33213-65-9	µg/Kg	2400	24000	102000	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Endosulfan Sulfate	1031-07-8	µg/Kg	2400	24000	1000000	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Endrin	72-20-8	µg/Kg	14	11000	60	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Endrin Aldehyde	7421-93-4	µg/Kg	NA	NA	NA	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Endrin Ketone	53494-70-5	µg/Kg	NA	NA	NA	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
gamma-BHC	58-89-9	µg/Kg	100	1300	100	< 1.5	U	< 1.5	U	< 1.4	U	< 1.5	U	< 1.4	U
gamma-chlordane	5103-74-2	µg/Kg	NA	NA	14000	< 3.7	U	< 3.6	U	< 3.6	U	< 3.9	U	< 3.6	U
Heptachlor	76-44-8	µg/Kg	42	2100	380	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Heptachlor Epoxide	1024-57-3	µg/Kg	NA	NA	20	< 7.4	U	< 7.3	U	< 7.2	U	< 7.7	U	< 7.2	U
Methoxychlor	72-43-5	µg/Kg	NA	NA	900000	< 37	U	< 36	U	< 36	U	< 39	U	< 36	U
Toxaphene	8001-35-2	µg/Kg	NA	NA	NA	< 150	U	< 150	U	< 140	U	< 150	U	< 140	U

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The Huguenot Site, New Rochelle, New York

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Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	MW-6 6-8 FT		MW-7 12-14 FT		MW-8 12-14 FT		D-1		D-2	
	Lab ID					CA38296		CA38297		CA37521		CA34757		CA38298	
	Sample Date					4/28/2018		4/28/2018		4/26/2018		4/23/2018		4/28/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C															
1,1,1-Trichloroethane	71-55-6	µg/Kg	680	100,000	680	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/Kg	NA	NA	600	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,1,2-Trichloroethane	79-00-5	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,1-Dichloroethane	75-34-3	µg/Kg	270	26,000	270	< 5.6	U	< 5.1	U	< 5.2	U	<360 MDL	U	< 5.2	U
1,1-Dichloroethene	75-35-4	µg/Kg	330	100,000	330	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
1,2,3-Trichlorobenzene	87-61-6	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,2,4-Trichlorobenzene	120-82-1	µg/Kg	NA	NA	3400	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,2-Dibromoethane	106-93-4	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,2-Dichlorobenzene	95-50-1	µg/Kg	1,100	100,000	1,100	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
1,2-Dichloroethane	107-06-2	µg/Kg	20	3,100	20	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
1,2-Dichloropropane	78-87-5	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,3-Dichlorobenzene	541-73-1	µg/Kg	2,400	49,000	2,400	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
1,4-Dichlorobenzene	106-46-7	µg/Kg	1,800	13,000	1,800	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
2-Butanone	78-93-3	µg/Kg	NA	100,000	120	< 33	U	< 31	U	< 31	U	< 11000	U	< 31	U
2-Hexanone	591-78-6	µg/Kg	NA	NA	NA	< 28	U	< 26	U	< 26	U	< 9000	U	< 26	U
Acetone	67-64-1	µg/Kg	50	100,000	50	12	JS	15	JS	13	JS	<1800 MDL	U	10	JS
Benzene	71-43-2	µg/Kg	60	4,800	60	< 5.6	U	< 5.1	U	< 5.2	U	< 180 MDL	U	< 5.2	U
Bromochloromethane	74-97-5	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Bromodichloromethane	75-27-4	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Bromoform	75-25-2	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Bromomethane	74-83-9	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Carbon Disulfide	75-15-0	µg/Kg	NA	NA	2700	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Carbon Tetrachloride	56-23-5	µg/Kg	760	2,400	760	< 5.6	U	< 5.1	U	< 5.2	U	<360 MDL	U	< 5.2	U
Chlorobenzene	108-90-7	µg/Kg	1,100	100,000	1,100	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
Chlorodibromomethane	124-48-1	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	MW-6 6-8 FT		MW-7 12-14 FT		MW-8 12-14 FT		D-1		D-2	
	Lab ID					CA38296		CA38297		CA37521		CA34757		CA38298	
	Sample Date					4/28/2018		4/28/2018		4/26/2018		4/23/2018		4/28/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroethane	75-00-3	µg/Kg	NA	NA	1900	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Chloroform	67-66-3	µg/Kg	370	49,000	370	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
Chloromethane	74-87-3	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
cis-1,2-Dichloroethene	156-59-2	µg/Kg	250	100,000	250	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
cis-1,3-Dichloropropene	10061-01-5	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Cyclohexane	110-82-7	µg/Kg	NA	NA	NA	<5.6	U	<5.1	U	<5.2	U	820	J	<5.2	U
Dichlorodifluoromethane	75-71-8	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Ethylbenzene	100-41-4	µg/Kg	1,000	41,000	1,000	< 5.6	U	< 5.1	U	< 5.2	U	< 1000	U	< 5.2	U
Isopropylbenzene	98-82-8	µg/Kg	NA	NA	2300	< 5.6	U	< 5.1	U	< 5.2	U	870	J	< 5.2	U
m&p-Xylene	179601-23-1	µg/Kg				< 5.6	U	< 5.1	U	< 5.2	U	<250	U	< 5.2	U
Methyl Isobutyl Ketone	108-10-1	µg/Kg	NA	NA	1000	< 28	U	< 26	U	< 26	U	< 9000	U	< 26	U
Methyl Tert-Butyl Ether	1634-04-4	µg/Kg	930	100,000	930	< 11	U	< 10	U	< 10	U	< 930	U	< 10	U
Methylacetate	79-20-9	µg/Kg				< 5.6	U	< 5.1	U	<10	U	< 1800	U	<10	U
Methylcyclohexane	108-87-2	µg/Kg				< 5.6	U	< 5.1	U	<10	U	13,000		<10	U
Methylene Chloride	75-09-2	µg/Kg	50	100,000	50	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
o-Xylene	95-47-6	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	<250	U	< 5.2	U
Styrene	100-42-5	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Tetrachloroethene	127-18-4	µg/Kg	1,300	19,000	1,300	< 5.6	U	< 5.1	U	< 5.2	U	<360 MDL	U	< 5.2	U
Toluene	108-88-3	µg/Kg	700	100,000	700	< 5.6	U	< 5.1	U	< 5.2	U	< 700	U	< 5.2	U
Total Xylenes	1330-20-7	µg/Kg	260	100000	1600	< 5.6	U	< 5.1	U	< 5.2	U	<250	U	< 5.2	U
trans-1,2-Dichloroethene	156-60-5	µg/Kg	190	100,000	190	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
trans-1,3-Dichloropropene	10061-02-6	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Trichloroethene	79-01-6	µg/Kg	470	21,000	470	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U
Trichlorofluoromethane	75-69-4	µg/Kg	NA	NA	NA	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Trichlorotrifluoroethane	76-13-1	µg/Kg	NA	NA	6000	< 5.6	U	< 5.1	U	< 5.2	U	< 1800	U	< 5.2	U
Vinyl Chloride	75-01-4	µg/Kg	20	900	20	< 5.6	U	< 5.1	U	< 5.2	U	<180 MDL	U	< 5.2	U

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	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D															
1,1- Biphenyl	92-52-4	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2,3,4,6-tetrachlorophenol	58-90-2	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2,4,5-Trichlorophenol	95-95-4	µg/Kg	NA	NA	100	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2,4,6-Trichlorophenol	88-06-2	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
2,4-Dichlorophenol	120-83-2	µg/Kg	NA	NA	400	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
2,4-Dimethylphenol	105-67-9	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2,4-Dinitrophenol	51-28-5	µg/Kg	NA	NA	200	< 260	R	< 250	R	< 250	U	< 270	U	< 260	R
2,4-Dinitrotoluene	121-14-2	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
2,6-Dinitrotoluene	606-20-2	µg/Kg	NA	NA	170	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
2-Chloronaphthalene	91-58-7	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2-Chlorophenol	95-57-8	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2-Methylnaphthalene	91-57-6	µg/Kg	NA	NA	36400	< 260	U	< 250	U	< 250	U	2,200		< 260	U
2-Methylphenol	95-48-7	µg/Kg	330	100,000	330	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2-Nitroaniline	88-74-4	µg/Kg	NA	NA	400	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
2-Nitrophenol	88-75-5	µg/Kg	NA	NA	300	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
3,3-Dichlorobenzidine	91-94-1	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
3+4 Methylphenol	NA	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
3-Nitroaniline	99-09-2	µg/Kg	NA	NA	500	< 370	U	< 360	U	< 360	U	< 760	U	< 360	U
4,6-Dinitro-2-methylphenol	534-52-1	µg/Kg	NA	NA	NA	< 220	R	< 220	R	< 220	U	< 270	U	< 220	R
4-Bromophenyl-phenyl ether	101-55-3	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
4-Chloro-3-methylphenol	59-50-7	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
4-Chloroaniline	106-47-8	µg/Kg	NA	NA	220	< 290	U	< 290	U	< 290	U	< 760	U	< 290	U
4-Chlorophenyl phenyl ether	7005-72-3	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
4-Nitroaniline	100-01-6	µg/Kg	NA	NA	NA	< 370	U	< 360	U	< 360	U	< 1900	U	< 360	U
4-Nitrophenol	100-02-7	µg/Kg	NA	NA	100	< 370	U	< 360	U	< 360	U	< 270	U	< 360	U
Acenaphthene	83-32-9	µg/Kg	20,000	100,000	98,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Acenaphthylene	208-96-8	µg/Kg	100,000	100,000	107,000	< 260	U	< 250	U	< 250	U	< 150	U	< 260	U
Acetophenone	98-86-2	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Anthracene	120-12-7	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Atrazine	1912-24-9	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Benzaldehyde	100-52-7	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Benzo-a-Anthracene	56-55-3	µg/Kg	1,000	1,000	1,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U

Table 7: Summary of RI Soil Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ug/Kg: microgram per kilogram (ppb)

mg/Kg: milligram per kilogram (ppm)

Analyte detected

Detected at concentration above 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Detected at concentration above 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives

Method Detection Limit (MDL) above the UUSCO

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYCRR 375 Unrestricted Use	NYCRR 375 Restricted- Residential	NYCRR 375 Protection of Groundwater	MW-6 6-8 FT		MW-7 12-14 FT		MW-8 12-14 FT		D-1		D-2	
	Lab ID					CA38296		CA38297		CA37521		CA34757		CA38298	
	Sample Date					4/28/2018		4/28/2018		4/26/2018		4/23/2018		4/28/2018	
	CAS					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Benzo-a-Pyrene	50-32-8	µg/Kg	1,000	1,000	22,000	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
Benzo-b-Fluoranthene	205-99-2	µg/Kg	1,000	1,000	1,700	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Benzo-g,h,i-Perylene	191-24-2	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Benzo-k-Fluoranthene	207-08-9	µg/Kg	800	3,900	1,700	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Bis(2-Chloroethoxy)methane	111-91-1	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Bis(2-Chloroethyl)ether	111-44-4	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/Kg	NA	NA	435000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Butylbenzylphthalate	85-68-7	µg/Kg	NA	NA	122000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Caprolactam	105-60-2	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Carbazole	86-74-8	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 270	U	< 180	U
Chrysene	218-01-9	µg/Kg	1,000	3,900	1,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Dibenzo-a,h-Anthracene	53-70-3	µg/Kg	330	330	1000000	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
Dibenzofuran	132-64-9	µg/Kg	7000	59,000	6,200	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Diethyl Phthalate	84-66-2	µg/Kg	NA	NA	7100	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Dimethyl Phthalate	131-11-3	µg/Kg	NA	NA	27000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Di-n-Butyl Phthalate	84-74-2	µg/Kg	NA	NA	8100	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Di-n-Octyl Phthalate	117-84-0	µg/Kg	NA	NA	120000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Fluoranthene	206-44-0	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Fluorene	86-73-7	µg/Kg	30,000	100,000	386,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Hexachlorobenzene	118-74-1	µg/Kg	330	1,200	1400	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
Hexachlorobutadiene	87-68-3	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Hexachlorocyclopentadiene	77-47-4	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Hexachloroethane	67-72-1	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/Kg	500	500	8200	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Isophorone	78-59-1	µg/Kg	NA	NA	4400	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
Naphthalene	91-20-3	µg/Kg	12,000	100,000	12,000	< 260	U	< 250	U	210	J	< 270	U	< 260	U
Nitrobenzene	98-95-3	µg/Kg	NA	15000	170	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
N-Nitrosodimethylamine	62-75-9	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
N-Nitroso-di-n-Propylamine	621-64-7	µg/Kg	NA	NA	NA	< 180	U	< 180	U	< 180	U	< 150	U	< 180	U
N-Nitrosodiphenylamine	86-30-6	µg/Kg	NA	NA	NA	< 260	U	< 250	U	< 250	U	< 150	U	< 260	U
Pentachlorophenol	87-86-5	µg/Kg	800b	6,700	800e	< 220	U	< 220	U	< 220	U	< 270	U	< 220	U
Phenanthrene	85-01-8	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 250	U	< 250	U	< 150	U	< 260	U
Phenol	108-95-2	µg/Kg	330	100,000	330	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U
Pyrene	129-00-0	µg/Kg	100,000	100,000	1,000,000	< 260	U	< 250	U	< 250	U	< 270	U	< 260	U

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total													
Aluminum, Al	7429-90-5	mg/L	0.1	0.108	N	0.087	N	0.791	N	0.382	N	0.11	N
Arsenic, As	7440-38-2	mg/L	0.025	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U
Barium, Ba	7440-39-3	mg/L	1	0.36		0.096		0.053		0.335		0.042	
Beryllium, Be	7440-41-7	mg/L	0.003	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U
Cadmium, Cd	7440-43-9	mg/L	0.005	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U
Calcium, Ca	7440-70-2	mg/L	NA	225		179		29.3		240		62.4	
Chromium, Cr	7440-47-3	mg/L	0.05	< 0.001	U	< 0.001	U	0.002		0.002		0.002	
Cobalt, Co	7440-48-4	mg/L	NA	< 0.005	U	< 0.005	U	0.001	J	< 0.005	U	< 0.005	U
Copper, Cu	7440-50-8	mg/L	0.2	< 0.005	U	0.001	J	0.002	J	0.003	J	< 0.005	U
Iron, Fe	7439-89-6	mg/L	0.3	39.9		4.84		1.21		52.5		0.1	
Lead, Pb	7439-92-1	mg/L	0.025	0.005		< 0.002	U	< 0.002	U	0.007		< 0.002	U
Magnesium, Mg	7439-95-4	mg/L	35	45		15.9		7.22		31		11.1	
Manganese, Mn	7439-96-5	mg/L	0.3	16		1.78		1.7		4.06		0.089	
Mercury, Hg	7439-97-6	mg/L	0.0007	< 0.0002	U	< 0.0002	U	< 0.0002	U	< 0.0002	U	< 0.0002	U
Nickel, Ni	7440-02-0	mg/L	0.1	0.003	J	0.002	J	0.006		0.002	J	0.005	
Potassium, K	9/7/7440	mg/L	NA	10.5		13.3		5.9		10.9		4.4	
Antimony, Sb	7440-36-0	mg/L	0.003	< 0.0030	U	< 0.0030	U	< 0.0030	U	< 0.0030	U	< 0.0030	U
Selenium, Se	7782-49-2	mg/L	0.01	< 0.010	U	< 0.010	U	< 0.010	U	< 0.010	U	0.012	
Silver, Ag	7440-22-4	mg/L	0.05	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U
Sodium, Na	7440-23-5	mg/L	20	54.9		46.6		143		358		29.7	
Thallium, Tl	7440-28-0	mg/L	0.0005	< 0.0005	U	< 0.0005	U	< 0.0005	U	< 0.0005	U	< 0.0005	U
Vanadium, V	7440-62-2	mg/L	NA	< 0.010	U	< 0.010	U	0.002	J	< 0.010	U	< 0.010	U
Zinc, Zn	7440-66-6	mg/L	2	0.004	J	0.007	J	0.003	J	0.008	J	< 0.010	U
Cyanide	57-12-5	mg/L	0.2	< 0.010	U	< 0.010	U	< 0.010	U	< 0.010	U	< 0.010	U

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A													
Aroclor 1016	12674-11-2	µg/L	0.09	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1221	11104-28-2	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1232	11141-16-5	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1242	53469-21-9	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1248	12672-29-6	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1254	11097-69-1	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1260	11096-82-5	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1262	37324-23-5	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U
Aroclor 1268	11100-14-4	µg/L		< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U

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The Huguenot Site, New Rochelle, New York

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Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C													
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,1-Trichloroethane	71-55-6	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1-Dichloroethane	75-34-3	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
1,1-Dichloroethene	75-35-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.04	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,4-Trimethylbenzene	95-63-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	0.37	J	< 1.0	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	0.04	< 0.50	U	< 0.50	U	< 0.50	U	< 0.50	U	< 0.50	U
1,2-Dibromoethane	106-93-4	µg/L	0.0006	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U
1,2-Dichlorobenzene	95-50-1	µg/L	3	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
1,2-Dichloroethane	107-06-2	µg/L	0.6	< 0.60	U	< 0.60	U	< 0.60	U	< 0.60	U	< 0.60	U
1,2-Dichloropropane	78-87-5	µg/L	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	0.39	J	< 1.0	U
1,3-Dichlorobenzene	541-73-1	µg/L	3	3.2		6		2		6.8		1.7	J
1,3-Dichloropropane	142-28-9	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,4-Dichlorobenzene	106-46-7	µg/L	3	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
2,2-Dichloropropane	594-20-7	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
2-Chlorotoluene	95-49-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
2-Hexanone	591-78-6	µg/L	50	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
4-Methyl-2-pentanone	108-10-1	µg/L	NA	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
Acetone	67-64-1	µg/L	50	< 5.0	U	8.7	S	< 5.0	U	< 5.0	U	< 5.0	U
Benzene	71-43-2	µg/L	1	< 0.70	U	< 0.70	U	< 0.70	U	0.74		< 0.70	U
Bromochloromethane	74-97-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromodichloromethane	75-27-4	µg/L	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromoform	75-25-2	µg/L	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromomethane	74-83-9	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Carbon Disulfide	75-15-0	µg/L	60	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Carbon Tetrachloride	56-23-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chlorobenzene	108-90-7	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Chloroethane	75-00-3	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Chloroform	67-66-3	µg/L	7	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Chloromethane	74-87-3	µg/L	5	< 2.0	U	< 2.0	U	0.54	J	< 2.0	U	< 2.0	U
cis-1,2-Dichloroethene	156-59-2	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
cis-1,3-Dichloropropene	10061-01-5	µg/L	0.4	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U
Cyclohexane	110-82-7	µg/L	NA	2.1	J	< 5.0	U	< 5.0	U	26		< 5.0	U
Dibromochloromethane	124-48-1	µg/L	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dibromomethane	74-95-3	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dichlorodifluoromethane	75-71-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Ethylbenzene	100-41-4	µg/L	5	0.31	J	< 1.0	U	< 1.0	U	4.6		< 1.0	U
Isopropylbenzene	98-82-8	µg/L	5	2.3		2.7		< 1.0	U	17		< 1.0	U
m&p-Xylene	179601-23-1	µg/L		0.31	J	< 1.0	U	< 1.0	U	2		< 1.0	U
Methyl ethyl ketone	78-93-3	µg/L	50	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U
Methyl Tert-Butyl Ether	1634-04-4	µg/L	10	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Methylacetate	79-20-9	µg/L	NA	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
Methylcyclohexane	108-87-2	µg/L	NA	4.3		< 2.0	U	< 2.0	U	36		< 2.0	U
Methylene Chloride	75-09-2	µg/L	5	< 3.0	U	< 3.0	U	< 3.0	U	< 3.0	U	< 3.0	U
Naphthalene	91-20-3	µg/L	10	36		1.1		< 1.0	U	2		< 1.0	U
n-Butylbenzene	104-51-8	µg/L	5	3.6		0.99	J	< 1.0	U	2.5		< 1.0	U
n-Propylbenzene	103-65-1	µg/L	5	1.4		2.9		< 1.0	U	15		< 1.0	U
o-Xylene	95-47-6	µg/L	NA	0.62	J	< 1.0	U	< 1.0	U	0.45	J	< 1.0	U
p-Isopropyltoluene	99-87-6	µg/L	5	0.32	J	< 1.0	U	< 1.0	U	5.3		< 1.0	U
sec-Butylbenzene	135-98-8	µg/L	5	4.1		3.1		0.35	J	3.4		< 1.0	U
Styrene	100-42-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
tert-Butylbenzene	98-06-6	µg/L	NA	0.53	J	2.1		< 1.0	U	1.5		< 1.0	U
Tetrachloroethene	127-18-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Toluene	108-88-3	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	0.44	J	< 2.0	U
Total Xylenes	1330-20-7	µg/L	15	< 1.0	U	< 1.0	U	< 1.0	U	2.4		< 1.0	U
trans-1,2-Dichloroethene	156-60-5	µg/L	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	0.4	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U
Trichloroethene	79-01-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichlorofluoromethane	75-69-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichlorotrifluoroethane	76-13-1	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Vinyl Chloride	75-01-4	µg/L	2	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D (SIM)													
1-1- Biphenyl	92-52-4	µg/L	NA	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/L	10	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U
2,3,4,6-tetrachlorophenol	58-90-2	µg/L		< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2,4,5-Trichlorophenol	95-95-4	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2,4,6-Trichlorophenol	88-06-2	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2,4-Dichlorophenol	120-83-2	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2,4-Dimethylphenol	105-67-9	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2,4-Dinitrophenol	51-28-5	µg/L	10	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2-Chlorophenol	95-57-8	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
2-Methylphenol	95-48-7	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	0.25		< 0.19	R
2-Nitrophenol	88-75-5	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
4,6-Dinitro-2-methylphenol	534-52-1	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
4-Chloro-3-methylphenol	59-50-7	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
4-Nitrophenol	100-02-7	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
Acenaphthylene	208-96-8	µg/L	NA	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U
Anthracene	120-12-7	µg/L	50	0.32		< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Atrazine	1912-24-9	µg/L	NA	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U
Benzo-a-Anthracene	56-55-3	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Benzo-a-Pyrene	50-32-8	µg/L	MDL	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Benzo-b-Fluoranthene	205-99-2	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Benzo-g,h,i-Perylene	191-24-2	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Benzo-k-Fluoranthene	207-08-9	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Bis(2-Chloroethyl)ether	111-44-4	µg/L	1	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Bis(2-Ethylhexyl)Phtalate	117-81-7	µg/L	5	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U
Chrysene	218-01-9	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Dibenzo-a,h-Anthracene	53-70-3	µg/L	NA	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Fluoranthene	206-44-0	µg/L	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Fluorene	86-73-7	µg/L	50	3.8		0.46		< 0.19	U	< 0.19	U	< 0.19	U
Hexachlorobenzene	118-74-1	µg/L	0.04	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Hexachlorobutadiene	87-68-3	µg/L	0.5	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Hexachlorocyclopentadiene	77-47-4	µg/L	5	< 0.09	U	< 0.09	U	< 0.09	U	< 0.09	U	< 0.09	U
Hexachloroethane	67-72-1	µg/L	5	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Nitrobenzene	98-95-3	µg/L	0.4	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
N-Nitrosodimethylamine	62-75-9	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
Pentachlorophenol	87-86-5	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
Phenanthrene	85-01-8	µg/L	50	1.7		0.3		0.11		< 0.05	U	< 0.05	U
Phenol	108-95-2	µg/L	1	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	R
Pyrene	129-00-0	µg/L	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U

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The Huguenot Site, New Rochelle, New York

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Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D													
2,4-Dinitrotoluene	121-14-2	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
2,6-Dinitrotoluene	606-20-2	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
2-Chloronaphthalene	91-58-7	µg/L	10	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
2-Methylnaphthalene	91-57-6	µg/L	NA	39		< 4.7	U	< 4.7	U	12		< 4.7	U
2-Nitroaniline	88-74-4	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
3+4 Methylphenol	NA	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	R
3,3-Dichlorobenzidine	91-94-1	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
3-Nitroaniline	99-09-2	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
4-Bromophenyl-phenyl ether	101-55-3	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
4-Chloroaniline	106-47-8	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
4-Chlorophenyl phenyl ether	7005-72-3	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
4-Nitroaniline	100-01-6	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Acenaphthene	83-32-9	µg/L	20	2.4	J	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Acetophenone	98-86-2	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Benzaldehyde	100-52-7	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Butylbenzylphthalate	85-68-7	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Bis(2-Chloroethoxy)methane	111-91-1	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Caprolactam	105-60-2	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Carbazole	86-74-8	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Dibenzofuran	132-64-9	µg/L	NA	3.9	J	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Diethyl Phthalate	84-66-2	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	1.7	J	< 4.7	U
Dimethyl Phthalate	131-11-3	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Di-n-Butyl Phthalate	84-74-2	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Di-n-Octyl Phthalate	117-84-0	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Hexachlorocyclopentadiene	77-47-4	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Isophorone	78-59-1	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
Naphthalene	91-20-3	µg/L	10	16		< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
N-Nitroso-di-n-Propylamine	621-64-7	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U
N-Nitrosodiphenylamine	86-30-6	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U

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The Huguenot Site, New Rochelle, New York

Notes:

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µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID			CA44183		CA44178		CA44179		CA44175		CA44176	
	Sample Date			5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides By SW8081B													
4,4-DDD	72-54-8	µg/L	0.3	< 0.094	U	< 0.005	U	< 0.005	U	< 0.024	U	< 0.005	U
4,4-DDE	72-55-9	µg/L	0.2	< 0.094	U	< 0.005	U	< 0.005	U	< 0.024	U	< 0.005	U
4,4-DDT	50-29-3	µg/L	0.2	< 0.094	U	< 0.005	U	< 0.005	U	< 0.024	U	< 0.005	U
alpha-BHC	319-84-6	µg/L	0.01	< 0.15	U	< 0.005	U	< 0.005	U	< 0.024	U	< 0.005	U
Chlordane	5103-71-9	µg/L	NA	< 0.47	U	< 0.047	U	< 0.009	U	< 0.047	U	< 0.009	U
Alachlor	15972-60-8	µg/L	0.5	< 0.23	U	< 0.35	U	< 0.071	U	< 0.35	U	< 0.071	U
Aldrin	309-00-2	µg/L	MDL	< 0.094	U	< 0.005	U	< 0.001	U	< 0.007	U	< 0.001	U
beta-BHC	319-85-7	µg/L	0.04	< 0.094	U	< 0.024	U	< 0.005	U	< 0.024	U	< 0.005	U
Chlordane	57-74-9	µg/L	0.05	< 2.3	U	< 0.047	U	< 0.047	U	< 0.050	U	< 0.047	U
delta-BHC	319-86-8	µg/L	0.04	< 0.094	U	< 0.024	U	< 0.005	U	< 0.024	U	< 0.005	U
Dieldrin	60-57-1	µg/L	0.004	< 0.094	U	< 0.004	U	< 0.001	U	< 0.007	U	< 0.001	U
Endosulfan I	959-98-8	µg/L	NA	< 0.23	U	< 0.047	U	< 0.009	U	< 0.047	U	< 0.009	U
Endosulfan II	33213-65-9	µg/L	NA	< 0.23	U	< 0.047	U	< 0.009	U	< 0.047	U	< 0.009	U
Endosulfan Sulfate	1031-07-8	µg/L	NA	< 0.23	U	< 0.047	U	< 0.009	U	< 0.047	U	< 0.009	U
Endrin	72-20-8	µg/L	MDL	< 0.23	U	< 0.009	U	< 0.009	U	< 0.023	U	< 0.009	U
Endrin Aldehyde	7421-93-4	µg/L	5	< 0.47	U	< 0.047	U	< 0.009	U	< 0.047	U	< 0.009	U
Endrin Ketone	53494-70-5	µg/L	5	< 0.47	U	< 0.009	U	< 0.009	U	< 0.047	U	< 0.009	U
gamma-BHC	58-89-9	µg/L	0.05	< 0.094	U	< 0.024	U	< 0.005	U	< 0.024	U	< 0.005	U
gamma-chlordane	5103-74-2	µg/L	NA	< 0.094	U	< 0.047	U	< 0.009	U	< 0.047	U	< 0.009	U
Heptachlor	76-44-8	µg/L	0.04	< 0.23	U	< 0.009	U	< 0.009	U	< 0.023	U	< 0.009	U
Heptachlor Epoxide	1024-57-3	µg/L	0.03	< 0.23	U	< 0.009	U	< 0.009	U	< 0.010	U	< 0.009	U
Methoxychlor	72-43-5	µg/L	35	< 4.7	U	< 0.47	U	< 0.094	U	< 0.47	U	< 0.094	U
Toxaphene	8001-35-2	µg/L	0.06	< 9.4	U	< 0.19	U	< 0.19	U	< 0.94	U	< 0.19	U
1,4-dioxane By SW8270DSIM													
1,4-Dioxane	123-91-1	µg/L	NA	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U

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Analyte detected

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Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-6		MW-7		MW-8		D-1		FIELD BLANK		TRIP BLANK	
	Lab ID			CA44714		CA44180		CA44177		CA44181		CA44182		CA44383	
	Sample Date			5/9/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/9/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Metals, Total															
Aluminum, Al	7429-90-5	mg/L	0.1	3.82		0.869	N	3.95	N	0.099	N	0.004	J, N	NT	
Arsenic, As	7440-38-2	mg/L	0.025	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U	NT	
Barium, Ba	7440-39-3	mg/L	1	0.124		0.171		0.116		0.042		< 0.010	U	NT	
Beryllium, Be	7440-41-7	mg/L	0.003	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	< 0.001	U	NT	
Cadmium, Cd	7440-43-9	mg/L	0.005	< 0.001	U	< 0.004	U	< 0.004	U	< 0.004	U	< 0.004	U	NT	
Calcium, Ca	7440-70-2	mg/L	NA	92.5		39.7		99.3		61.5		0.061		NT	
Chromium, Cr	7440-47-3	mg/L	0.05	0.012		0.002		0.006		0.002		< 0.001	U	NT	
Cobalt, Co	7440-48-4	mg/L	NA	0.002		0.003	J	0.004	J	< 0.005	U	< 0.005	U	NT	
Copper, Cu	7440-50-8	mg/L	0.2	0.009		0.001	J	0.014		< 0.005	U	< 0.005	U	NT	
Iron, Fe	7439-89-6	mg/L	0.3	4.39		1.77		3.29		0.08		< 0.01	U	NT	
Lead, Pb	7439-92-1	mg/L	0.025	< 0.002	U	< 0.002	U	< 0.002	U	< 0.002	U	< 0.002	U	NT	
Magnesium, Mg	7439-95-4	mg/L	35	20.8		29.1		54.4		10.9		0.024		NT	
Manganese, Mn	7439-96-5	mg/L	0.3	0.356		3.38		1.43		0.089		< 0.005	U	NT	
Mercury, Hg	7439-97-6	mg/L	0.0007	< 0.0002	U	< 0.0002	U	< 0.0002	U	< 0.0002	U	< 0.0002	U	NT	
Nickel, Ni	7440-02-0	mg/L	0.1	0.035		0.029		0.007		0.004		< 0.004	U	NT	
Potassium, K	9177440	mg/L	NA	6.8		7.6		15.6		4.5		< 0.1	U	NT	
Antimony, Sb	7440-36-0	mg/L	0.003	<0.0030	U	< 0.0030	U	< 0.0030	U	< 0.0030	U	< 0.0030	U	NT	
Selenium, Se	7782-49-2	mg/L	0.01	< 0.010	U	< 0.010	U	< 0.010	U	0.012		< 0.010	U	NT	
Silver, Ag	7440-22-4	mg/L	0.05	< 0.001	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
Sodium, Na	7440-23-5	mg/L	20	97.7		53.5		234		30.2		0.14		NT	
Thallium, Tl	7440-28-0	mg/L	0.0005	< 0.0005	U	< 0.0005	U	< 0.0005	U	< 0.0005	U	< 0.0005	U	NT	
Vanadium, V	7440-62-2	mg/L	NA	0.006		< 0.010	U	0.004	J	< 0.010	U	< 0.010	U	NT	
Zinc, Zn	7440-66-6	mg/L	2	0.019		0.006	J	0.011		0.002	J	< 0.010	U	NT	
Cyanide	57-12-5	mg/L	0.2	< 0.010	U	< 0.010	U	< 0.010	U	< 0.010	U	< 0.010	U	NT	

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The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

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	Sample Date			5/9/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/9/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
PCBs By SW8082A															
Aroclor 1016	12674-11-2	µg/L	0.09	< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1221	11104-28-2	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1232	11141-16-5	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1242	53469-21-9	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1248	12672-29-6	µg/L		< 0.090	U	< 0.047	U	0.094		< 0.047	U	< 0.047	U	NT	
Aroclor 1254	11097-69-1	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1260	11096-82-5	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1262	37324-23-5	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
Aroclor 1268	11100-14-4	µg/L		< 0.090	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	

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	Sample Date			5/9/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/9/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles By SW8260C															
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,1-Trichloroethane	71-55-6	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1-Dichloroethane	75-34-3	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
1,1-Dichloroethene	75-35-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,3-Trichlorobenzene	87-61-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,3-Trichloropropane	96-18-4	µg/L	0.04	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U
1,2,4-Trichlorobenzene	120-82-1	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,4-Trimethylbenzene	95-63-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	0.04	< 0.50	U	< 0.50	U	< 0.50	U	< 0.50	U	< 0.50	U	< 0.50	U
1,2-Dibromoethane	106-93-4	µg/L	0.0006	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U	< 0.25	U
1,2-Dichlorobenzene	95-50-1	µg/L	3	< 1.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
1,2-Dichloroethane	107-06-2	µg/L	0.6	< 0.60	U	< 0.60	U	< 0.60	U	< 0.60	U	< 0.60	U	< 0.60	U
1,2-Dichloropropane	78-87-5	µg/L	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,3,5-Trimethylbenzene	108-67-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,3-Dichlorobenzene	541-73-1	µg/L	3	2		1.5	J	4.9		2		< 2.0	U	< 2.0	U
1,3-Dichloropropane	142-28-9	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,4-Dichlorobenzene	106-46-7	µg/L	3	< 1.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
2,2-Dichloropropane	594-20-7	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
2-Chlorotoluene	95-49-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
2-Hexanone	591-78-6	µg/L	50	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
4-Methyl-2-pentanone	108-10-1	µg/L	NA	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
Acetone	67-64-1	µg/L	50	< 5.0	U	6.9	S	12	S	< 5.0	U	< 5.0	U	2.5	JS
Benzene	71-43-2	µg/L	1	< 0.70	U	< 0.70	U	< 0.70	U	< 0.70	U	< 0.70	U	< 0.70	U
Bromochloromethane	74-97-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromodichloromethane	75-27-4	µg/L	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromoform	75-25-2	µg/L	50	< 5.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromomethane	74-83-9	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Carbon Disulfide	75-15-0	µg/L	60	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Carbon Tetrachloride	56-23-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U

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	Sample Date			5/9/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/9/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chlorobenzene	108-90-7	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Chloroethane	75-00-3	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Chloroform	67-66-3	µg/L	7	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Chloromethane	74-87-3	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	0.38	J	< 2.0	U
cis-1,2-Dichloroethene	156-59-2	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
cis-1,3-Dichloropropene	10061-01-5	µg/L	0.4	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U
Cyclohexane	110-82-7	µg/L	NA	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U
Dibromochloromethane	124-48-1	µg/L	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dibromomethane	74-95-3	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dichlorodifluoromethane	75-71-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Ethylbenzene	100-41-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Isopropylbenzene	98-82-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
m&p-Xylene	179601-23-1	µg/L		< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Methyl ethyl ketone	78-93-3	µg/L	50	< 5.0	U	< 5.0	U	8.3		< 5.0	U	< 5.0	U	< 5.0	U
Methyl Tert-Butyl Ether	1634-04-4	µg/L	10	< 1.0	U	3.3		0.26	J	< 1.0	U	< 1.0	U	< 1.0	U
Methylacetate	79-20-9	µg/L	NA	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
Methylcyclohexane	108-87-2	µg/L	NA	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Methylene Chloride	75-09-2	µg/L	5	< 3.0	U	< 3.0	U	< 3.0	U	< 3.0	U	< 3.0	U	< 3.0	U
Naphthalene	91-20-3	µg/L	10	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
n-Butylbenzene	104-51-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
n-Propylbenzene	103-65-1	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
o-Xylene	95-47-6	µg/L	NA	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
p-Isopropyltoluene	99-87-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
sec-Butylbenzene	135-98-8	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Styrene	100-42-5	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
tert-Butylbenzene	98-06-6	µg/L	NA	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Tetrachloroethene	127-18-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Toluene	108-88-3	µg/L	5	< 1.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
Total Xylenes	1330-20-7	µg/L	15	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
trans-1,2-Dichloroethene	156-60-5	µg/L	5	< 5.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U
trans-1,3-Dichloropropene	10061-02-6	µg/L	0.4	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U	< 0.40	U
Trichloroethene	79-01-6	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichlorofluoromethane	75-69-4	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichlorotrifluoroethane	76-13-1	µg/L	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Vinyl Chloride	75-01-4	µg/L	2	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U

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	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D (SIM)															
1-1- Biphenyl	92-52-4	µg/L	NA	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	NT	
1,2,4,5-Tetrachlorobenzene	95-94-3	µg/L	10	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	NT	
2,3,4,6-tetrachlorophenol	58-90-2	µg/L		< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2,4,5-Trichlorophenol	95-95-4	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2,4,6-Trichlorophenol	88-06-2	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2,4-Dichlorophenol	120-83-2	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2,4-Dimethylphenol	105-67-9	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2,4-Dinitrophenol	51-28-5	µg/L	10	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2-Chlorophenol	95-57-8	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
2-Methylphenol	95-48-7	µg/L	NA	< 0.19	U	< 0.19	U	0.59		< 0.19	U	< 0.19	U	NT	
2-Nitrophenol	88-75-5	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
4,6-Dinitro-2-methylphenol	534-52-1	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
4-Chloro-3-methylphenol	59-50-7	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
4-Nitrophenol	100-02-7	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Acenaphthylene	208-96-8	µg/L	NA	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U	NT	
Anthracene	120-12-7	µg/L	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Atrazine	1912-24-9	µg/L	NA	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	< 0.47	U	NT	
Benzo-a-Anthracene	56-55-3	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Benzo-a-Pyrene	50-32-8	µg/L	MDL	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Benzo-b-Fluoranthene	205-99-2	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Benzo-g,h,i-Perylene	191-24-2	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Benzo-k-Fluoranthene	207-08-9	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Bis(2-Chloroethyl)ether	111-44-4	µg/L	1	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Bis(2-Ethylhexyl)Phthalate	117-81-7	µg/L	5	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U	< 0.28	U	NT	
Chrysene	218-01-9	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Dibenzo-a,h-Anthracene	53-70-3	µg/L	NA	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Fluoranthene	206-44-0	µg/L	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Fluorene	86-73-7	µg/L	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Hexachlorobenzene	118-74-1	µg/L	0.04	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Hexachlorobutadiene	87-68-3	µg/L	0.5	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Hexachlorocyclopentadiene	77-47-4	µg/L	5	< 0.09	U	< 0.09	U	< 0.09	U	< 0.09	U	< 0.09	U	NT	
Hexachloroethane	67-72-1	µg/L	5	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Indeno(1,2,3-cd)Pyrene	193-39-5	µg/L	0.002	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U	NT	
Nitrobenzene	98-95-3	µg/L	0.4	< 0.19	U	< 0.19	U	0.19		< 0.19	U	< 0.19	U	NT	
N-Nitrosodimethylamine	62-75-9	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Pentachlorophenol	87-86-5	µg/L	NA	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
Phenanthrene	85-01-8	µg/L	50	< 0.05	U	< 0.05	U	< 0.05	U	< 0.05	U	< 0.05	U	NT	
Phenol	108-95-2	µg/L	1	< 0.19	U	< 0.19	U	1.4		< 0.19	U	0.32		NT	
Pyrene	129-00-0	µg/L	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-6		MW-7		MW-8		D-1		FIELD BLANK		TRIP BLANK	
	Lab ID			CA44714		CA44180		CA44177		CA44181		CA44182		CA44383	
	Sample Date			5/9/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/9/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatiles By SW8270D															
2,4-Dinitrotoluene	121-14-2	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
2,6-Dinitrotoluene	606-20-2	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
2-Chloronaphthalene	91-58-7	µg/L	10	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
2-Methylnaphthalene	91-57-6	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
2-Nitroaniline	88-74-4	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
3+4 Methylphenol	NA	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
3,3-Dichlorobenzidine	91-94-1	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
3-Nitroaniline	99-09-2	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
4-Bromophenyl-phenyl ether	101-55-3	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
4-Chloroaniline	106-47-8	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
4-Chlorophenyl phenyl ether	7005-72-3	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
4-Nitroaniline	100-01-6	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Acenaphthene	83-32-9	µg/L	20	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Acetophenone	98-86-2	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Benzaldehyde	100-52-7	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Butylbenzylphthalate	85-68-7	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Bis(2-Chloroethoxy)methane	111-91-1	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Bis(2-Chloroisopropyl)ether	39638-32-9	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Caprolactam	105-60-2	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Carbazole	86-74-8	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Dibenzofuran	132-64-9	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Diethyl Phthalate	84-66-2	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Dimethyl Phthalate	131-11-3	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Di-n-Butyl Phthalate	84-74-2	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Di-n-Octyl Phthalate	117-84-0	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Hexachlorocyclopentadiene	77-47-4	µg/L	5	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Isophorone	78-59-1	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
Naphthalene	91-20-3	µg/L	10	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
N-Nitroso-di-n-Propylamine	621-64-7	µg/L	NA	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	
N-Nitrosodiphenylamine	86-30-6	µg/L	50	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	< 4.7	U	NT	

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

mg/L: miligram per liter (ppm)

µg/L: microgram per liter (ppb)

Analyte detected

Method Detection Limit (MDL) above TOGS 1.1.1 Ambient Water Quality Standard

Concentration above TOGS 1.1.1 Ambient Water Quality Standard

Result rejected due to severe QC exceedance

Parameters	Sample ID	Units	NYSDEC TOGS 1.1.1. AWQS	MW-6		MW-7		MW-8		D-1		FIELD BLANK		TRIP BLANK	
	Lab ID			CA44714		CA44180		CA44177		CA44181		CA44182		CA44383	
	Sample Date			5/9/2018		5/8/2018		5/8/2018		5/8/2018		5/8/2018		5/9/2018	
	CAS			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Pesticides By SW8081B															
4,4-DDD	72-54-8	µg/L	0.3	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
4,4-DDE	72-55-9	µg/L	0.2	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
4,4-DDT	50-29-3	µg/L	0.2	< 0.005	U	< 0.005	U	0.021		< 0.005	U	< 0.005	U	NT	
alpha-BHC	319-84-6	µg/L	0.01	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
Chlordane	5103-71-9	µg/L	NA	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Alachlor	15972-60-8	µg/L	0.5	< 0.071	U	< 0.071	U	< 0.071	U	< 0.071	U	< 0.071	U	NT	
Aldrin	309-00-2	µg/L	MDL	< 0.001	U	< 0.005	U	< 0.001	U	< 0.001	U	< 0.001	U	NT	
beta-BHC	319-85-7	µg/L	0.04	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
Chlordane	57-74-9	µg/L	0.05	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	< 0.047	U	NT	
delta-BHC	319-86-8	µg/L	0.04	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
Dieldrin	60-57-1	µg/L	0.004	< 0.001	U	< 0.001	U	< 0.004	U	< 0.001	U	< 0.001	U	NT	
Endosulfan I	959-98-8	µg/L	NA	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Endosulfan II	33213-65-9	µg/L	NA	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Endosulfan Sulfate	1031-07-8	µg/L	NA	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Endrin	72-20-8	µg/L	MDL	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Endrin Aldehyde	7421-93-4	µg/L	5	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Endrin Ketone	53494-70-5	µg/L	5	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
gamma-BHC	58-89-9	µg/L	0.05	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	< 0.005	U	NT	
gamma-chlordane	5103-74-2	µg/L	NA	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Heptachlor	76-44-8	µg/L	0.04	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Heptachlor Epoxide	1024-57-3	µg/L	0.03	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	< 0.009	U	NT	
Methoxychlor	72-43-5	µg/L	35	< 0.094	U	< 0.094	U	< 0.094	U	< 0.094	U	< 0.094	U	NT	
Toxaphene	8001-35-2	µg/L	0.06	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U	NT	
1,4-dioxane By SW8270DSIM															
1,4-Dioxane	123-91-1	µg/L	NA	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	NT	

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ng/L: nanogram per liter (ppt)

Analyte detected

PFOA and PFOS above USEPA Health Advisory Level of 70 ppt

Parameters	Sample ID	Unit	MW-1		MW-2		MW-3		MW-4		MW-5	
	Lab ID		18E0544-07		18E0544-04		18E0544-05		18E0544-01		18E0544-02	
	Sample Date		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
PFOA & PFOS												
Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/L	12	2	13	2	2.8	2	22	2	11	2
Perfluorohexanoic acid (PFHxA)	307-24-4	ng/L	14	2	20	2	22	2	62	2	54	2
Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/L	7.9	2	8.1	2	6.4	2	39	2	31	2
Perfluorobutanoic acid (PFBA)	375-22-4	ng/L	48	3	3.8	3	6	3	12	3	9.5	3
Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluorooctanesulfonamide (FOSA)	754-91-6	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluoropentanoic acid (PFPeA)	2706-90-3	ng/L	16	3	19	3	22	3	93	3	55	3
6:2 Fluorotelomersulfonate (6:2 FTS)	27619-97-2	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
8:2 Fluorotelomersulfonate (8:2 FTS)	39108-34-4	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/L	6.5	2	46	2	3.4	2	61	2	20	2
Perfluorooctanoic acid (PFOA)	335-67-1	ng/L	17	2	20	2	15	2	58	2	64	2
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/L	8.8	2	54	2	17	2	44	2	120	2
Perfluorononanoic acid (PFNA)	375-95-1	ng/L	ND	2	5.7	2	2	2	3.6	2	5.2	2
Perfluorodecanoic acid (PFDA)	335-76-2	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
NMeFOSAA	2355-31-9	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
NEtFOSAA	2991-50-6	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluorododecanoic acid (PFDoA)	307-55-1	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluorotetradecanoic acid (PFTA)	376-06-7	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Total PFOA & PFOS		ng/L	25.8		74		32		102		184	
Total PFAS		ng/L	130.2		189.6		96.6		394.6		369.7	

Table 8: Summary of RI Groundwater Sampling Results
The Huguenot Site, New Rochelle, New York

Notes:

ng/L: nanogram per liter (ppt)

Analyte detected

PFOA and PFOS above USEPA Health Advisory Level of 70 ppt

Parameters	Sample ID	Unit	MW-6		MW-7		MW-8		FIELD BLANK		D-1	
	Lab ID		18E0544-08		18E0544-06		18E0544-03		18E0544-09		18E0544-10	
	Sample Date		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
PFOA & PFOS												
Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/L	60	2	27	2	7.7	2	ND	2	4.8	2
Perfluorohexanoic acid (PFHxA)	307-24-4	ng/L	7.3	2	7.1	2	21	2	ND	2	36	2
Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/L	3.2	2	3.4	2	9	2	ND	2	24	2
Perfluorobutanoic acid (PFBA)	375-22-4	ng/L	3.8	3	ND	3	8.6	3	ND	3	6.5	3
Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluorooctanesulfonamide (FOSA)	754-91-6	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluoropentanoic acid (PFPeA)	2706-90-3	ng/L	6.9	3	3.5	3	13	3	ND	3	32	3
6:2 Fluorotelomersulfonate (6:2 FTS)	27619-97-2	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
8:2 Fluorotelomersulfonate (8:2 FTS)	39108-34-4	ng/L	ND	3	ND	3	ND	3	ND	3	ND	3
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/L	3.4	2	7.1	2	4.6	2	ND	2	15	2
Perfluorooctanoic acid (PFOA)	335-67-1	ng/L	8.8	2	12	2	35	2	ND	2	59	2
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/L	7.9	2	14	2	6.1	2	ND	2	120	2
Perfluorononanoic acid (PFNA)	375-95-1	ng/L	ND	2	4	2	2.5	2	ND	2	4.2	2
Perfluorodecanoic acid (PFDA)	335-76-2	ng/L	ND	2	ND	2	3	2	ND	2	ND	2
NMeFOSAA	2355-31-9	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
NEtFOSAA	2991-50-6	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluorododecanoic acid (PFDoA)	307-55-1	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Perfluorotetradecanoic acid (PFTA)	376-06-7	ng/L	ND	2	ND	2	ND	2	ND	2	ND	2
Total PFOA & PFOS		ng/L	16.7		26		41.1		ND		179	
Total PFAS		ng/L	101.3		78.1		110.5		ND		301.5	

Table 9: Summary of RI Air Sampling Results
The Huguenot Site, New Rochelle, New York

Parameters	Sample ID	Units	OA-1		OA-2		IA-3-1		IA-3-2		SG-3	
	Lab Id		CA10852		CA10853		CA10854		CA10851		CA10855	
	Sample Date		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018	
	CAS		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatiles (TO15) By TO15												
1,1,1,2-Tetrachloroethane	630-20-6	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,1,1-Trichloroethane	71-55-6	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,1,2,2-Tetrachloroethane	79-34-5	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,1,2-Trichloroethane	79-00-5	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,1-Dichloroethane	75-34-3	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,1-Dichloroethene	75-35-4	µg/m ³	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U
1,2,4-Trichlorobenzene	120-82-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,2,4-Trimethylbenzene	95-63-6	µg/m ³	< 1.00	U	3.96		< 1.00	U	< 1.00	U	< 1.00	U
1,2-Dibromoethane(EDB)	106-93-4	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,2-Dichlorobenzene	95-50-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,2-Dichloroethane	107-06-2	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,2-dichloropropane	78-87-5	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,2-Dichlorotetrafluoroethane	76-14-2	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,3,5-Trimethylbenzene	108-67-8	µg/m ³	< 1.00	U	1.11		< 1.00	U	< 1.00	U	< 1.00	U
1,3-Butadiene	106-99-0	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,3-Dichlorobenzene	541-73-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,4-Dichlorobenzene	106-46-7	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
1,4-Dioxane	123-91-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
2-Hexanone(MBK)	591-78-6	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
4-Ethyltoluene	622-96-8	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
4-Isopropyltoluene	99-87-6	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
4-Methyl-2-pentanone(MIBK)	108-10-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Acetone	67-64-1	µg/m ³	10.3		12.6		18.4		12		73.4	
Acrylonitrile	107-13-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Benzene	71-43-2	µg/m ³	< 1.00	U	1.48		1.19		< 1.00	U	1.23	
Benzyl chloride	100-44-7	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Bromodichloromethane	75-27-4	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Bromoform	75-25-2	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Bromomethane	74-83-9	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Carbon Disulfide	75-15-0	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Carbon Tetrachloride	56-23-5	µg/m ³	0.46		0.54		0.61		0.49		0.53	
Chlorobenzene	108-90-7	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Chloroethane	75-00-3	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Chloroform	67-66-3	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	2.8		< 1.00	U
Chloromethane	74-87-3	µg/m ³	1.21		1.39		1.52		< 1.00	U	< 1.00	U
Cis-1,2-Dichloroethene	156-59-2	µg/m ³	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U
cis-1,3-Dichloropropene	10061-01-5	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Cyclohexane	110-82-7	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Dibromochloromethane	124-48-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Dichlorodifluoromethane	75-71-8	µg/m ³	2.44		2.55		3.03		2.34		2.59	
Ethanol	64-17-5	µg/m ³	26.7		28.1		56.3		17.3		426	E
Ethyl acetate	141-78-6	µg/m ³	< 1.00	U	< 1.00	U	2.04		1.5		1.93	
Ethylbenzene	100-41-4	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Heptane	142-82-5	µg/m ³	< 1.00	U	1.04		1.63		< 1.00	U	< 1.00	U

Table 9: Summary of RI Air Sampling Results
The Huguenot Site, New Rochelle, New York

Parameters	Sample ID	Units	OA-1		OA-2		IA-3-1		IA-3-2		SG-3	
	Lab Id		CA10852		CA10853		CA10854		CA10851		CA10855	
	Sample Date		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018	
	CAS		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Hexachlorobutadiene	87-68-3	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Hexane	110-54-3	µg/m ³	1.03	S	1.69	S	1.18	S	< 1.00	U	< 1.00	U
Isopropylalcohol	67-63-0	µg/m ³	4.99		4.45		5.18		4.45		65.6	
Isopropylbenzene	98-82-8	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
m,p-Xylene	179601-23-1	µg/m ³	1.31		3.58		2.6		1.69		3.21	
Methyl Ethyl Ketone	78-93-3	µg/m ³	1.11		1.13		1.46		1.1		16.2	
Methyl tert-butyl ether(MTBE)	1634-04-4	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Methylene Chloride	75-09-2	µg/m ³	< 3.00	U	< 3.00	U	6.53	S	5.59	S	6.21	S
n-Butylbenzene	104-51-8	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
o-Xylene	95-47-6	µg/m ³	< 1.00	U	1.35		< 1.00	U	< 1.00	U	1.08	
Propylene	115-07-1	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	7.19	
sec-Butylbenzene	135-98-8	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Styrene	100-42-5	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Tetrachloroethene	127-18-4	µg/m ³	0.57		0.47		0.89		0.77		0.83	
Tetrahydrofuran	109-99-9	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	65.7	
Toluene	108-88-3	µg/m ³	2.58		5.01		4.71		3.07		4.11	
Trans-1,2-Dichloroethene	156-60-5	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
trans-1,3-Dichloropropene	10061-02-6	µg/m ³	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U	< 1.00	U
Trichloroethene	79-01-6	µg/m ³	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U
Trichlorofluoromethane	75-69-4	µg/m ³	1.49		1.67		1.95		1.56		1.73	
Trichlorotrifluoroethane	76-13-1	µg/m ³	1.03		1.1		1.33		1.02		1.09	
Vinyl Chloride	75-01-4	µg/m ³	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U	< 0.20	U

Qualifiers

- U The compound was analyzed for but not detected at or above the MDL. The number immediately preceding the "U" represents the PQL reporting level corrected for percent solids, weight and/or volume calculations, and dilution factors.
- J The value is estimated. This flag is used
a) on form 1 when the compound is reported above the MDL, but below the PQL, and
b) on the Tentatively Identified Compounds (TIC) form for all compounds identified.
- N The concentration is based on the response to the nearest internal. This flag is used on the TIC form for all compounds identified.
- S This compound is a solvent that is used in the laboratory. Laboratory contamination is suspected if concentration is less than five times the reporting level.
- D The reported concentration is the result of a diluted analysis.
- (*) See report for comment.

Result Detected

Table 10: RI Groundwater Monitoring Wells Gauging Results
The Huguenot Site, New Rochelle, New York

Survey Point	Target Point	Rod Reading	Elevation	DTW	GW Elevation
S-1			91.00		
S-1	MW-5C	8.85	82.15	8.02	74.13
	MW-5M	8.65	82.35		
	MW-4C	4.67	86.33	7.69	78.64
	MW-4M	4.5	86.50		
	R-1	4.33	86.67		
S-2	R-1	1.65	86.67		
	R-2	4.77	83.55		
S-3	R-2	4.75	83.55		
	MW-2C	5.35	82.95	7.06	75.89
	MW-2M	5.04	83.26		
S-4	R-1	5.58	86.67		
	MW-8C	5.88	86.37	8.38	77.99
	MW-8M	5.58	86.67		
	MW-3C	9.85	82.40	6.11	76.29
	MW-3M	9.52	82.73		
S-5	MW-3C	3.35	82.40		
	MW-3M	2.6			
	R-3	3.15	82.60		
	MW-7C	11.85	73.90		
	MW-7M	11.46	74.29		
S-6	R-3	5.38	82.60		
	MW-1C	4.88	83.10	7.86	75.24
	MW-1M	4.63	83.35		
S-7	MW-6C	8.38	66.29	7.47	58.82
	MW-6M	7.67	67.00		
	MW-7C	0.77	73.90	7.42	66.48
	MW-7M	0.38			

Table 11: Remedial Cost Estimation A-2 Track 4 Cleanup (Selected Remedy)
The Huguenot Site, New Rochelle, New York

Description	Unit	Unit Rate	Qty	Extended Cost
Task-1: Project Management, Health and Safety				\$ 29,050.00
CAMP Equipment (3 Particulate + 3 PIDs)	Per Day	\$ 525.00	30	\$ 15,750.00
Project Management (Sr. Consultant)	Per Hour	\$ 100.00	80	\$ 8,000.00
Administrative	Per Hour	\$ 40.00	20	\$ 800.00
Project Meetings (P.E., QEP)	Per Event	\$ 1,500.00	1	\$ 1,500.00
Daily/Weekly/Monthly Report	Per Item	\$ 100.00	30	\$ 3,000.00
Task-2: Supervise Site Excavation				\$ 36,875.00
Environmental Scientist	Per Day	\$ 640.00	30	\$ 19,200.00
Environmental Technician	Per Day	\$ 600.00	10	\$ 6,000.00
Sr Geologist / Sr. Engineer	Per Day	\$ 800.00	10	\$ 8,000.00
Utility Vehicle	Per Day	\$ 110.00	30	\$ 3,300.00
Vapor and Dust Suppression-Equipment and Materials	Per Day	\$ 75.00	0	\$ -
Land Survey Equipment	Per Day	\$ 125.00	3	\$ 375.00
Task-3: Classification, T&D of Soil/Fill				\$ 245,350.00
Waste Classification Sampling (TCLPs, etc.)	Per Sample	\$ 1,200.00	4	\$ 4,800.00
Obtain Disposal Facility Approval (Sr. Consultant)	Per Hour	\$ 100.00	8	\$ 800.00
6-mil Plastic sheeting	Per Roll	\$ 125	10	\$ 1,250.00
T&D of Urban Fill (non-hazardous/non-Petroleum impacted)	Per Ton	\$ 65.00	3000	\$ 195,000.00
T&D of Petroleum Impacted Soil (petroleum impacted)	Per Ton	\$ 87.00	500	\$ 43,500.00
Asphalt Transportation & Disposal	Per Ton	\$ 42.50	0	\$ -
Task-4: Endpoint Sampling, Analysis and DUSR				\$ 45,360.00
Laboratory Analysis- Soil Endpoint, Full List + PFAS	Per Sample	\$ 1,050.00	30	\$ 31,500.00
QA/QC Duplicate	Per Sample	\$ 1,050.00	2	\$ 2,100.00
ASP B Data Usability Summary Report	35% of Lab			\$ 11,760.00
Task-5: Site Covering System				\$ 70,600.00
Demarcation Layer, All Materials, Transportation and Installation	Per Sft	\$ 1.50	1500	\$ 2,250.00
Clean Fill Material, Sampling, Procurement and Transportation	Per Ton	\$ 33.00	800	\$ 26,400.00
3/4' Bluestone, Certificate, Procurement and Transportation	Per Ton	\$ 46.00	800	\$ 36,800.00
Laboratory Analysis- Clean Fill, Full List + PFAS	Per Sample	\$ 1,050.00	3	\$ 3,150.00
Site Covering System Inspections	Per Hour	\$ 100.00	20	\$ 2,000.00
Task-6: Final Engineering Report				\$ 9,100.00
Sr. Consultant/Engineer	Per Hour	\$ 100.00	40	\$ 4,000.00
Staff Environmental Scientist/ Geologist	Per Hour	\$ 80.00	40	\$ 3,200.00
PE Stamp	Per Item	\$ 750.00	2	\$ 1,500.00
Administrative	Per Hour	\$ 40.00	10	\$ 400.00
Public Meeting	Per Hour	\$ 1,500.00	0	\$ -
Task-7: MW Re-Installation				\$ 24,180.00
DOT/County/Village Permit (Sr. Consultant)	Per Hour	\$ 100.00	10	\$ 1,000.00
Private Mark-Out and GPR/Utility Survey	Per Day	\$ 950.00	1	\$ 950.00
Drill Rig Mobilization	Per Event	\$ 500.00	1	\$ 500.00
Hollow Stem Auger w/crew (PFAS-free procedures)	Per Day	\$ 2,950.00	3	\$ 8,850.00
Project Manager	Per Hour	\$ 100.00	8	\$ 800.00
Sr Geologist	Per Day	\$ 640.00	3	\$ 1,920.00
Environmental Technician	Per Day	\$ 560.00	3	\$ 1,680.00
Utility Vehicle	Per Day	\$ 110.00	3	\$ 330.00
PFAS-Free / Low-Flow GW Sampling Equipment	Per Day	\$ 450.00	3	\$ 1,350.00
Permanent 2-Inch Well Material (PFAS-free protocol)	Per Foot	\$ 15.00	150	\$ 2,250.00
Flush Mounted Well Covers Installation	Per Location	\$ 150.00	5	\$ 750.00
Well Development (PFAS-free protocol)	Per Location	\$ 200.00	9	\$ 1,800.00
IDW Waste Disposal	Per Drum	\$ 400.00	5	\$ 2,000.00
Task-8: Site Management Plan				\$ 8,700.00
Sr. Consultant/Engineer	Per Hour	\$ 100.00	40	\$ 4,000.00
Staff Environmental Scientist/ Geologist	Per Hour	\$ 80.00	30	\$ 2,400.00
PE Stamp	Per Item	\$ 750.00	2	\$ 1,500.00
Administrative	Per Hour	\$ 40.00	20	\$ 800.00
Part 1: Till 6 months after Site Construction				\$ 469,215.00

Table 11: Remedial Cost Estimation A-2 Track 4 Cleanup (Selected Remedy)
The Huguenot Site, New Rochelle, New York

Description	Unit	Unit Rate	Qty	Extended Cost
Task-9: Long-Term Groundwater Monitoring				\$ 108,462.50
GW Monitoring (5 yrs, semi-annual 1st, annual 2nd-5th)	Per Event	\$ 21,692.50	5	\$ 108,462.50
Project Manager	Per Hour	\$ 100.00	8	\$ 800.00
Sr Geologist	Per Day	\$ 640.00	2	\$ 1,280.00
Utility Vehicle	Per Day	\$ 110.00	2	\$ 220.00
PFAS-Free / Low-Flow GW Sampling Equipment	Per Day	\$ 450.00	2	\$ 900.00
Laboratory Analysis - Groundwater, Full List + PFAS	Per Sample	\$ 1,050.00	9	\$ 9,450.00
Laboratory Analysis - Groundwater (QA/QC)	Per Sample	\$ 1,050.00	2	\$ 2,100.00
ASP B Deliverables and DUSR	35% of Lab			\$ 4,042.50
IDW Waste Disposal	Per Drum	\$ 400.00	1	\$ 400.00
Groundwater Monitoring Report	Per Event	\$ 2,500.00	1	\$ 2,500.00
Task-10: Soil Vapor Intrusion Monitoring for On-Site Building				\$ 40,405.00
Vapor Monitoring (5 yrs, 2 Soil Gas, 2 Indoor, 2 Outdoor per event)	Per Event	\$ 8,081.00	5	\$ 40,405.00
Project Manager	Per Hour	\$ 100.00	8	\$ 800.00
Sr Geologist	Per Day	\$ 640.00	2	\$ 1,280.00
Utility Vehicle	Per Day	\$ 110.00	2	\$ 220.00
Soil gas/Indoor Air Sampling Equipment	Per Day	\$ 250.00	2	\$ 500.00
Laboratory Analysis - Soil Gas TO-15 plus helium	Per Sample	\$ 370.00	2	\$ 740.00
Laboratory Analysis - Indoor/Outdoor Air TO-15	Per Sample	\$ 330.00	4	\$ 1,320.00
ASP B Deliverables and DUSR	35% of Lab			\$ 721.00
On-Site SVI Monitoring Report	Per Event	\$ 2,500.00	1	\$ 2,500.00
Task-11: EC and IC Inspection and Reporting				\$ 15,000.00
Annual Inspection and Reporting	Per Event	\$ 3,000.00	5	\$ 15,000.00
Part 2: Long Term Site Management and Monitoring				\$ 163,867.50

Refer to Contract Agreement for Assumptions and Conditions

Table 12: Remedial Cost Estimation A-3 Track 1
BCP No. C360157 The Huguenot Site

Description	Unit	Unit Rate	Qty	Extended Cost
Health and Safety, Community Air Monitoring				\$ 25,550.00
Health and Safety Plan (HASP) (Sr. Consultant)	Per Hour	\$ 100.00	8	\$ 800.00
Personal Protection Equipment, Level D	Per Day	\$ 25.00	45	\$ 1,125.00
Particulate Meters (3) and PID (3)	Per Day	\$ 525.00	45	\$ 23,625.00
Citizen Participation				\$ 2,480.00
Sr. Consultant	Per Hour	\$ 100.00	12	\$ 1,200.00
Staff Environmental Scientist	Per Hour	\$ 80.00	12	\$ 960.00
Administrative	Per Hour	\$ 40.00	8	\$ 320.00
Project Coordination / Management				\$ 27,200.00
Project Coordination (Sr. Consultant)	Per Hour	\$ 100.00	150	\$ 15,000.00
Project Meetings (P.E., QEP)	Per Event	\$ 1,500.00	2	\$ 3,000.00
Conference Calls	Per Event	\$ 200.00	15	\$ 3,000.00
Administrative	Per Hour	\$ 40.00	30	\$ 1,200.00
Daily/Weekly/Monthly Report	Per Item	\$ 100.00	50	\$ 5,000.00
Supervise Site Excavation				\$ 56,000.00
Environmental Scientist	Per Day	\$ 640.00	45	\$ 28,800.00
Environmental Technician	Per Day	\$ 600.00	15	\$ 9,000.00
Sr Geologist / Sr. Engineer	Per Day	\$ 800.00	15	\$ 12,000.00
Utility Vehicle	Per Day	\$ 110.00	45	\$ 4,950.00
Vapor and Dust Suppression-Equipment and Materials	Per Day	\$ 75.00	0	\$ -
Land Survey Equipment	Per Day	\$ 125.00	10	\$ 1,250.00
Construction Erosion Control	Lump Sum	\$ 15,000.00	0	\$ -
Additional Construction Related Cost				\$ 930,000.00
Additional material removal (4,100 cubic yard)	Lump Sum	\$ 150,000.00	1	\$ 150,000.00
Relocate footings at lower levels	Lump Sum	\$ 325,000.00	1	\$ 325,000.00
Deeper SOE on front elevation	Lump Sum	\$ 100,000.00	1	\$ 100,000.00
Additional clean fill (4,000 cubic yard)	Lump Sum	\$ 200,000.00	1	\$ 200,000.00
Additional cost of insurance and bonding	Lump Sum	\$ 155,000.00	1	\$ 155,000.00
Transportation and Disposal of Impacted Soil				\$ 406,000.00
Waste Classification Sampling (TCLPs, etc)	Lump Sum	\$ 1,500.00	8	\$ 12,000.00
Obtain Disposal Facility Approval (Sr. Consultant)	Per Hour	\$ 100.00	15	\$ 1,500.00
6-mil Plastic sheeting	Per Roll	\$ 125	20	\$ 2,500.00
T&D of Impacted Soil (non-hazardous)	Per Ton	\$ 65.00	6000	\$ 390,000.00
T&D of Impacted Soil (Hazardous)	Per Ton	\$ 285.00	0	\$ -
Asphalt Transportation & Disposal	Per Ton	\$ 42.50	0	\$ -
Endpoint Sampling, Analysis and DUSR				\$ 45,360.00
Laboratory Analysis- Soil Endpoint, Full List + PFAS	Per Sample	\$ 1,050.00	30	\$ 31,500.00
QA/QC Duplicate	Per Sample	\$ 1,050.00	2	\$ 2,100.00
Data Usability Summary Report	35% of Lab			\$ 11,760.00
Site Covering System				\$ 248,650.00
Clean Fill Material, Sampling, Procurement and Transportation	Per Ton	\$ 33.00	6200	\$ 204,600.00
3/4" Bluestone, Certificate, Procurement and Transportation	Per Ton	\$ 46.00	800	\$ 36,800.00
Laboratory Analysis- Clean Fill, Full List + PFAS	Per Sample	\$ 1,050.00	5	\$ 5,250.00
Site Covering System Inspections	Per Hour	\$ 100.00	20	\$ 2,000.00
Chemical Injection for Groundwater Remediation				\$ 64,400.00
Obtain USEPA approval for the chemical injection	Lump Sum	\$ 1,000.00	1	\$ 1,000.00
Chemical injection (open excavation and/or Geoprobe)	Per Event	\$ 7,500.00	2	\$ 15,000.00
ORC-Advanced by Regensis (material)	Per lbs	\$ 21.00	2000	\$ 42,000.00
Material Transportation	Per 1K lbs	\$ 1,200.00	2	\$ 2,400.00
Sr. Geologist / Sr. Engineer	Per Hour	\$ 100.00	40	\$ 4,000.00
MW Re-Installation				\$ 24,180.00
DOT/County/Village Permit (Sr. Consultant)	Per Hour	\$ 100.00	10	\$ 1,000.00
Private Mark-Out and GPR/Utility Survey	Per Day	\$ 950.00	1	\$ 950.00
Drill Rig Mobilization	Per Event	\$ 500.00	1	\$ 500.00
Hollow Stem Auger w/crew (PFAS-free procedures)	Per Day	\$ 2,950.00	3	\$ 8,850.00

Table 12: Remedial Cost Estimation A-3 Track 1
BCP No. C360157 The Huguenot Site

Description	Unit	Unit Rate	Qty	Extended Cost
Project Manager	Per Hour	\$ 100.00	8	\$ 800.00
Sr Geologist	Per Day	\$ 640.00	3	\$ 1,920.00
Environmental Technician	Per Day	\$ 560.00	3	\$ 1,680.00
Utility Vehicle	Per Day	\$ 110.00	3	\$ 330.00
PFAS-Free / Low-Flow GW Sampling Equipment	Per Day	\$ 450.00	3	\$ 1,350.00
Permanent 2-Inch Well Material (PFAS-free protocol)	Per Foot	\$ 15.00	150	\$ 2,250.00
Flush Mounted Well Covers Installation	Per Location	\$ 150.00	5	\$ 750.00
Well Development (PFAS-free protocol)	Per Location	\$ 200.00	9	\$ 1,800.00
IDW Waste Disposal	Per Drum	\$ 400.00	5	\$ 2,000.00
Final Engineering Report				\$ 9,100.00
Sr. Consultant/Engineer	Per Hour	\$ 100.00	40	\$ 4,000.00
Staff Environmental Scientist/ Geologist	Per Hour	\$ 80.00	40	\$ 3,200.00
PE Stamp	Per Item	\$ 750.00	2	\$ 1,500.00
Administrative	Per Hour	\$ 40.00	10	\$ 400.00
Public Meeting	Per Hour	\$ 1,500.00	0	\$ -
Part 1 A-3 Track 1 Remediation Cost - During Construction				\$ 1,838,920.00
Long-Term Groundwater Monitoring				\$ 108,462.50
GW Monitoring (5 yrs, semi-annual 1st, annual 2nd-5th)	Per Event	\$ 21,692.50	5	\$ 108,462.50
Project Manager	Per Hour	\$ 100.00	8	\$ 800.00
Sr Geologist	Per Day	\$ 640.00	2	\$ 1,280.00
Utility Vehicle	Per Day	\$ 110.00	2	\$ 220.00
PFAS-Free / Low-Flow GW Sampling Equipment	Per Day	\$ 450.00	2	\$ 900.00
Laboratory Analysis - Groundwater, Full List + PFAS	Per Sample	\$ 1,050.00	9	\$ 9,450.00
Laboratory Analysis - Groundwater (QA/QC)	Per Sample	\$ 1,050.00	2	\$ 2,100.00
ASP B Deliverables and DUSR	35% of Lab			\$ 4,042.50
IDW Waste Disposal	Per Drum	\$ 400.00	1	\$ 400.00
Groundwater Monitoring Report	Per Event	\$ 2,500.00	1	\$ 2,500.00
Soil Vapor Intrusion Monitoring for On-Site Building				\$ 40,405.00
Vapor Monitoring (5 yrs, 2 Soil Gas, 2 Indoor, 2 Outdoor per event)	Per Event	\$ 8,081.00	5	\$ 40,405.00
Project Manager	Per Hour	\$ 100.00	8	\$ 800.00
Sr Geologist	Per Day	\$ 640.00	2	\$ 1,280.00
Utility Vehicle	Per Day	\$ 110.00	2	\$ 220.00
Soil gas/Indoor Air Sampling Equipment	Per Day	\$ 250.00	2	\$ 500.00
Laboratory Analysis - Soil Gas TO-15 plus helium	Per Sample	\$ 370.00	2	\$ 740.00
Laboratory Analysis - Indoor/Outdoor Air TO-15	Per Sample	\$ 330.00	4	\$ 1,320.00
ASP B Deliverables and DUSR	35% of Lab			\$ 721.00
On-Site SVI Monitoring Report	Per Event	\$ 2,500.00	1	\$ 2,500.00
Part 2 A-3 Track 1 Remediation Cost - Post Construction				\$ 148,867.50

Refer to Remedial Alternative Analysis Report for Assumptions and Conditions

APPENDIX 1

Proposed Building Plan

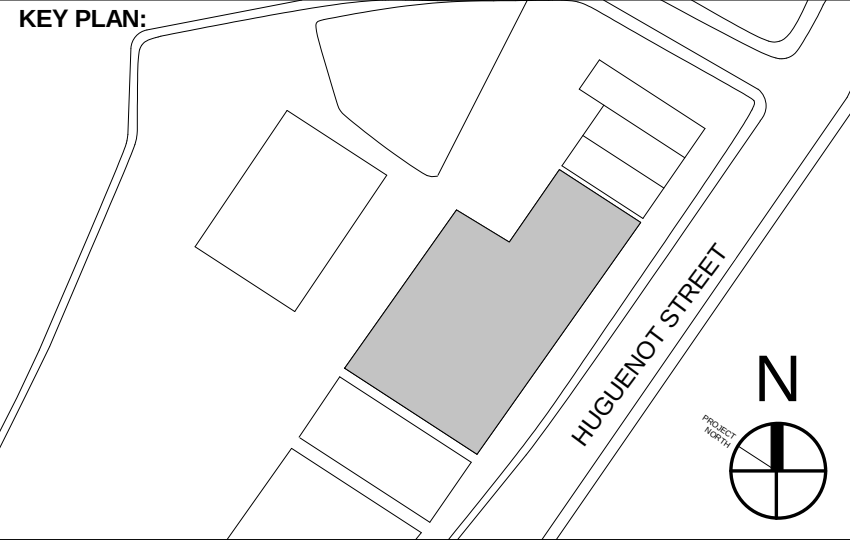


393 HUGUENOT STREET

PROJECT:
393 HUGUENOT STREET
MULTI-FAMILY RESIDENTIAL
ADDRESS:
393 Huguenot Street
New Rochelle, NY 10801
OWNER:
381-383 Huguenot LLC
20 Amelia Earhart Lane
Rye, NY 10580

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REV	DATE	NOTES



Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	AS NOTED
	Date: 7/7/2016

Drawing Title:
COVER PAGE



Drawing No:
T-000.00

PROJECT:

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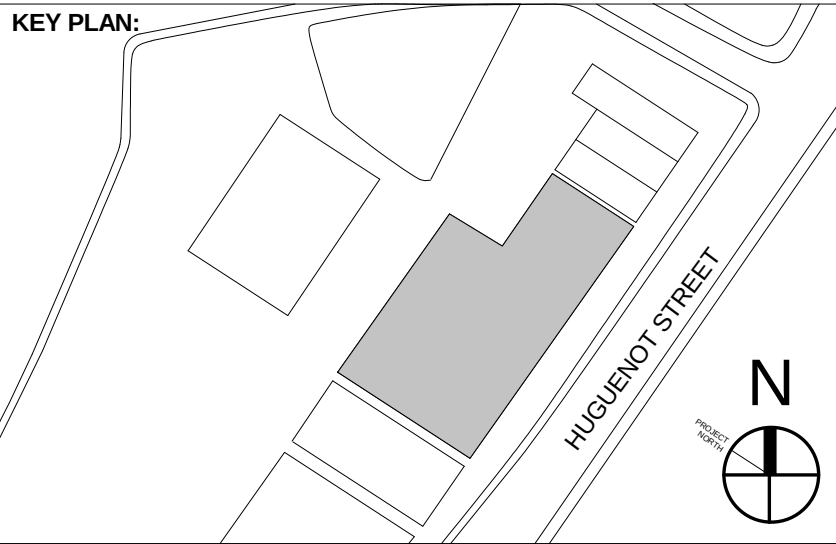
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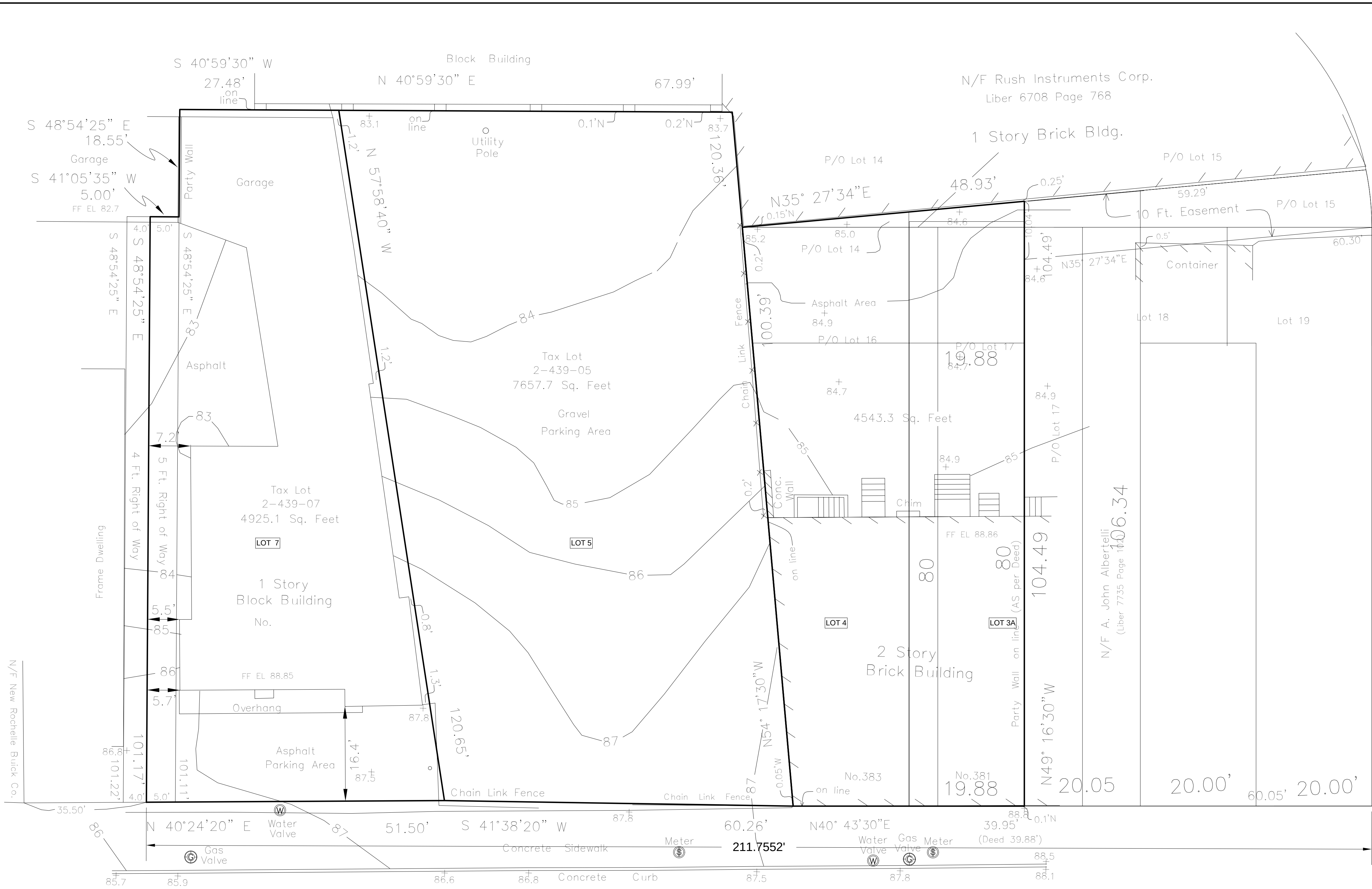
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REV	DATE	NOTES



Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	1" = 10'-0"
Date:	7/7/2016

Drawing Title:	SITE SURVEY

Drawing No:	A-010.00



Richard A. Spinelli
650 Halstead Avenue
Mamaroneck, N. Y. 10543
(914) 381-2357
N.Y.S. Lic. Land Surveyor
No. 49240

Topographical survey of Lots 16 and Portions of Lots 14, 15
& 17 on "Map of Columbus Park, City of New Rochelle, West.
Co., N. Y." Filed on April 14, 1919 in Vol. 49 Pg. 41
And tax parcels 2-439-05 & 2-439-07

Scale 1"=20' July 16, 2015
Feb.3, 2016 (Add R.O.W.s)

Note: Elevations shown in NAVD1988

Book 11 Page 1544 (Huguenot Disc 1)

1.Lots 07, 05, 04, and 03A COMPRISE THE PROJECT SITE. OWNER AGREES TO MERGE THESE LOTS PRIOR TO ISSUE OF PERMIT FOR CONSTRUCTION.
2.SEE CIVIL ENGINEERING DRAWINGS C101 - C404 FOR SITE PLAN AND RELATED INFORMATION.

Survey
1" = 10'-0" **01**

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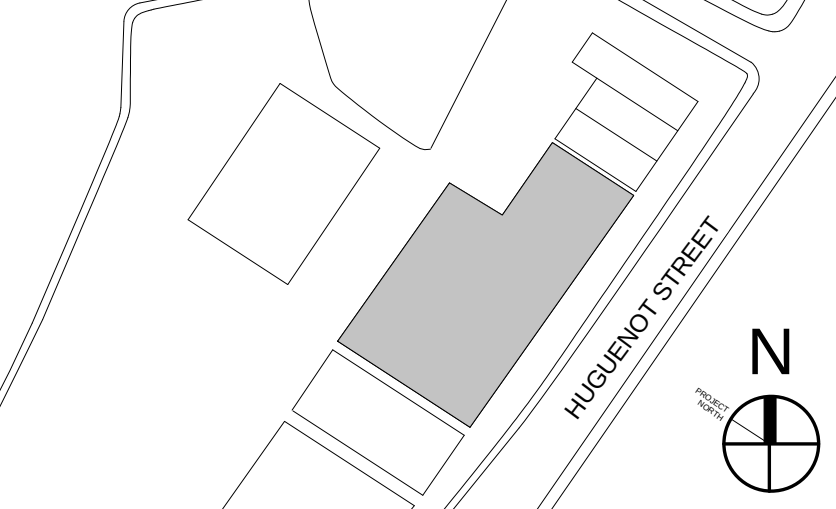
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REV	DATE	NOTES

KEY PLAN:



Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	1/8" = 1'-0"
Date:	7/7/2016

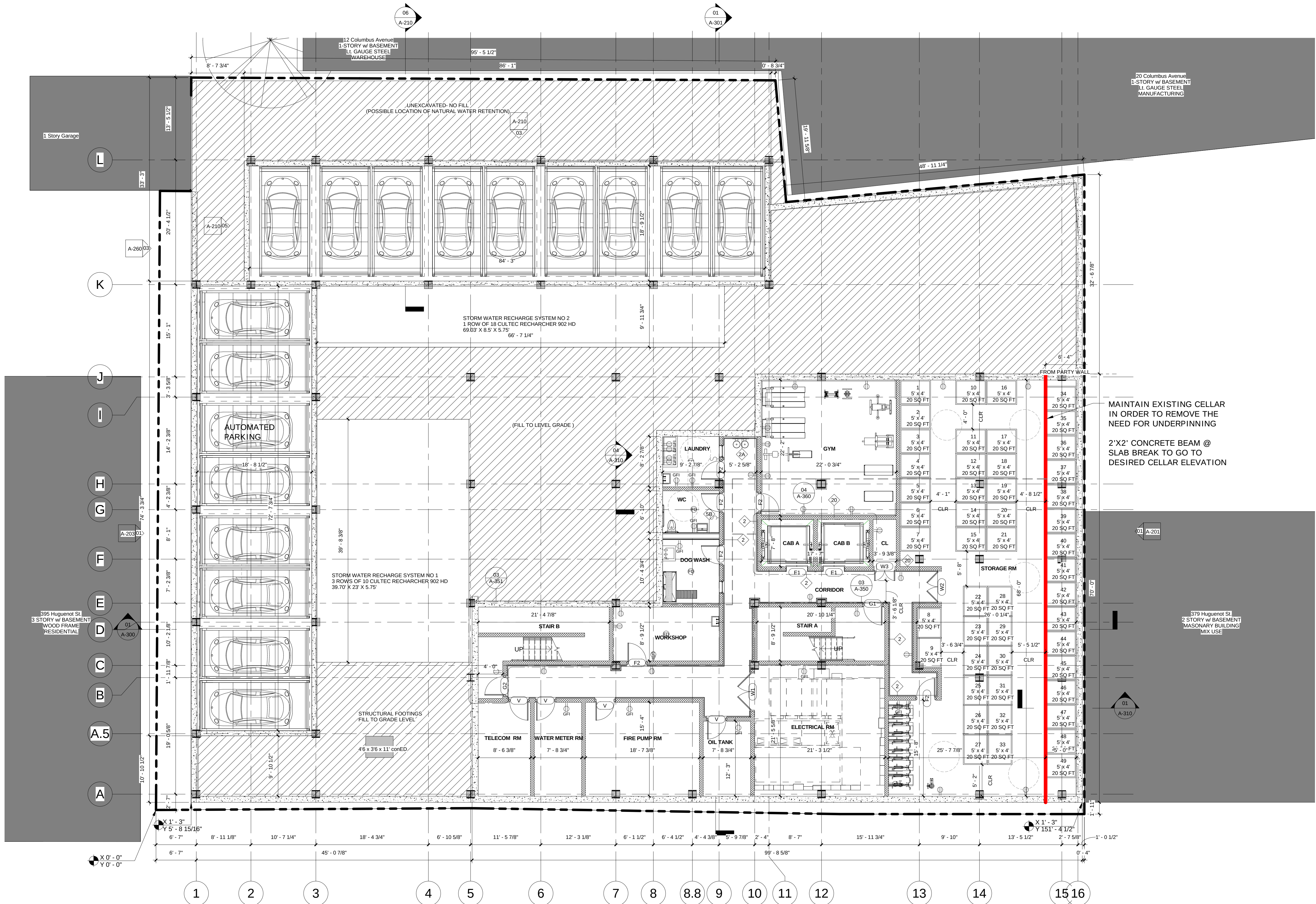
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CELLAR



Drawing No:

A-100.00



CELLAR 01
1/8" = 1'-0"

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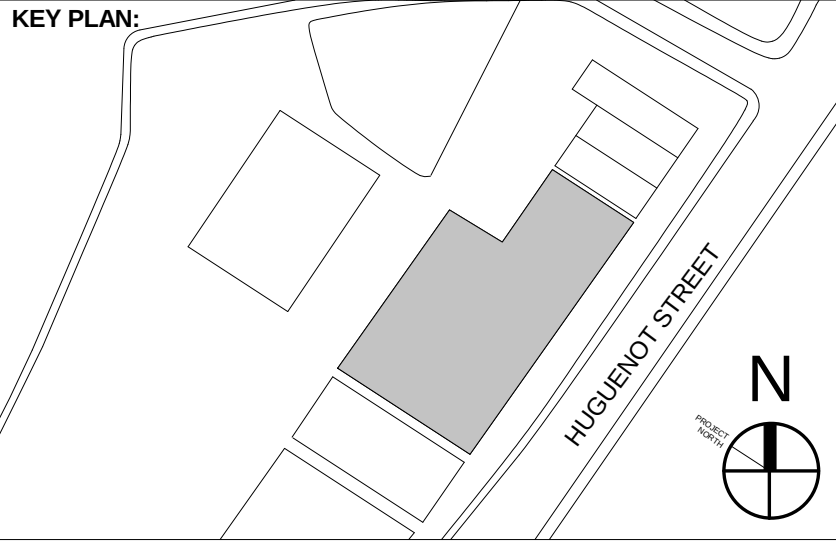
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1. RETAIN WALL AT BACK OF THE LTO TO ALIGN WITH CORNER OR PROPERTY--> THIS ALLOWS FOR LESS SOE AND LESS FILL
2. HARDING STEEL CAR MATRIX SYSTEM ALLOWS FOR 55-56 SPACES BEANETH THE BUILDING

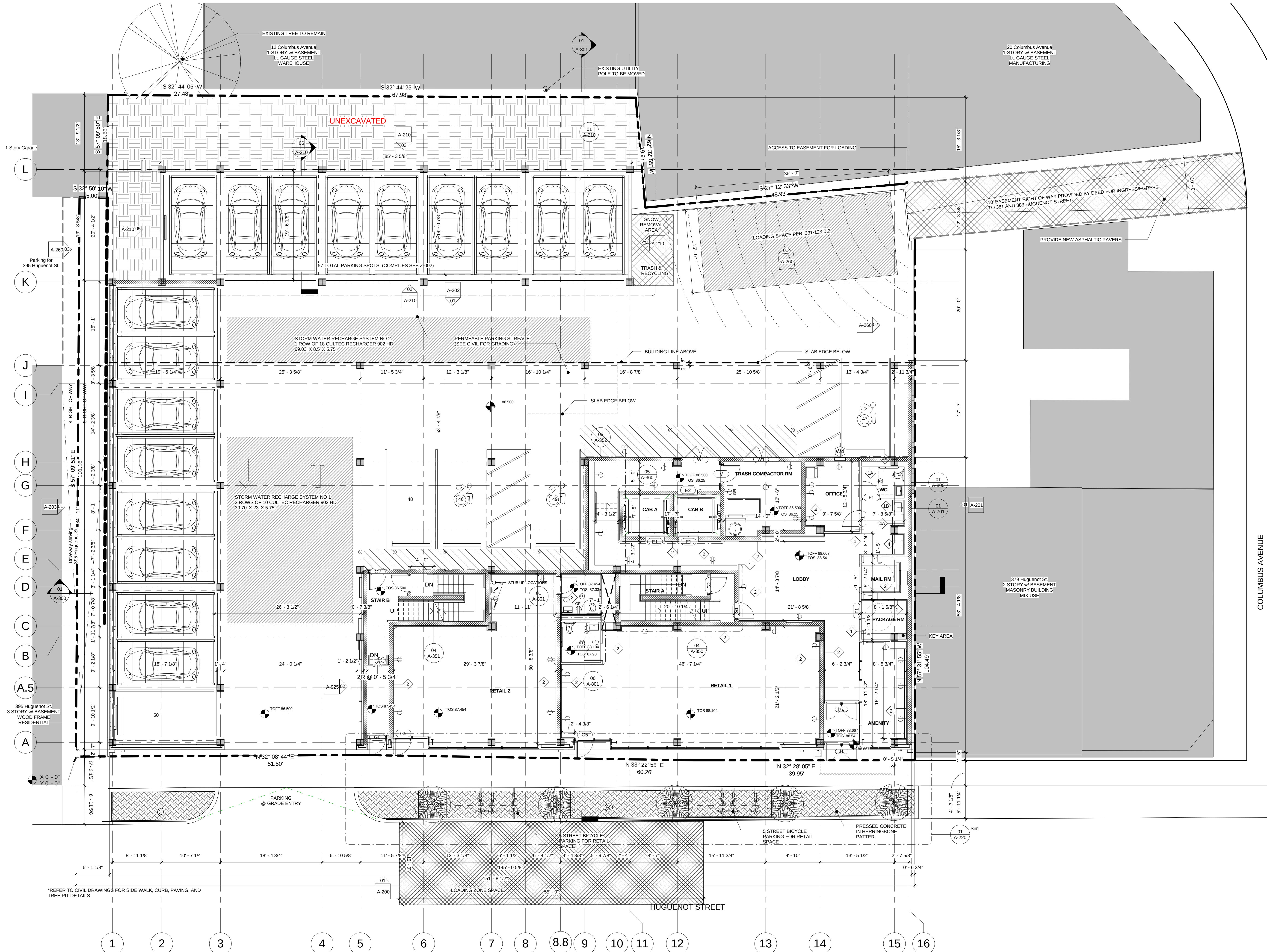
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REV	DATE	NOTES

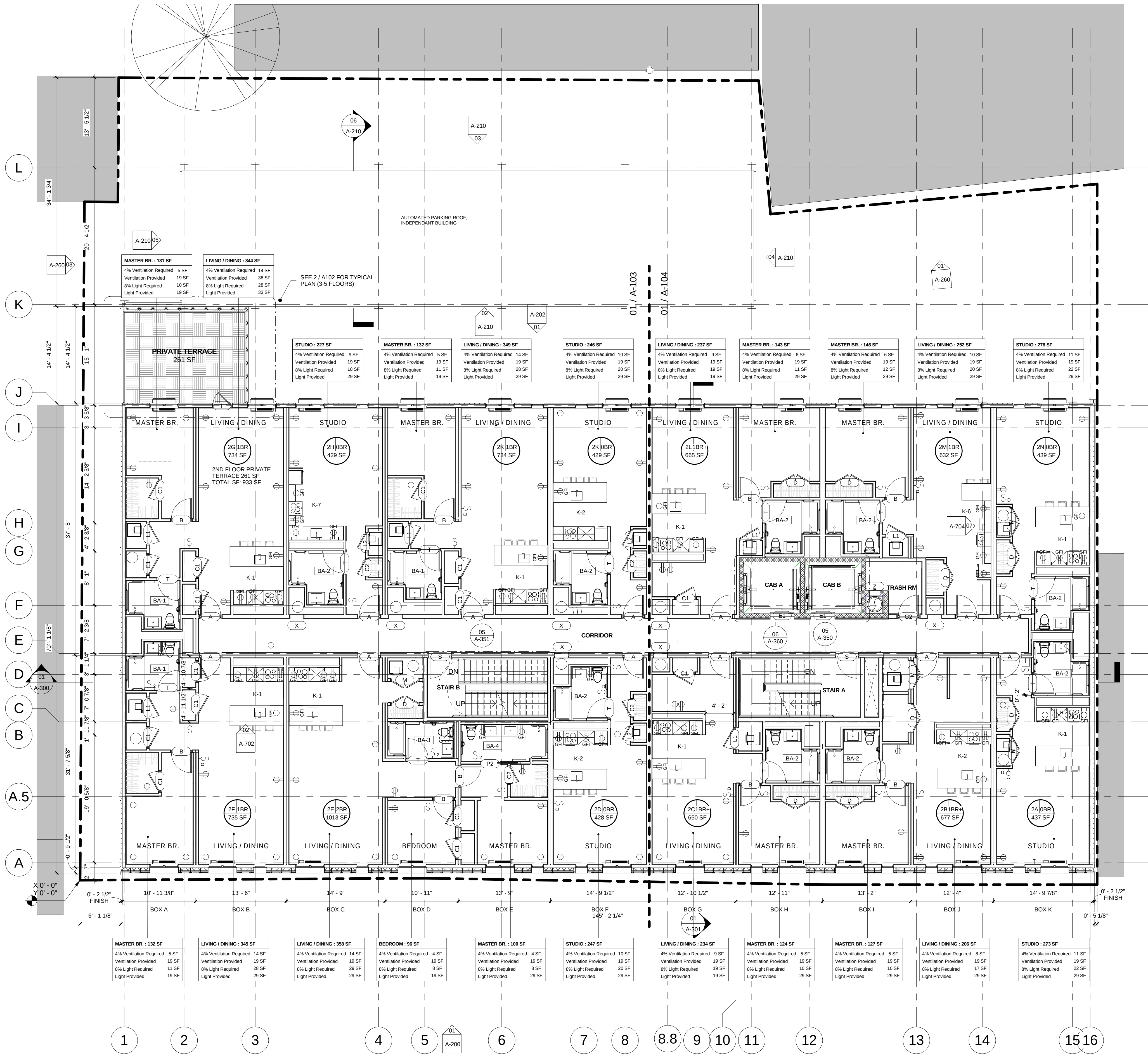


Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	1/8" = 1'-0"
Date:	7/7/2016

Drawing Title:
1ST FLOOR

Drawing No:
A-101.00

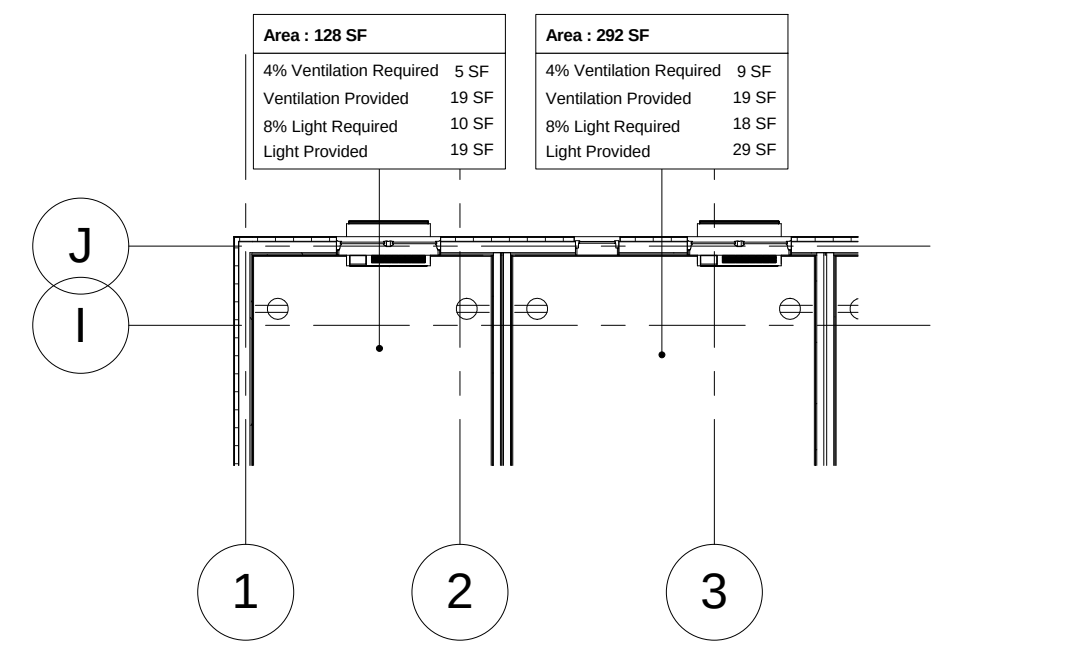




TYPICAL FLOOR 01
1/8" = 1'-0"

LIGHT & AIR CALCS - TYPICAL FLOOR (PER IBC 2015 SEC. 1203 - 1205)					
NAME	AREA	4% VENTILATION REQUIRED	VENTILATION PROVIDED	8% LIGHT REQUIRED	LIGHT PROVIDED
2A					
STUDIO	273 SF	11 SF	19 SF	22 SF	29 SF
2B					
LIVING / DINING	206 SF	8 SF	19 SF	17 SF	29 SF
MASTER BR.	127 SF	5 SF	19 SF	10 SF	29 SF
2C					
LIVING / DINING	234 SF	9 SF	19 SF	19 SF	19 SF
MASTER BR.	124 SF	5 SF	19 SF	10 SF	29 SF
2D					
STUDIO	247 SF	10 SF	19 SF	20 SF	29 SF
2E					
BEDROOM	96 SF	4 SF	19 SF	8 SF	19 SF
LIVING / DINING	358 SF	14 SF	19 SF	29 SF	29 SF
MASTER BR.	100 SF	4 SF	19 SF	8 SF	29 SF
2F					
LIVING / DINING	345 SF	14 SF	19 SF	28 SF	29 SF
MASTER BR.	132 SF	5 SF	19 SF	11 SF	19 SF
2G					
LIVING / DINING	344 SF	14 SF	38 SF	28 SF	33 SF
MASTER BR.	131 SF	5 SF	19 SF	10 SF	19 SF
2H					
STUDIO	227 SF	9 SF	19 SF	18 SF	29 SF
2J					
STUDIO	246 SF	10 SF	19 SF	20 SF	29 SF
2K					
LIVING / DINING	349 SF	14 SF	19 SF	28 SF	29 SF
MASTER BR.	132 SF	5 SF	19 SF	11 SF	19 SF
2L					
LIVING / DINING	237 SF	9 SF	19 SF	19 SF	19 SF
MASTER BR.	143 SF	6 SF	19 SF	11 SF	29 SF
2M					
LIVING / DINING	252 SF	10 SF	19 SF	20 SF	29 SF
MASTER BR.	146 SF	6 SF	19 SF	12 SF	29 SF
2N					
STUDIO	278 SF	11 SF	19 SF	22 SF	29 SF

2ND - 5TH FLOOR UNITS	
13 UNITS PER FLOOR	
UNIT BREAK DOWN:	
UNIT TYPE	AMOUNT
0BR	5
1BR	5
1BR +	2
2BR	1
TOTAL FLOOR AREA PER FLOOR 10,185 SF	
ALL UNITS ARE TYPE B UNITS	
TYPE A UNITS 2K AND 4C	

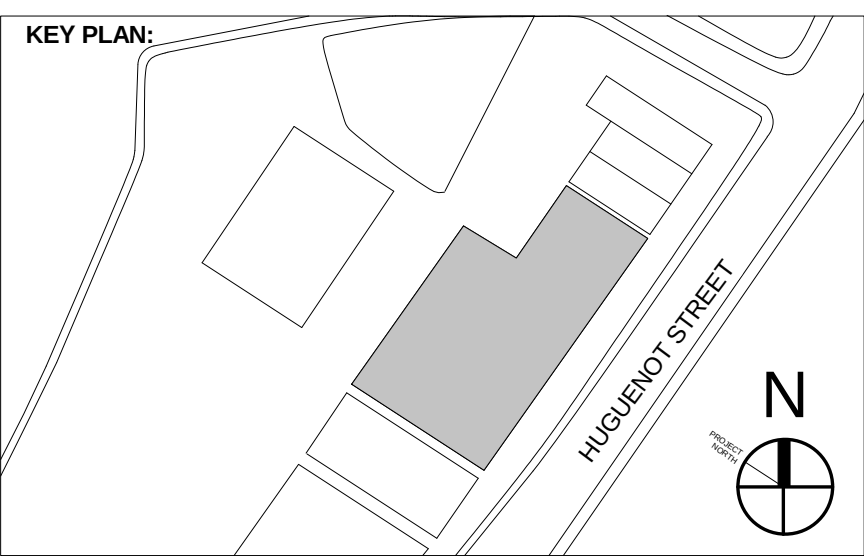


3RD - 5TH FLOOR PARTIAL PLAN 02
1/8" = 1'-0"

PROJECT:
MULTI-FAMILY RESIDENTIAL
ADDRESS:
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REV	DATE	NOTES



Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	As indicated
Date:	7/7/2016

Drawing Title:
TYPICAL FLOOR

Drawing No:
A-102.00

PROJECT:

393 HUGUENOT STREET

MULTI-FAMILY RESIDENTIAL

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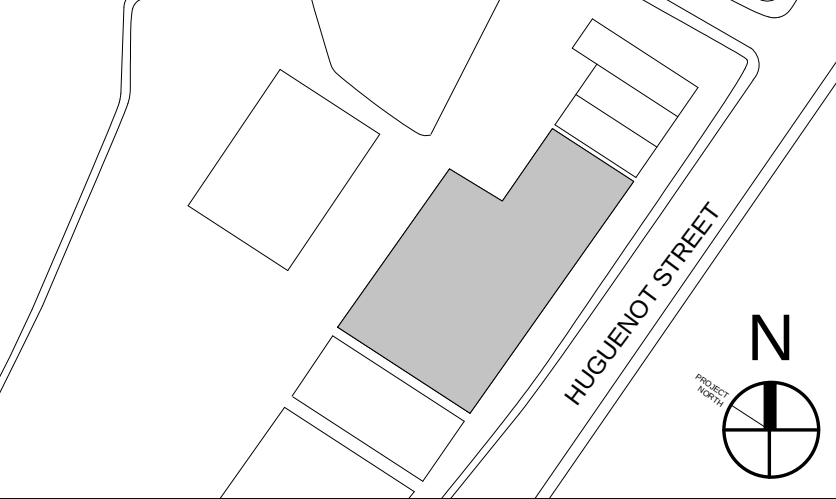
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REV	DATE	NOTES

KEY PLAN:



Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	1/8" = 1'-0"
	Date: 7/7/2016

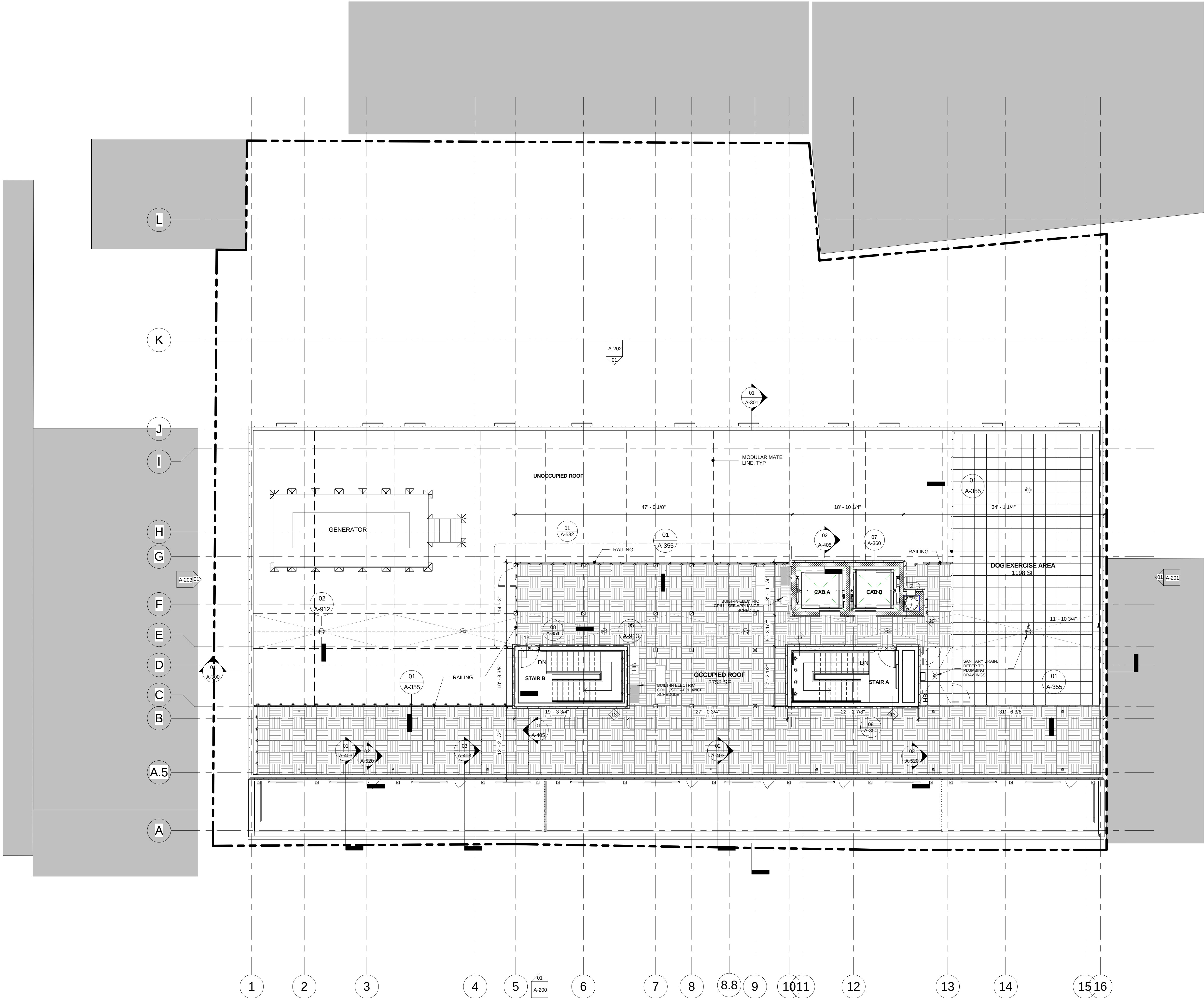
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ROOF PLAN



Drawing No:

A-109.00



ROOF
1/8" = 1'-0" 01

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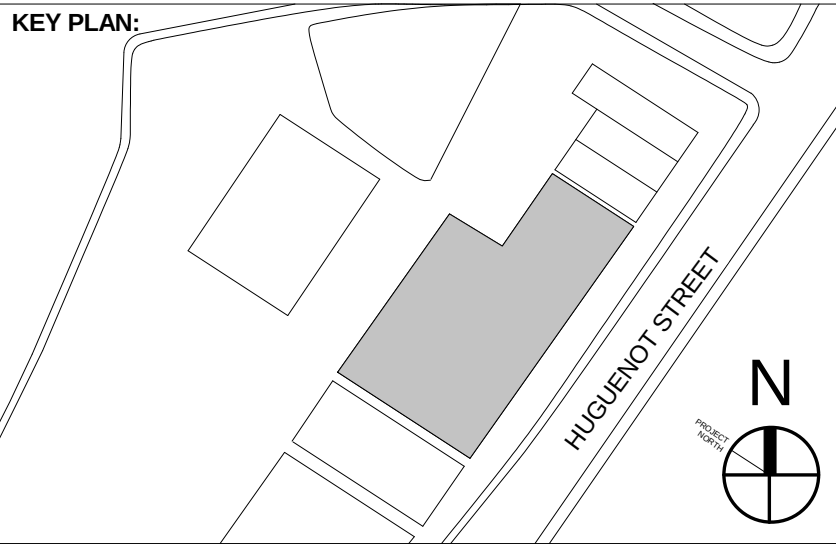
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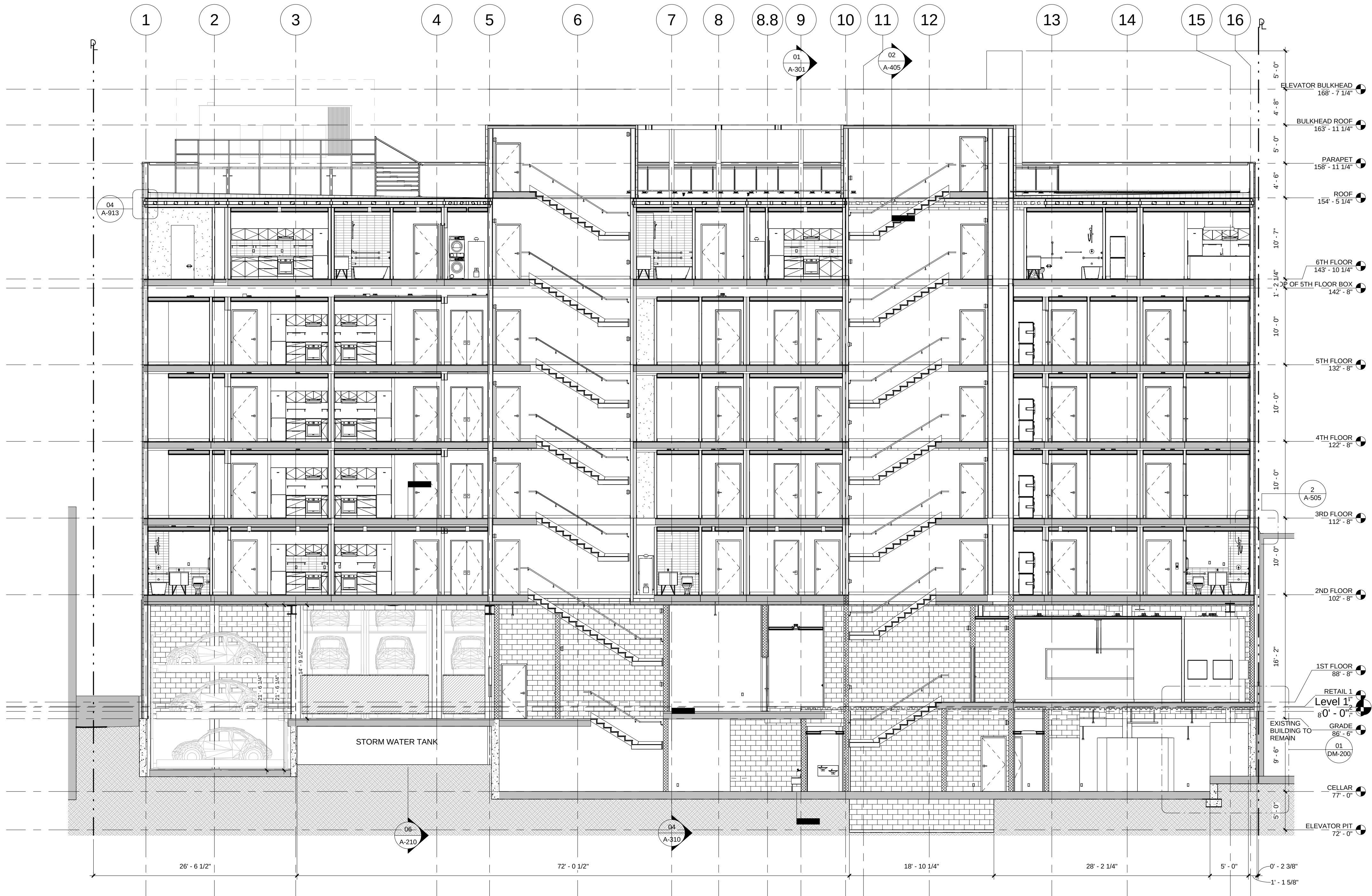
REV DATE NOTES



Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	1/8" = 1'-0"
	Date: 7/7/2016

Drawing Title:
BUILDING SECTION

	Drawing No: A-300.00



PROJECT:

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MODULAR BUILDER:

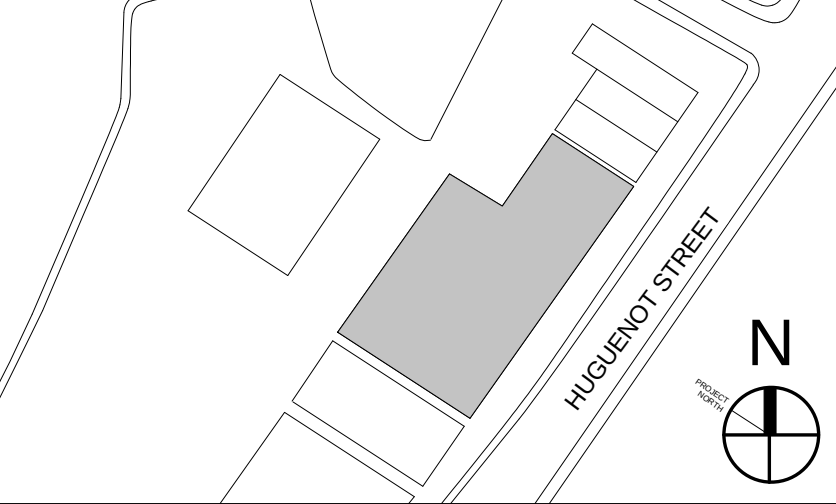
SIGNATURE BUILDING SYSTEMS OF PA, LLC
1004 Springbrook Ave. Moosic, PA 18507
Phone: 800-231-8713
www.sbsmod.com

ENVIRONMENTAL:

CIDER ENVIRONMENTAL
6268 Jericho Turnpike, Suite 12, Commack, NY 11725
Phone: (631) 616-4000 Fax: (631) 980-7972
www.ciderenvironmental.com

3	7/7/2017	STATE MODULAR FILING
2	6/23/2017	PRICING SET
1	10/07/2016	SCOPE BUDGET SET
REV	DATE	NOTES

KEY PLAN:

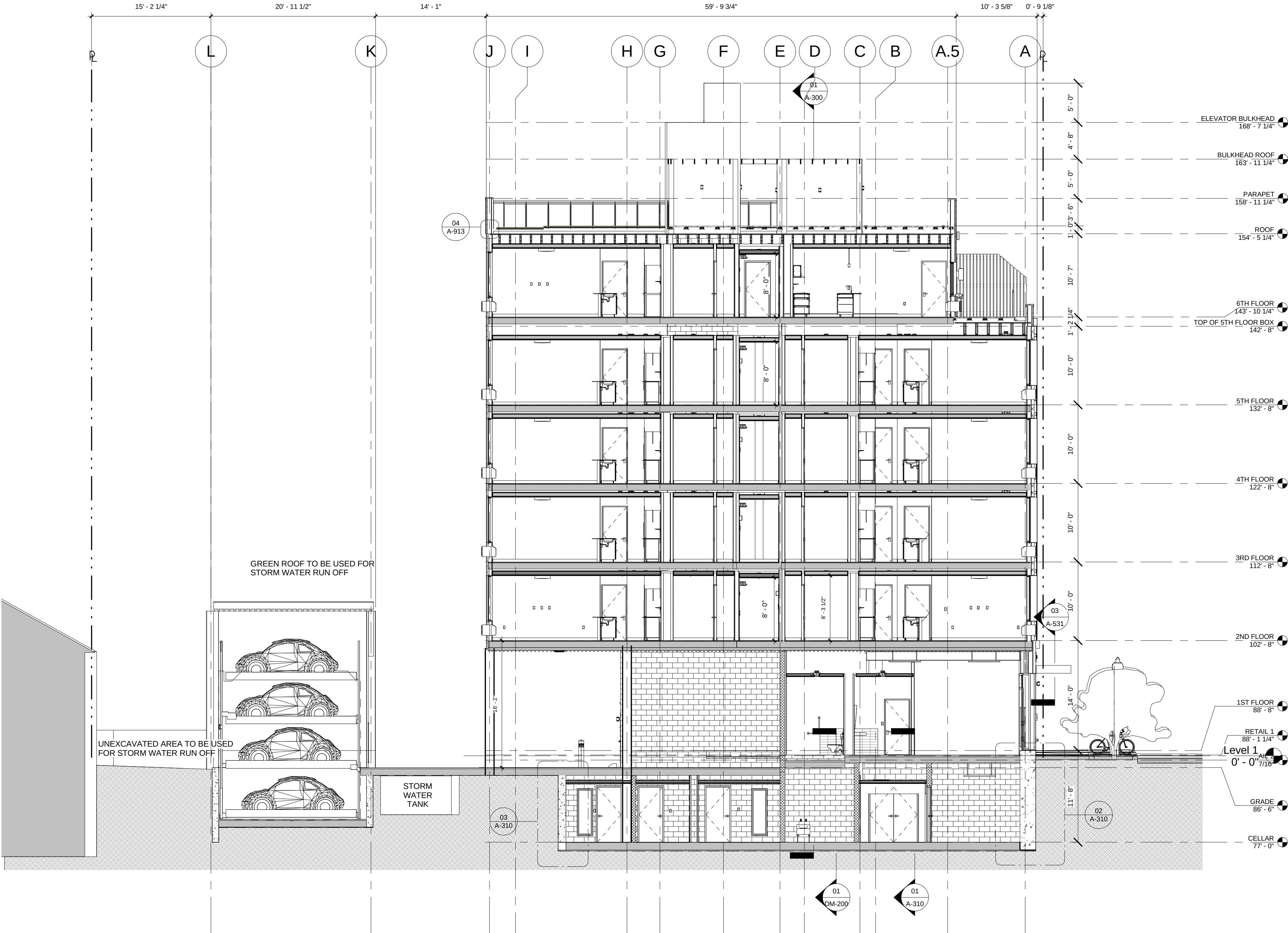


Project Architect/Engineer:	Susan Doban, RA
Drawn By:	Spencer Alexander
Project No:	201607
Scale:	1/8" = 1'-0"
Date:	7/7/2016

Drawing Title:
BUILDING SECTION



Drawing No:
A-301.00



APPENDIX 2

Site Specific Health and Safety Plan

Health and Safety Plan

August 3, 2018

Subject Property:

The Huguenot Site
BCP Site No. C360157
381-393 Huguenot Street
New Rochelle, NY
Westchester County Tax Map Designation: Section 2; Block 239; Lot 3, 4, 5 & 7
NYSDEC BCP Site No. C360157

Prepared for:

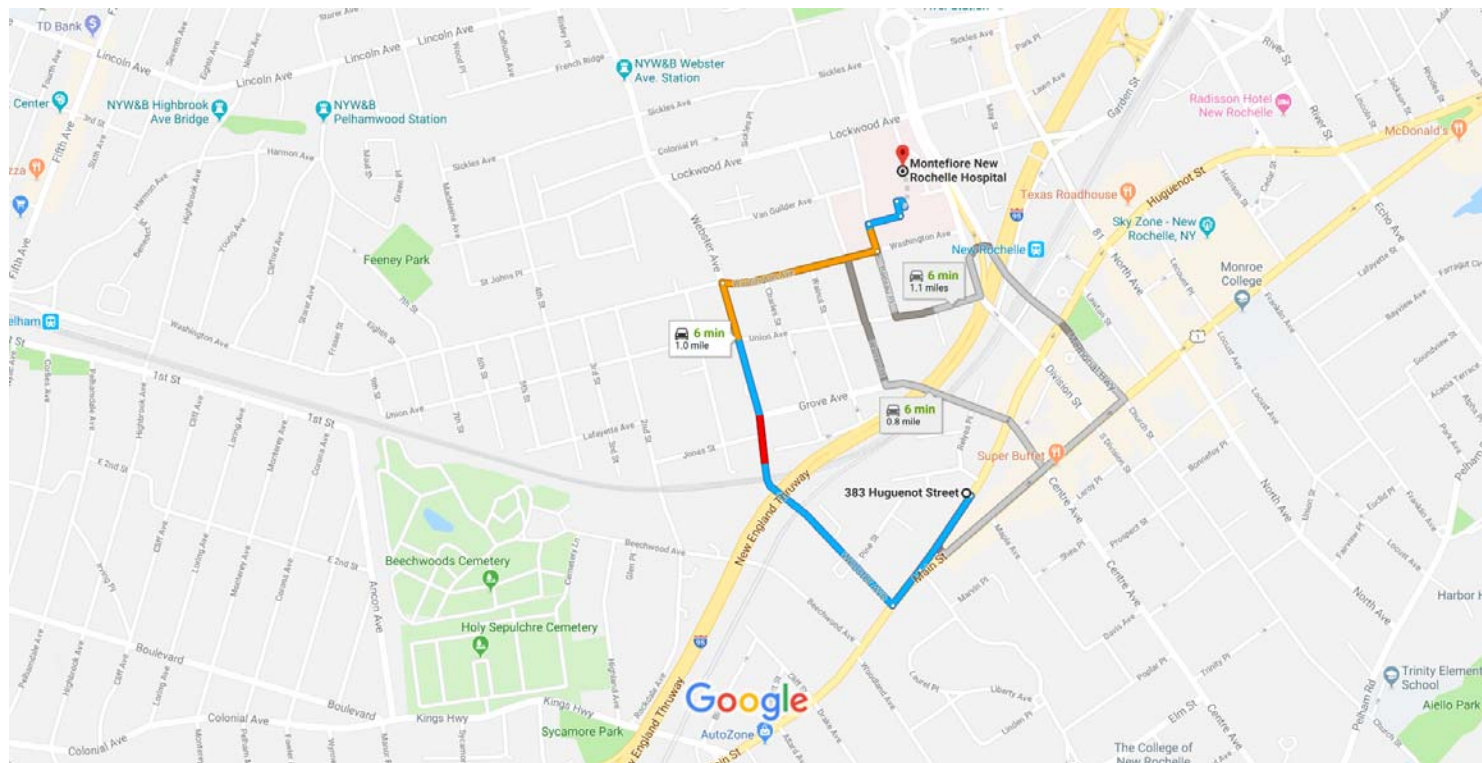
381-383 Huguenot LLC

New York State Department of Environmental Conservation



383 Huguenot Street, New Rochelle, NY to Montefiore
New Rochelle Hospital

Drive 1.0 mile, 6 min



Map data ©2018 Google 500 ft

383 Huguenot St

New Rochelle, NY 10801

Take Webster Ave to Washington Ave

- ↑ 1. Head southwest on Huguenot St toward Pintard Ave
0.1 mi
- ↑ 2. Continue onto Boston Post Rd/Main St
308 ft
- 3. Turn right onto Webster Ave
0.5 mi

Continue on Washington Ave to your destination

- 4. Turn right onto Washington Ave
0.2 mi
- ⬅ 5. Turn left onto Glover Johnson Pl
194 ft
- 6. Turn right
226 ft
- ⬅ 7. Turn left
105 ft



8. Turn right



Destination will be on the left

85 ft

Montefiore New Rochelle Hospital

16 Guion Pl, New Rochelle, NY 10802

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

HEALTH AND SAFETY PLAN

Client: 381-383 Huguenot LLC
Project: Remedial Action Work Plan
Activities: Soil, groundwater and air sampling
Location: The Huguenot Site, New Rochelle, New York
Chemical Hazards: Volatile Organic Compounds, Semi-Volatile Organic Compounds, Metals, Pesticides, Polychlorinated Biphenyls
Prepared By: Cider Environmental

Date: August 3, 2018

Client Contact

Title	Name	Telephone
Client Representative	Frank Chechile	(614) 787-2733

Cider Key Personnel

Title	Name	Telephone
Project Manager:	James Cressy	(631) 365-6118
Site Health & Safety Officer:	Shuangtao Zhang	(631) 456-6336

CIDERN ENVIRONMENTAL DO NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THIS SITE. DUE TO THE NATURE OF THIS SITE AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS WHICH MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY AT THIS SITE. THE HEALTH AND SAFETY GUIDELINES IN THIS PLAN WERE PREPARED SPECIFICALLY FOR THIS SITE AND SHOULD NOT BE USED ON ANY OTHER SITE WITHOUT PRIOR RESEARCH AND EVALUATION BY A TRAINED HEALTH AND SAFETY SPECIALIST.

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1 Introduction

1.1 Purpose

This Health and Safety Plan (HASP) has been developed to comply with the regulations under Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1025. It addresses foreseeable activities associated with the site work activities to be conducted at The Huguenot Site, BCP Site No. C360157, 381-393 Huguenot Street, New Rochelle, New York (herein referred to as the "Site" or "Subject Property". See **Figure 1** for site location).

This HASP establishes personnel protection standards and mandatory safety practices and procedures. Additionally, it assigns responsibilities, establishes standard operating procedures, and provides for contingencies that may arise while operations are being conducted at known or suspected hazardous waste sites.

Cider Environmental (CE) personnel involved with any intrusive investigation which involve the displacement of soil and/or material or groundwater in the identified Area of Concern (AOC) shall comply with the requirements of this HASP. All personnel engaged in onsite activities will read this document carefully and complete the Field Personal Review (**Section 11**). Contractors and subcontractors work in identified AOC will provide their own HASP (equal or more stringent than the CE HASP) and are solely responsible for their own workers Health and Safety and providing a safe working environment in accordance with all applicable federal, state and local requirements. Each Subcontractor will have a designated Site Health and Safety Coordinator who will be responsible for ensuring that the designated procedures are implemented in the field. The level of protection and the procedures specified in this HASP represent the minimum health and safety requirements to be observed by site personnel. Should an employee find himself or herself in a potentially hazardous situation, the employee will immediately discontinue the hazardous procedures(s) and either personally effect appropriate preventative or corrective measures, or immediately notify the Project Manager of the nature of the hazard. In the event of an immediately dangerous or life threatening situation, the employee always has "stop work" authority.

1.2 Site Conditions

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business.

The Site is currently utilized for mixed commercial and residential uses. The surrounding parcels are currently utilized for mixed commercial and residential uses. The Site is located within the City of New Rochelle's recently designated Downtown Overlay Zone (DOZ). The DOZ is part of a new zoning plan adopted in 2015 to re-establish the downtown as a center of vibrancy within a mixed-use, transit oriented setting. The characteristics of the Site allow a building of up to six stories, with the provision by the developer of a community benefit.

1.3 Site History

The northern portion of the Site (Lots 3A and 4 at 381 and 383 Huguenot Street) has been utilized for dry cleaning services circa 1931, and for manufacturing since the 1970s to 2010s. The central portion of the Site (385 & 387 Huguenot) has maintained a residential dwelling circa 1931, and as truck and trailer parking since 1990s. The southern portion of the Site (Lots 5 and 7 at 391 and 393 Huguenot) has maintained a gasoline filling station from 1930s to 1950s, car wash in 1931, and as warehouse from 1970s to 2010s.

1.4 Summary of Previous Investigation

The Subject Property (381 Huguenot Street, under the name of Rush Manufacturing) has an open NYSDEC Spill case (9604099). This spill was reported on June 6, 1996 due to soil and groundwater contamination encountered during a site investigation.

In March 2016, CE performed a Phase II ESA at the Subject Property. The Phase II ESA collected subsurface soil/groundwater/soil gas samples to evaluate the potential environmental impacts. The soil samples showed several target VOC/SVOCs at levels above the Unrestricted Use Soil Cleanup Objectives. Elevated PID readings and strong petroleum odors were noted during soil sampling. Strong odor representing degraded petroleum product was noted, exceeding the nuisance criteria of CP-51. The laboratory analysis performed on the soil gas samples detected several gasoline related compounds and chlorinated solvents, including PCE and its daughter products TCE, cis-1,2-DCE and VC. The groundwater samples showed evidence of impact from petroleum products of chlorinated solvent. The maximum fuel

oil related SVOCs in groundwater was 13,000 ug/L (GW-2). The maximum gasoline related VOCs in groundwater was 2,020 ug/L (GW-1). TCE was detected in one of the monitoring wells (GW-4) at 6.5 ug/L.

In February 2017, CE performed a Supplemental Subsurface Investigation (SSI) at the Subject Property. The SSI collected samples of the urban fill materials and analyzed for metals and PCBs. The SSI also determined the groundwater flow direction and delineate the extent of groundwater contamination. The SSI detected a 2-foot layer of urban fill material throughout the site. Lead (maximum 4,330 mg/Kg) was detected at levels exceeding the RRSCO (400 mg/Kg) within the urban fill layer at multiple locations. Mercury was detected at level (1.26 mg/Kg) exceeding the RRSCO (0.81 mg/Kg) at one (1) location (SB-21 [0'-2']). PCB was detected at level (3,000 ug/Kg) exceeding the RRSCO (1,000 ug/Kg) at one (1) location (SB-2B [5'-7']). The SSI concluded that the existing groundwater contamination originated from the fuel oil application on the Subject Property. Using the AWQS as the cut off, it is likely that the groundwater contamination has migrated beyond Site boundary to the west.

From March 2018 to May 2018, CE performed the Remedial Investigation (RI) on the Site in accordance with the NYSDEC approved work plan. During the RI, CE performed geophysical survey; installed fifteen (15) soil borings and collected twenty-six (26) soil samples; installed eight (8) groundwater monitoring wells and collected eight (8) groundwater samples; collected one (1) sub-slab soil gas sample, two (2) indoor air samples, and two (2) outdoor air samples; and performed a groundwater elevation survey. All samples were submitted to a NYSDOH certified laboratory for analysis. The result of the RI and the previous investigations were summarized in the Remedial Investigation Report (RIR), dated 6/5/2018.

GPR

During the GPR survey, a fill port, suspected to be associated with a fuel oil UST, was found in the front of Building 393 Huguenot St. A metallic anomaly was detected near the fill port. GPR transects over this area display inconclusive data. It is possible that the former fuel oil UST was backfilled. This area will be excavated, with any tank(s) properly removed, during the upcoming site redevelopment.

Soil Sampling

The RI soil sampling followed the approved RIWP and CPP. There is no significant deviation from the approved RIWP. During this RI, a total of twenty-six (26) soil samples and two (2) QA/QC samples were collected for laboratory analysis.

The field observation and laboratory analysis results of the soil samples from this RI are consistent with the previous investigation.

Exceedances of lead (maximum 1,560 mg/Kg), cadmium (maximum 4.79 mg/Kg) and SVCOs (maximum 48,760 µg/Kg) over RRSCO were detected in multiple shallow soil samples within the urban fill layer. The deeper soil samples generally met RRSCO and, except for nickel and chromium, met UUSCO. Nickel and chromium exceeding UUSCO were detected throughout the site and in soil samples from the off-site monitoring wells, suggesting that there are elevated background levels.

Based on the results of this RI, it is anticipated that upon completion of the proposed site excavation for new building construction (and remedial excavation of the "hot spots"), the end point soil samples from the excavated areas can meet the RRSCO and the UUSCO, except for nickel and chromium, which appears to have a higher regional background level.

Groundwater Sampling

The monitoring well installation and groundwater sampling followed the approved RIWP. There is no significant deviation from the approved RIWP. The flow rates of the wells are extremely low. Most of the wells ran dry when purging rate was >500 ml/min.

During this RI, a total of eight (8) groundwater samples and three (3) QA/QC samples were collected for laboratory analysis.

Petroleum odor was observed with groundwater samples from MW-1, MW-2 and MW-4.

Exceedances of several inorganic compounds (aluminum, iron, magnesium, manganese and sodium) over the AWQS were detected in both on-site and off-site wells (including upgradient and side-gradient wells). This is due to elevated regional background levels, and not from impacts from the Site.

Selenium was detected in MW-5 (side-gradient) at 0.012 mg/L marginally above the AWQS. PCB was detected in MW-8 (up-gradient) at 0.094 µg/L marginally above the AWQS. 1,3-Dichlorobenzene was detected in both the on-site and up-gradient wells (maximum 6.8 µg/L) marginally exceeding the AWQS. Isopropylbenzene was detected in MW-4 at 17 µg/L marginally above the AWQS. Phenol was detected in MW-8 (up-gradient) at 1.4 µg/L marginally above the AWQS. Naphthalene was detected in MW-1 at 16 µg/L marginally above the AWQS.

PFOA & PFOS were detected in all groundwater samples exceeding the USEPA Health Advisory Levels of 70 ppt. It appears the PFOA & PFOS groundwater contamination was a result of general urban environment, and not impacted from the Site.

Field data from the groundwater samples indicated groundwater at the Site has a pH range from 7 to 9 (with exception of MW-3, which has pH at 5.5).

Air Sampling

Access for air sampling were denied by many of the neighboring property owners. All objections were properly documented. A total of one (1) sub-slab soil gas sample, two (2) indoor air samples and two (2) outdoor air samples were collected.

The laboratory analysis results of the air samples did not identify any significant impacts from petroleum products or chlorinated solvents.

1.5 Scope of Work

The remedial activities which will require the oversight by Cider include the following scope and will include the completion of:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures.
- Endpoint soil sampling.
- Installation and operation of a passive sub-slab depressurization system (SSDS) and a vapor barrier system to mitigate the risk of vapor intrusion. The passive SSDS can be converted to active if needed.
- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring.
- Implementation of a Site Management Plan, including future land use and groundwater use restrictions.

Details of the scopes of work to be completed are provided within the Remedial Action Work Plan (RAWP), dated August 2018 prepared by Cider Environmental.

2 Project Team and Responsibilities

2.1 Project Manager

The Project Manager will be responsible for implementing the project and obtaining any necessary personnel or resources for the completion of the project. Specific duties will include:

- Coordinating the activities of all construction and Remedial Personnel, to include informing them of the required Personal Protective Equipment (PPE) and insuring their signature acknowledging this HASP;
- Selecting a Site Health and Safety Officer and field personnel for the work to be undertaken on site;
- Ensuring that the tasks assigned are being completed as planned and on schedule;
- Providing authority and resources to ensure that the Site Health and Safety Officer is able to implement and manage safety procedures;
- Preparing reports and recommendations about the project to clients and affected personnel;
- Ensuring that all persons allowed to enter the site are made aware of the potential hazards associated with the substances known or suspected to be on site, and are knowledgeable as to the on-site copy of the specific HASP;
- Ensuring that the Site Health and Safety Officer is aware of all of the provisions of this HASP and is instructing all personnel on site about the safety practices and emergency procedures defined in the plan;
- Serving as liaison with public officials where there is no Public Affairs official designated.

2.2 Site Health and Safety Officer

The Site Health and Safety Officer shall be responsible for the implementation of the HASP on site. Specific duties will include:

- Monitoring the compliance of construction and environmental remediation activities personnel (field personnel) for the routine and proper use of the PPE that has been designated for each task;
- Routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly;
- Stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public;
- Monitoring personnel who enter and exit the site and all controlled access points.
- Reporting any signs of fatigue, work-related stress, or chemical exposures to the Project Manager;
- Dismissing field personnel from the site if their actions or negligence endanger themselves, co-workers, or the public, and reporting the same to the Project Manager;

- Reporting any accidents or violations of the HASP plan to the Project Manager and documenting the same for the project in the records;
- Knowing emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments;
- Ensuring that all project-related personnel have signed the personnel agreement and acknowledgments form contained in this HASP;
- Coordinate upgrading and downgrading PPE as necessary due to changes in exposure levels, monitoring results, weather, and other site conditions;
- Perform air monitoring with approved instruments in accordance with requirements stated in this HASP.

3 Hazard Analysis and Control Measures

This section presents an assessment of the general, chemical, physical and biological hazards that may be encountered during the tasks specified under this HASP.

3.1 General Hazard Assessment

A general hazard assessment was conducted for the required field work described in Section 1.3 and the following potential hazards have been identified:

- Inhalation of volatile contaminants;
- Skin and eye contact with contaminants;
- Ingestion of contaminants;
- Inhalation of dusts impacted with semi-volatile, metals and PCB contaminants;
- Physical hazards associated with the use of heavy equipment;
- Excavation hazards;
- Tripping hazards;
- Noise exposure;
- Heat stress (depending on weather conditions);
- Cold exposure (depending on weather conditions);
- Flammable hazards;
- Electrical hazards; and,
- Use of personal protective equipment.

Specific chemical, physical and biological hazards are discussed below. Mitigation and controls will include as needed work procedures, work/rest regiment, dust control measures, personal protective equipment, and respiratory protection as appropriate.

3.2 Chemical Exposure Hazards

The following chemical hazard evaluation is based on the previous environmental investigation of the site. The evaluation has been conducted to identify chemicals/ materials that potentially may be present at the site, and to ensure that work activities, personnel protection, and emergency response are consistent with the specific contaminants that potentially could be encountered.

3.2.1 Chemical Hazard Exposure Routes

Potential hazards and their exposure routes include:

- Inhalation of organic vapors due to the presence of volatile organic compounds from diesel-powered equipment.

- Inadvertent ingestion of potentially toxic substances via hand to mouth contact or deliberate ingestion of materials inadvertently contaminated with potentially toxic materials. Included in this list are polycyclic aromatic hydrocarbons (PAHs), pesticides and metals.
- Dermal exposure and possible percutaneous (skin) absorption of certain lipophilic (readily absorbed through the skin) PAHs and pesticides.
- Skin and eye contact with contaminants at the site and decontamination activities.

3.2.2 Control of Exposure to Chemical Hazards

To protect potentially exposed personnel the following procedures and protocols will be adopted and used as needed: work procedures will be adhered to, work zones will be established, dust control will be utilized, respirators (if required) and personal protective equipment will be worn, area air monitoring will be conducted during times of disturbance of the impacted fill material. Strict personnel decontamination procedures will be followed.

3.3 Physical Hazards

3.3.1 Explosion and Fire

3.3.1.1 Flammable Vapors

The presence of flammable vapors can pose a potential fire and health hazard. Hazard reduction procedures include monitoring the ambient air with an oxygen/LEL meter (combustible gas indicator). If the LEL reading exceeds 20%, all work will stop and employees will leave the site immediately and contact the fire department.

3.3.1.2 High Oxygen Levels

Atmospheres that contain a level of oxygen greater than 23% pose an extreme fire hazard (the usual ambient oxygen level is approximately 20.5%). All personnel encountering atmospheres that contain a level of oxygen greater than 23% must evacuate the site immediately and must notify the Fire Department.

3.3.1.3 Fire Prevention

During equipment operation, periodic vapor concentration measurements should be taken with an explosimeter or combustimeter. If at any time the vapor concentrations exceed 20% of the lower explosive limit (LEL), then the Site Health and Safety Officer should immediately shut down all operations.

Only approved safety cans will be used to transport and store flammable liquids. All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool prior to filling.

Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved, or vapor forms, or other flammable liquids may be present. No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

3.3.2 Vehicular Traffic

All employees will be required to wear a fluorescent safety vest at all times while on site. In addition, supplemental traffic safety equipment use can be exercised when warranted by specific task. Supplemental equipment can be items such as cones, flags, barricades, and/or caution tape. Drivers of waste transportation vehicles will only exit vehicles in designated areas within the Support Zone. During this time, drivers will only be allowed to inspect the placement of waste loads and cover their trailers.

3.3.3 Noise Hazards

Hearing protection shall be provided to the employees where sound pressure levels exceed 85 dB. Hearing protection shall be worn where sound pressure levels in areas and/or on equipment exceeds 90 dB. Typical heavy excavation operations have been monitored with a sound level meter and indicate that hearing protection is required for all personnel while engaged in this action.

3.3.4 Safe Material Handling

Skin and eye contact with impacted soil/fill may occur during excavation, handling and decontamination activities. Nitrile gloves and approved safety glasses must be worn to prevent exposure to the associated contaminants. Employees working at or near (within ten feet of) excavation fronts could be required to wear respiratory protection. If necessary, all associated activities will be performed pursuant to 29 C.F.R. § 1910 Parts 1926.134 (a)(2) and 1926.55.

3.3.5 Heat Stress Hazards

Heat stress may occur even in moderate temperature areas and may present any or all of the following:

- Heat Rash. Result of continuous exposure to heat, humid air, and chafing clothes. Heat rash is uncomfortable and decreases the ability to tolerate heat.
- Heat Cramps. Result of the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.
- Heat Exhaustion. Result of increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include shallow breathing; pale, cool, moist skin; profuse sweating; and dizziness.
- Heat Stroke. Result of overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include red, hot, dry skin, absence of perspiration, nausea, dizziness and confusion, strong, rapid pulse that could lead to coma or death.

Heat Stress Prevention

- Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as "Gatorade". Employees must be encouraged to drink more than the amount required in order to satisfy thirst.
- Use cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek suits).
- Conduct non-emergency response activities in the early morning or evening during very hot weather.
- Provide shelter against heat and direct sunlight to protect personnel. Take breaks in shaded areas.
- Rotate workers utilizing protective clothing during hot weather.
- Establish a work regime that will provide adequate rest periods, with personnel working in shifts.

3.3.6 Cold Exposure Hazards

Work schedules will be adjusted to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather. Also, thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7 °C (20 °F), including wind chill factor, heated warming shelters (tents, cabins, company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation. A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing.

Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect.

3.4 Biological Hazards

During the course of the project, there is a potential for workers to come into contact with biological hazards such as animals and insects. As the potential for exposure to blood born pathogens during site investigation is anticipated to be low, a Blood Born Pathogen Exposure Plan (BBPEP) is not required

3.4.1 Animals

During site operations, animals such as dogs, cats, pigeons, mice, and rats may be encountered. Workers shall use discretion and avoid all contact with animals. Bites and scratches from dogs and cats can be painful and if the animal is rabid, the potential for contracting rabies exists. Contact with rat and mice droppings may lead to contracting hantavirus. Inhalation of dried pigeon droppings may lead to psittacosis. Cryptococcosis and histoplasmosis are also diseases associated with exposure to dried bird droppings but these are less likely to occur in this occupational setting.

3.4.2 Insects

Insects, including bees, wasps, hornets, mosquitoes, spiders, and ticks may be present at the site. Some individuals may have a severe allergic reaction to an insect bite or sting that can result in a life threatening condition. In addition, mosquito bites may lead to St. Louis encephalitis or West Nile encephalitis.

4 Personnel Training

4.1 Pre-assignment and OSHA Training

All Cider personnel that will be in direct contact (that is hand digging, sampling, processing) with the native soil/fill materials must complete an initial 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training course and, where necessary, a current eight hour refresher course (as required annually after initial 40-hour training completion). Personnel that will not be in direct contact with native soil/fill materials are only required to prove they have read and understood the procedures presented in this HASP.

The Site Health and Safety Officer will conduct an on-site training meeting for all personnel and observers that could potentially be exposed to the native soil/fill material during construction activities. Training meetings will be provided routinely for any new project personnel. This program will cover specific health and safety equipment and protocols and potential problems inherent to each project operation. The Site Health and Safety Officer will be present for any activities being performed that will involve the handling of soil/fill during construction activities to provide supervision on exposure reduction. This may include insuring the use of proper PPE and air quality monitoring.

4.2 Respirator Requirements

4.2.1 Respirator Requirements and Fit Testing

The OSHA respiratory protection standard, 29 CFR 1910.134, under paragraph (f)(2), requires fit testing for all employees using tight fitting respirators including filtering facepiece respirator. The fit test must be performed before the respirator is used and must be repeated at least annually and whenever a different respirator facepiece is used or a change in the employee's physical condition could affect the respirator fit.

The user seal check is a separate requirement under paragraph (g)(1)(iii) and must be performed each time the employee dons the respirator. Employers must adhere to the recommendations of the respirator's manufacturer; different manufacturers recommend different procedures.

4.2.2 Medical Surveillance

OSHA requires a medical evaluation to determine whether each employee required to wear a respirator is physically able to wear a respirator and perform the work. This evaluation can be a medical examination or an evaluation of employee responses to the OSHA Respirator Medical Evaluation Questionnaire located in Appendix C of the Respiratory Protection Standard. Either method must be performed by a physician or other licensed healthcare

professional.

5 Personal Protective Equipment

5.1 Levels of Protection

PPE must protect workers from the specific hazards they are likely to encounter on site. Selection of the appropriate PPE must take into consideration: (1) identification of the hazards or suspected hazards; (2) potential exposure routes; and, (3) the performance of the PPE construction (materials and seams) in providing a barrier to these hazards.

Based on anticipated site conditions and the proposed work activities to be performed at the Site, modified Level D Protection will be used. The upgrading/downgrading of these levels of protection will be based on continuous air monitoring results. The levels of protection are described below.

- **Level D Protection**

- a) Safety glasses w/ sideshields or chemical splash goggles
- b) Safety boots/shoes (toe-protected)
- c) Hard hat
- d) Long sleeve work shirt and work pants
- e) Nitrile gloves
- f) Hearing protection (as needed)
- g) Reflective traffic vest

- **Level D Protection (Modified)**

- a) Safety glasses w/ sideshields or chemical splash goggles
- b) Safety boots/shoes (toe-protected)
- c) Disposable chemical-resistant boot covers
- d) Coveralls (polycoated Tyvek or equivalent to be worn when contact with wet contaminated soil, groundwater, or non-aqueous phase liquids is anticipated)
- e) Hard hat
- f) Long sleeve work shirt and work pants
- g) Nitrile gloves
- h) Hearing protection (as needed)
- i) Reflective traffic vest

- **Level C Protection**

- a) Full face-piece, air-purifying, cartridge*-equipped, NIOSH-approved respirator [*combo cartridge P100/OV/CL/HC/SD/CD/HS (escape)]
- b) Inner (latex) and outer (nitrile) chemical-resistant glove

- c) Chemical-resistant safety boots/shoes (toe-protected)
- d) Disposable chemical-resistant boot covers
- e) Hard hat
- f) Long sleeve work shirt and work pants
- g) Coveralls (Tyvek or equivalent, poly-coated Tyvek will be worn when contact, or anticipated contact with wet contaminated soils, groundwater, and/or non-aqueous phase liquids (NAPL) is anticipated)
- h) Hearing protection (as needed)
- i) Reflective traffic vest

5.2 Respirator Fit-Test

All Cider personnel and subcontractors performing site work who could be exposed to hazardous substances at the work site are in possession of a full face-piece, air-purifying respirator and have been successfully quantitative fittested within the past year.

5.3 Respirator Cartridge Change-Out Schedule

Respiratory protection is required to be worn when certain action levels are reached. A respirator cartridge change-out schedule has been developed in order to comply with 29 CFR 1910.134. The respirator cartridge change-out schedule for this project is as follows:

- Cartridges shall be removed and disposed of at the end of each shift, when cartridges become wet or wearer experiences breakthrough, whichever occurs first.
- If the humidity exceeds 85%, then cartridges shall be removed and disposed of after 4 hours of use.
- Respirators shall not be stored at the end of the shift with contaminated cartridges left on. Cartridges shall not be worn on the second day, no matter how short the time period was the previous day they were used.

6 Air Monitoring Program

During site investigation/remediation, the air in work areas will be sampled periodically (on the site and at the property lines) for the presence of contaminants. Levels of organic vapors in the ambient air will be monitored during the fieldwork to ensure that appropriate levels of respiratory protection are employed at all times. Additionally, the testing will be performed to determine if changes to this plan are warranted to protect workers and the environment.

During site work involving disturbance of impacted fill material, real time air monitoring will be conducted for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). A photoionization detector (PID) and/or flame ionization detector (FID) will be used to monitor concentrations of VOCs at personnel breathing-zone height. Dust monitoring will be accomplished with an aerosol monitor. Air monitoring will be the responsibility of the Site Health and Safety Officer or designee. Air monitoring will be conducted approximately every 30 minutes during ground intrusive activities in the AOC on the project site. All manufacturers' instructions for instrumentation and calibration will be available onsite.

Subcontractors' air monitoring plans must be equal or more stringent as the Cider plan.

6.1 Organic Compounds

Monitoring with a PID, such as a MiniRAE 2000 (11.7v) or equivalent will occur during intrusive work in the AOCs. Colormetric Indicator Tubes for benzene may be used as backup for the PID, if measurements remain above background monitor every 2 hours. The Field Supervisor will monitor the employee breathing zone at least every 30 minutes, or whenever there is any indication that concentrations may have changed (odors, visible gases, appearance of drill cuttings, etc.) since the last measurement.

Instrument action levels for monitored gases are:

<i>Photoionization Detector (PID)</i>	
Concentrations (in ppm)	Level of PPE Required/Action Required
< 15 ppm within AOC zone	Level D
> 15 ppm (initial)	Stop work. Resume work once readings are below 15 ppm.
> 15 ppm and < 30 ppm (steady state condition) within breathing zone	Level C/Initiate Perimeter Monitoring
> 30 ppm (steady state condition) within AOC zone	Stop Work / Suppress Emissions / Evacuate and reevaluate.
>5 ppm above background for the 15-minute average at downwind perimeter.	Stop Work/ Re-evaluate.
>5ppm and <25 ppm downwind perimeter of AOC Zone	Stop Work / Take corrective actions to abate emissions. Resume work if <5 ppm
>25 ppm at perimeter of work area	Stop work.

*PID readings are taken at personnel breathing zone height using a 10.2V lamp PID or equivalent.

6.2 SVOCs, PCBs, Pesticides, and Metals

Based upon the site history, there is a potential for the soils to contain PAHs, PCBs, pesticides and metals. During invasive procedures which have the potential for creating airborne dust, such as excavation of dry soils, a real time airborne dust monitor such as a Mini-Ram should be used to monitor for air particulates. The Site Health and Safety Officer will monitor the employee breathing zone at least every 30 minutes, or whenever there is any indication that concentrations may have changed (appearance of visible dust) since the last measurement. Instrument action levels for dust monitoring are:

<i>Real Time Particulate Detection Meter</i>	
Concentration (mg/m³)	Level of PPE Required/Action Required
> 0.100 mg/m ³ above BKD (steady state condition) at perimeter of AOC zone for 15-minutes or visible dust.	Stop Work / Implement dust control / Continue dust monitoring if dust levels are less than 150 mg/m ³
> 0.150 mg/m ³ above BKD (following dust suppression measures)	Stop Work / implement dust control, continue work once levels are <150 mg/m ³

*BKD = Background concentration

6.3 Noise Monitoring

As a standard work practice, hearing protection will be worn within the area that exceeds 85 dBA created by any loud machinery as a precaution. Hearing protection is required and should be used in designated areas of the site as indicated by the posted signs. If there is a reasonable possibility that workers may be exposed to an 8-hour time-weighted average exceeding 85 Dba specifically as a result of conducting the required tasks, noise monitoring will be conducted using a sound level meter. Work areas or tasks which pose an exposure risk greater than 85 dBA will require hearing protection.

The New York City Department of Environmental Protection (NYCDEP) has initiated construction noise rules effective 1 July 2007. Contractors employing construction equipment such as vacuum excavators, drill rigs, and jackhammers, are required by the rules to have noise mitigation plans. These plans will be available on site. Noise mitigation measures may include mufflers, etc. Boring activities will occur during daytime hours only to minimize noise disturbance to the community. In addition, no vehicles will idle for more than three minutes when not in use.

6.4 Monitoring Equipment Calibration and Maintenance

Instrument calibration shall be documented and included in a dedicated safety and health logbook or on separate calibration pages of the field book. All instruments shall be calibrated before and after each shift. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings

may be taken to confirm individual instrument response. All instruments shall be operated in accordance with the manufacturers' specifications. Manufacturers' literature, including an operations manual for each piece of monitoring equipment will be maintained on site by the Site Health and Safety Officer for reference.

6.5 Determination of Background Levels

Background (BKD) levels for VOCs and dust will be established prior to intrusive activities within the AOC at an upwind location. A notation of BKD levels will be referenced in the daily monitoring log. BKD levels are a function of prevailing conditions. BKD levels will be taken in an appropriate upwind location as determined by the Site Health and Safety Officer.

7 Work Zone and Decontamination

7.1 Work Zone Definition

Work and support areas shall be established based on ambient air data and proposed work sites. They shall be established in order to contain contamination within the smallest areas possible and shall ensure that each employee has the proper PPE for the area or zone in which work is to be performed.

7.1.1 Exclusion Zone

It is within this zone that the excavation or environmental remediation activities such as tank abandonment operations are performed. No one shall enter this zone unless the appropriate PPE is donned. The location of this zone will change as the construction-related excavation activities are performed.

7.1.2 Contaminant Reduction Zone

It is within this zone that the decontamination process is undertaken. Personnel and their equipment must be adequately decontaminated before leaving this zone for the support zone. This zone will be set up between the EZ and the site boundary.

7.1.3 Support Zone

The support zone is considered to be uncontaminated; as such, protective clothing and equipment are not required but should be available for use in emergencies. All equipment and materials are stored and maintained within this zone. Protective clothing is put on within the SZ before entering the EZ or the CRZ. The SZ will be established in a safe environment at least 50 feet away from the EZ.

7.2 Decontamination

In general, decontamination involves scrubbing with a detergent water solution followed by clean water rinses. All disposable items shall be disposed of in a dry container. Certain parts of contaminated respirators, such as harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded. Rubber components can be soaked in detergent and water and scrubbed with a brush. In addition to being contaminated, all respirators, non-disposable protective clothing, and other personal articles must be sanitized or replaced before they can be used again if they become soiled from exhalation, body oils, and perspiration. The manufacturer's instructions should be followed in sanitizing the respirator masks.

The Site Health and Safety Officer will be responsible for the proper maintenance, decontamination, and sanitizing of any respirator equipment that may be used on-site.

The following procedures have been established to provide site personnel with minimum guidelines for proper decontamination. Personnel leaving the point of operations designated as the EZ must follow these minimum procedures. The decontamination process shall take place within the contaminant reduction zone.

7.2.1 Minimum Decontamination Procedure

Personnel leaving the point of operations should remove or change outer gloves. At a minimum, boots shall be cleaned of all accumulated soil/fill. Outer boots must be properly washed where gross contamination is evident or disposed of. If Tyvek suits are being utilized, they should be removed or changed. Personnel should remove the Tyvek suits so that the inner clothing does not come in contact with any contaminated surfaces. After Tyvek removal, personnel shall remove and discard outer Nitrile gloves. Personnel shall then remove the respirator, where applicable. Respirators shall be disinfected between uses with towelettes or other sanitary methods. Potable water, at a minimum, will be present so that site personnel can thoroughly wash hands and face after leaving the point of operations.

The Site Health and Safety Officer will monitor decontamination procedures to ensure their effectiveness. Modifications of the decontamination procedure may be necessary as determined by the Site Health and Safety Officer's observations.

7.2.2 Hand-Held Equipment Decontamination

Hand-held equipment includes all monitoring instruments as stated earlier, samples, hand tools, and notebooks. The hand-held equipment is dropped at the first decontamination station to be decontaminated by one of the decontamination team members. These items must be decontaminated or discarded as waste prior to removal from the CRZ. To aid in decontamination, monitoring instruments can be sealed in plastic bags or wrapped in polyethylene. This will also protect the instruments against contaminants. The instruments will be wiped clean using wipes or paper towels if contamination is visually evident. Sampling equipment, hand tools, etc. will be cleaned with non-phosphorous soap to remove any potentially contaminated soil, and rinsed with deionized water. All decontamination fluids will be containerized and stored on-site pending waste characterization sampling and appropriate off-site disposal.

7.2.3 Heavy Equipment Decontamination

Equipment traversing the site and exiting the site will be subjected to a decontamination protocol. At a minimum the protocol will consist of an inspection of the truck fenders, tires and mud flaps for accumulated soil/fill, and removal of all accumulations using hand tools (brush, broom and scrapers). If deemed necessary by the Site Health and Safety Officer, this inspection will be performed over a thirty by fifteen foot area that has been filled with ¾ inch crushed recycled concrete aggregate to facilitate the

removal of soil/fill accumulations from the tires, and to immobilize soil/fill removed from the truck body. Additionally, all trucks hauling waste will be required to be covered prior to exiting the site.

7.2.4 Emergency Decontamination

If circumstances dictate that contaminated clothing cannot be readily removed, then remove gross contamination and wrap injured personnel with clean garments/blankets to avoid contaminating other personnel or transporting equipment.

If the injured person can be moved, he/she will be decontaminated by site personnel as described above before emergency responders handle the victim. If the person cannot be moved because of the extent of the injury (a back or neck injury), provisions shall be made to ensure that emergency response personnel will be able to respond to the victim without being exposed to potentially hazardous atmospheric conditions. If the potential for inhalation hazards exist, such as with open excavation, this area will be covered with polyethylene sheeting to eliminate any potential inhalation hazards. All emergency personnel are to be immediately informed of the injured person's condition, potential contaminants, and provided with all pertinent data.

8 General Safety and Health Provisions

8.1 Safety Practices / Standing Orders

The following are important safety precautions that will be enforced during work activities.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as contaminated.
- Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other activity.
- Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garments are removed.
- No excessive facial hair that interferes with the effectiveness of a respirator will be permitted on personnel required to wear respiratory protection equipment. The respirator must seal against the face so that the wearer receives air only through the air purifying cartridges attached to the respirator. Fit testing shall be performed prior to respirator use to ensure the wearer obtains a proper seal.
- Contact with potentially contaminated surfaces should be avoided whenever possible. One should not walk through puddles; kneel on the ground; lean, sit, or place equipment on drums, containers, vehicles, or the ground.
- Medicine and alcohol can potentate the effect from exposure to certain compounds. Prescribed drugs and alcoholic beverages should not be consumed by personnel involved in the project.
- Personnel and equipment in the work areas should be minimized, consistent with effective site operations.
- Work areas for various operational activities should be established.
- Procedures for leaving the work area must be planned and implemented prior to going to the site. Work areas and decontamination procedures must be established on the basis of prevailing site conditions.
- Respirators will be issued for the exclusive use of one worker and will be cleaned and disinfected after each use.
- Safety gloves and boots shall be taped to the disposable, chemical-protective suits as necessary.
- All unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
- Noise mufflers or earplugs may be required for all site personnel working around heavy equipment. This requirement will be at the discretion of the Site Health and Safety Officer. Disposable, form-fitting plugs are preferred.
- Cartridges for air-purifying respirators in use will be changed daily at a minimum.

8.2 Buddy System

Site personnel will employ the buddy system when working under certain circumstances, such as enclosed spacing. Under the buddy system, each site worker is responsible for monitoring the well-being of another worker. No one will work alone when the buddy system is implemented. At no time will fewer than two employees be present at the site if activities are underway.

8.3 Site Communications Plan

Mobile telephone and/or two-way radios will be used to communicate between the work parties on the site. The following standard hand signals will be used in case of failure of radio communication:

- Hands on top of head = Need assistance
- Thumbs up = OK, I am alright, I understand
- Thumbs down = No, negative

Personnel in the Contaminated Zone should remain in constant radio communication or within sight of the project team leader. Any failure of radio communication will require the team leader to evaluate whether personnel should leave the zone.

9 Emergency Response / Contingency Plan

9.1 Pre-Emergency Planning

In order to properly prepare for emergencies, Safety Data Sheets (SDS) will be maintained on-site for the type of contaminants to which workers may be exposed. The SDS for potential chemicals to be encountered at the Site are presented in **Appendix D**.

In the event a suspected or known hazardous substance or substance container is encountered during site activities, a contingency plan will be triggered.

Cider will communicate directly with administrative personnel from the emergency room at the hospital in order to determine whether the hospital has the facilities and personnel needed to treat cases of trauma resulting from any of the contaminants expected to be found on the site. Instructions for finding the hospital will be posted conspicuously in the site office and in each site vehicle.

9.2 Emergency Contact Information

In the event of an accident or emergency situation, emergency procedures will be executed. Said procedures can and will be executed by the first person to observe an accident or emergency situation. The Site Health and Safety Officer will be notified about the situation immediately after emergency procedures are implemented.

9.2.1 Emergency Contacts

ORGANIZATION	CONTACT	TELEPHONE
City of New Rochelle Police		911
City of New Rochelle Fire		911
CE Project Manager	James Cressy	631-365-6118
National Response Center		800-424-8802
TSCA Hotline		202-554-1404
RCRA Hotline		800-424-9346
Center for Disease Control	(DAY) (NIGHT)	404-452-4100 404-329-2888
Bureau of Alcohol, Tobacco & Firearms		800-424-9555
National Response Center		800-424-8802
Pesticide Information Service		800-424-9346
Federal Express - Hazardous Material Info		901-922-1666

9.3 Contingency Plan

If an unknown substance or substance container is encountered during site activities, the following contingency plan will be triggered.

- The Site Health and Safety Officer, Project Manager and Field Operations Leader will be notified and an Exclusion Zone (the aerial extent of which will be determined by the above safety staff) will be established.
- All staff will be evacuated from the Exclusion Zone.
- Air monitoring will be conducted down-wind of the Exclusion Zone.
- The NYSDEC, as well as any other Government regulatory agency whose need may be prompted by the particular situation, will be notified.
- Upon arrival of the NYSDEC or Government regulatory agency representative(s), site control will transfer to the appropriate Government personnel.

It may be possible that a situation could develop site emergency could necessitate the evacuation of all personnel from the site. If such a situation develops, an audible alarm shall be given for site evacuation (consisting of an air horn). Personnel shall evacuate the site in a calm and controlled fashion and regroup at a predetermined location. The route of evacuation will be dependent on wind direction, severity, type of incident, etc. The site must not be re-entered until back-up help, monitoring equipment, and/or personal protective equipment are on hand and the appropriate regulatory agencies have been notified.

9.4 Emergency Medical Treatment Procedures

All injuries, no matter how slight, will be reported to the site safety supervisor immediately. The safety supervisor will complete an accident report for all incidents.

Some injuries, such as severe lacerations or burns, may require immediate treatment. Unless required due to immediate danger, seriously injured persons should not be moved without direction from attending medical personnel.

Only in non-emergency situations will an injured person be transported to the hospital by means other than an ambulance.

Nearest Hospital with Emergency Room:

Montefiore New Rochelle Hospital

16 Guion Place

New Rochelle, NY

Tel: (914) 632-5000

*(Directions from site to hospital can be found on **Figure 2**, Attached to the front of this plan)*

9.4.1 Standard Procedures for Injury

1. Notify the Site Health and Safety Officer, Project Manager, and the proper regulatory agency of all accidents, incidents, and near emergency situations.
2. If the injury is minor, trained personnel should proceed to administer appropriate first aid.
3. Telephone for ambulance/medical assistance if necessary. Whenever possible, notify the receiving hospital of the nature of physical injury or chemical overexposure. If no phone is available, transport the person to the nearest hospital.
4. When transporting an injured person to a hospital, bring this Health and Safety Plan with the attached SDS to assist medical personnel with diagnosis and treatment.

9.4.2 Chemical Overexposure

The following are standard procedures to treat chemical exposures. Other, specific procedures detailed on the SDS will be followed, when necessary.

- **SKIN AND EYE:** Use copious amounts of soap and water from eye-wash kits and portable hand wash stations.
- **CONTACT:** Wash/rinse affected areas thoroughly, then provide appropriate medical attention. Skin shall also be rinsed for 15 minutes if contact with caustics, acids or hydrogen peroxide occurs. Affected items of clothing shall also be removed from contact with skin.

Providing wash water and soap will be the responsibility of each individual contractor or subcontractor on-site.

9.5 Fire Prevention and Protection

In the event of a fire or explosion, procedures will include immediately evacuating the site and notification of the Cider Project Manager. Portable fire extinguishers will be provided at the work zone. The extinguishers located in the various locations should also be identified prior to the start of work. No personnel will fight a fire beyond the stage where it can be put out with a portable extinguisher (incipient stage).

Fires will be prevented by adhering to the following precautions:

- Good housekeeping and storage of materials.
- Storage of flammable liquids and gases away from oxidizers.
- Shutting off engines to refuel.
- Grounding and bonding metal containers during transfer of flammable liquids.
- Use of UL approved flammable storage cans.

- Fire extinguishers rated at least 10 pounds ABC located on all heavy equipment, in all trailers and near all hot work activities.

9.6 Significant Vapor Release

Based on the proposed tasks, the potential for a significant vapor is low. However, if a release occurs, the following steps will be taken:

- Move all personnel to an upwind location. All non-essential personnel shall evacuate.
- Upgrade to Level C Respiratory Protection.
- Downwind perimeter locations shall be monitored for volatile organics..
- If the release poses a potential threat to human health or the environment in the community, the Emergency Coordinator shall notify the Cider Project Manager.
- Local emergency response coordinators will be notified.

9.7 Adverse Weather Conditions

In the event of adverse weather conditions, the Site Health and Safety Officer will determine if work will continue without potentially risking the safety of all field workers. Some of the items to be considered prior to determining if work should continue are:

- Potential for heat stress and heat-related injuries.
- Potential for cold stress and cold-related injuries.
- Treacherous weather-related working conditions (hail, rain, snow, ice, high winds).
- Limited visibility (fog).
- Potential for electrical storms.
- Earthquakes.
- Other major incidents.

Site activities will be limited to daylight hours, or when suitable artificial light is provided, and acceptable weather conditions prevail. The Site Health and Safety Officer will determine the need to cease field operations or observe daily weather reports and evacuate, if necessary, in case of severe inclement weather conditions.

9.8 First Aid

A first aid kit and an emergency eyewash will be available on-site. Field crews, when performing field operations, will carry portable first aid kits that include emergency eye wash stations.

10 Recordkeeping

10.1 Employer's First Report of Injury

The site safety supervisor for all accidents involving work injury at the site will complete this form (**Appendix A**). Follow-up procedures will include investigation of each accident or near-miss by the safety supervisor to assure that no similar accidents occur in the future.

10.2 Injuries and Illnesses Form (OSHA 200)

All occupational injuries and illnesses that are required to be recorded under the Occupational Safety and Health Act will be registered on OSHA Form 200 (see **Appendix B**). The site safety supervisor will record occupational injuries and illnesses within 48 hours of occurrence, as required by statute.

11 FIELD PERSONNEL REVIEW

This form serves as documentation that field personnel have been verbally given a full HASP review by Cider personnel, and understand this HASP. It is maintained on site by the Site Health and Safety Officer as a project record. Each field team member shall sign this section after Site-specific training is completed and before being permitted to work onsite.

[illegible]

APPENDIX 3

Quality Assurance Project Plan

Quality Assurance Project Plan

August 2018

NYSDEC BCP Site:

The Huguenot Site
BCP Site No. C360157
381-393 Huguenot Street
New Rochelle, NY
Westchester County Tax Map Designation: Section 2; Block 239; Lot 3, 4, 5 & 7
NYSDEC BCP Site No. C360157

Prepared for:

381-383 Huguenot LLC

New York State Department of Environmental Conservation

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1 Introduction

1.1 Purpose

Cider Environmental (CE) has prepared this Quality Assurance Project Plan (QAPP) for work related to remedial action at 381-393 Huguenot Street, New Rochelle, Westchester County, New York (the "Site" or the "Subject Property"). BCP Site No. C360157.

This QAPP identifies the necessary procedures for an orderly, accurate, and efficient data collection and analysis program for the project, and it ensures that data meet quality objectives. The objectives for monitoring and ensuring data quality include the following:

- Identify key responsibilities and qualifications of staff responsible for data quality monitoring;
- Ensure samples are properly managed both in the field and the laboratory;
- Ensure realistic data quality goals that will produce data of known and acceptable quality are established; and
- Ensure that data are accurate, complete, and verifiable.

1.2 Site Condition

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business.

1.3 Scope of Work

The remedial activities which will require the oversight by Cider include the following scope and will include the completion of:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures.
- Endpoint soil sampling.
- Installation and operation of a passive sub-slab depressurization system (SSDS) and a vapor barrier system to mitigate the risk of vapor intrusion. The passive SSDS can be converted to active if needed.
- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring.
- Implementation of a Site Management Plan, including future land use and groundwater use restrictions.

Details of the scopes of work to be completed are provided within the Remedial Action Work Plan (RAWP), dated August 2018 prepared by Cider Environmental.

2 Quality Assurance Objectives

Quality objectives ensure that data collected are sufficient to meet the intended project goals. Quality objectives are pre-established goals or "benchmarks" that are used to monitor and assess the progress and quality of the work performed. It is essential to define quality objectives prior to initiation of any project work to ensure that activities yield data sufficient to meet project objectives.

Quality objectives are divided into two categories: data quality objectives (DQOs) and quality assurance objectives (QAOs). The DQOs are associated with the overall project objective as it relates to data collection. The QAOs define acceptance limits for project-generated data as they relate to data quality.

2.1 Data Quality Objectives

DQOs are qualitative and quantitative criteria required to support the decision making process. DQOs define the uncertainty in a data set and are expressed in terms of precision, accuracy, representativeness, completeness, and comparability (PARCC). The DQOs apply to both characterization and confirmation samples at the site. These parameters are defined as follows:

- **Precision:** a measure of mutual agreement among measurements of the same property usually under prescribed similar conditions. Precision is best expressed in terms of the standard deviation. Various measures of precision exist depending upon the "prescribed similar conditions".
- **Accuracy:** the degree of agreement of a measurement (or an average of measurements) with an accepted reference of "true value". Accuracy is one estimate of the bias in a system.
- **Representativeness:** expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition.
- **Completeness:** a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions.
- **Comparability:** expresses the confidence with which one data set can be compared with

another. Comparability is a qualitative, not quantitative measurement, as in the case of accuracy and precision. Comparability is assessed by reviewing results or procedures for data that do not agree with expected results.

It is the responsibility of the field team to collect representative and complete samples. It is the responsibility of the field-screening chemist at the laboratory to analyze these samples using accepted protocols resulting in data that meet PARCC standards.

2.2 Field Sampling Quality Objectives

The overall quality of sample results depends on proper sample management. Management of samples begins at the time of collection and continues throughout the analytical process. To ensure samples are collected and managed properly and consistently, field procedures for sample collection activities have been developed for the project. The laboratory also has procedures that ensure a proper and consistent analytical process.

Field procedures include descriptions of equipment and procedures required to perform a specific task. The purpose is to increase reproducibility and to document each of the steps required to perform the task. Approved and correctly implemented field procedures should produce data of acceptable quality that meet project DQOs.

2.3 Laboratory Data Quality Objectives

The laboratory will demonstrate analytical precision and accuracy by the analysis of laboratory duplicates and by adherence to accepted manufacture and procedural methodologies.

The performance of the laboratory will be evaluated by the Project Manager and Project Quality Assurance Officer during data reduction. The evaluation will include a review of all deliverables for completeness and accuracy when applicable.

3 Quality Control Procedures

This section presents a general overview of the quality assurance and quality control procedures that will be implemented during the project.

3.1 Field Quality Control Activities

Several types of field QC samples will be collected and submitted for analysis during the project. Each type of QC sample monitors a different aspect of the field effort. Analytical results for QC samples provide information regarding the adequacy of the sample collection and transportation of samples.

The frequency of field QC samples collected will depend on the total number of samples being collected. Specifics of the sampling activities, including collection frequency and sampling procedures, are described in the field procedures. The types of field QC samples that will be generated during the project are defined below.

- **Trip blanks** – Trip blank samples monitor for contamination due to handling, transport, cross contamination from other samples during storage, or laboratory contamination.
- **Blind duplicates** – Blind duplicates are used to monitor field and laboratory precision, as well as matrix heterogeneity.
- **Matrix Spikes** – Matrix Spikes (MS) are used to monitor precision and accuracy of the analytical method on various matrices.

3.2 Laboratory Quality Control Activities

Laboratory QC samples will include the use of method blanks, MS, laboratory control samples, laboratory duplicates, and surrogate spikes. The types of laboratory QC samples are defined below.

- **Method blanks** - Method blanks are used to monitor and ensure that the analytical system is free of contamination due either to carryover from previous samples or from laboratory procedures.
- **Matrix Spike samples** - MS samples monitor and assess the effects of the sample matrix on the sample analysis and verify the accuracy and precision of the analysis.
- **Laboratory Control samples** - LCSs are used to monitor the accuracy of the

analytical procedure without the potential interferences of a matrix.

- **Laboratory Duplicate samples** - Laboratory duplicate samples are used to monitor and assess laboratory precision, as well as potential matrix heterogeneity.
- **Surrogate Spikes** - Surrogate Spikes are utilized to monitor potential interferences from the sample matrix. Surrogate spikes are required for organic analyses only.

4 Calibration Procedures

Calibration is an integral part of ensuring that results are quantitated correctly. Instruments that are not calibrated either to manufacturers and/or method specifications are likely to produce unreliable results. Proper procedures must be followed and sufficient documentation maintained to ensure calibrations are performed correctly and that sample quantitation accurately reflects sample concentrations.

During the course of this project, instruments that may be used in the field in conjunction with sampling activities include photoionization detector (PID) and particulate meter. A maintenance, calibration, and operation program will be implemented to ensure that routine calibration and maintenance is performed on all field instruments. The program will be monitored by the Field Team Leader. Trained team members will perform scheduled calibration, field calibrations, checks, and instrument maintenance prior to use each day. Additionally, calibration will be checked as necessary to ascertain that proper measurements are being taken.

Team members are familiar with the field calibration, operation, and maintenance of the equipment, and will perform the prescribed field operating procedures outlined in the operation and field manuals accompanying the respective instrument. Field personnel will keep records of all field instruments calibrations and field checks in the field logbooks. Calibration information recorded in field logbooks will include date, time, instrument model, and a description of calibration or field check procedure, results, and any instrument deviations. If on-site monitoring equipment should fail, the Field Team Leader will be contacted immediately. Replacement equipment will be provided or the malfunction will be repaired in a timely fashion.

5 Analytical Procedures and Data Evaluation

Soil and ground water samples will be collected for the Site-specific target analytes. Samples will be analyzed by a New York State Department of Health-approved ELAP Contract Laboratory Protocol-certified laboratory.

Upon receipt of analytical reports from the laboratory, CE will evaluate data packages and confirm that samples were analyzed within required holding time and at proper detection limits. Data validation is not included in the scope of work; however, the laboratory will provide ASP Category B data packages for confirmation soil samples.

The project Quality Assurance/Quality Control (QA/QC) officer will review the data packages and prepare a Data Usability Summary Report (DUSR) in accordance with NYSDEC guidelines. At a minimum, the following information will be evaluated:

- Chain-of-custody forms;
- Date sampled/date analyzed;
- Sample temperature at check-in;
- Original laboratory analysis report;
- Initial and continuing instrument calibrations;
- Matrix spikes;
- Laboratory duplicate analysis;
- Surrogate recoveries (organics); and
- Laboratory control samples (inorganics).

Data reduction will consist of presenting analytical results on summary tables. Data resulting from confirmation analyses will then be used to evaluate the success of the remedial options.

6 Project Roles and Responsibilities

Specific roles and responsibilities have been defined for key project personnel to ensure that project goals are achieved. Each defined role will be performed by a qualified individual. Roles and responsibilities for tasks specific to this QAPP are as follows:

- The **Project Manager** has overall responsibility for developing the QAPP, monitoring the quality of the technical and managerial aspects of the project, and implementing the QAPP and corrective measures, where necessary. Project Manager is responsible for the successful and timely completion of the field activities and ensures that all policies and procedures outlined in the work plan, this QAPP, and the Construction Health and Safety Plan are followed by the project team, and is responsible for assigning appropriate staff to project tasks.
- The **Task Manager** is responsible for implementation of the activities described in the appropriate sampling and analysis plan for each specific study area. The Task Manager also handles project oversight and coordination between each of the project team members.
- The **Project Scientist** oversees the laboratory contract, monitors data quality, and conducts data review to ensure the accuracy of data collected during the investigation. The Project Scientist is the laboratory contact for questions and/or revisions of procedures, methods, or chain-of-custody (COC) information, and will verify laboratory procedures and conduct laboratory audits.
- The **Data Manager** is responsible for establishing and maintaining an accurate and representative database for chemical and hydrogeologic data collected during the investigation.
- The **QA/QC Officer** is responsible for the periodic review, auditing, or assignment of qualified individuals to perform audits of activities associated with the procedures in the QAPP, and for ensuring acceptable data quality

APPENDIX 4

Soil/Material Management Plan

Soil and Materials Management Plan

January 2019

NYSDEC BCP Site:

The Huguenot Site
BCP Site No. C360157
381-393 Huguenot Street
New Rochelle, NY
Westchester County Tax Map Designation: Section 2; Block 239; Lot 3, 4, 5 & 7
NYSDEC BCP Site No. C360157

Prepared for:

381-383 Huguenot LLC

New York State Department of Environmental Conservation

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1 Introduction

1.1 Purpose

Cider Environmental (CE) has prepared this Soil and Material Management Plan (SoMP) for work related to remedial action at 381-393 Huguenot Street, New Rochelle, Westchester County, New York (the “Site” or the “Subject Property”). BCP Site No. C360157.

1.2 Site Condition

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business. These buildings are currently vacant in anticipation of demolition.

1.3 Scope of Work

The remedial activities which will require the oversight by Cider include the following scope and will include the completion of:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures.
- Endpoint soil sampling.
- Installation and operation of a vapor barrier system to mitigate the risk of vapor intrusion.
- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring.

- Implementation of a Site Management Plan, including future land use and groundwater use restrictions.

Details of the scopes of work to be completed are provided within the Remedial Work Plan (RWP), dated January 2019 prepared by Cider Environmental.

2 Soil and Material Management Plan

2.1 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed under the supervision of a Qualified Environmental Professional and will be reported in the final remedial report. Soil screening will be performed during invasive work performed during the remedy and development phases prior to issuance of final signoff by NYSDEC.

2.2 Stockpile Methods

Excavated soil from suspected areas of contamination (e.g., hot spots, USTs, drains, etc.) will be stockpiled separately and will be segregated from clean soil and construction materials. Stockpiles will be used only when necessary and will be removed as soon as practicable. While stockpiles are in place, they will be inspected daily, and before and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. Excavated soils will be stockpiled on, at minimum, double layers of 8-mil minimum sheeting, will be kept covered at all times with appropriately anchored plastic tarps, and will be routinely inspected. Broken or ripped tarps will be promptly replaced.

All stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations. Stockpiles of excavated soils and other materials shall be located at least of 50 feet from the property boundaries, where possible. Hay bales or equivalent will surround soil stockpiles except for areas where access by equipment is required. Silt fencing and hay bales will be used as needed near catch basins, surface waters and other discharge points.

2.3 Characterization of Excavated Materials

Soil/fill or other excavated media that is transported off-Site for disposal will be sampled in a manner required by the receiving facility, and in compliance with applicable laws and regulations. Soils proposed for reuse on-Site will be managed as defined in this plan.

2.4 Materials Excavation, Load-Out, and Departure

The PE/QEP overseeing the remedial action will:

- oversee remedial work and the excavation and load-out of excavated material;

- ensure that there is a party responsible for the safe execution of invasive and other work performed under this work plan;
- ensure that Site development activities and development-related grading cuts will not interfere with, or otherwise impair or compromise the remedial activities proposed in this RWP;
- ensure that the presence of utilities and easements on the Site has been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;
- ensure that all loaded outbound trucks are inspected and cleaned if necessary before leaving the Site;
- ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during Site remediation.

Locations where vehicles exit the Site shall be inspected daily for evidence of soil tracking off premises. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

Open and uncontrolled mechanical processing of historical fill and contaminated soil on-Site will not be performed without prior NYSDEC approval.

2.5 Off-Site Materials Transport

Loaded vehicles leaving the Site will comply with all applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with 6 NYCRR Part 364. If loads contain wet material capable of causing leakage from trucks, truck liners will be used. Queuing of trucks will be performed on-Site, when possible in order to minimize off Site disturbance. Off-Site queuing will be minimized.

Inbound and outbound truck transport routes are described in this RWP. This routing takes into account the following factors: (a) limiting transport through residential areas and past sensitive sites; (b) use of mapped truck routes; (c) minimizing off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. To the extent possible, all trucks loaded with Site materials will travel from the Site using these truck routes. Trucks will not stop or idle in the neighborhood after leaving the project Site.

2.6 Materials Disposal Off-Site

The following documentation will be established and reported by the PE/QEP for each disposal destination used in this project to document that the disposal of regulated material exported from the Site conforms with applicable laws and regulations:

- A letter from the PE/QEP to each disposal facility describing the material to be disposed and requesting written acceptance of the material. This letter will state that material to be disposed is regulated material generated at an environmental remediation Site under a NYSDEC BCP program. The letter will provide the project identity and the name and phone number of the PE/QEP. The letter will include as an attachment a summary of all chemical data for the material being transported.
- A letter from each disposal facility stating it is in receipt of the correspondence (1, above) and is approved to accept the material. These documents will be included in the final remedial report.

The Final Engineering Report will include an itemized account of the destination of all material removed from the Site during this remedial action. Documentation associated with disposal of all material will include records and approvals for receipt of the material. This information will be presented in the final remedial report.

All impacted soil/fill or other waste excavated and removed from the Site will be managed as regulated material and will be disposed in accordance with applicable laws and regulations. Historic fill and contaminated soils taken off-Site will be handled as solid waste and will not be disposed at a Part 360-16 Registration Facility (also known as a Soil Recycling Facility).

Waste characterization will be performed for off-Site disposal in a manner required by the receiving facility and in conformance with its applicable permits. Waste characterization sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the final remedial report. A manifest system for off-Site transportation of exported materials will be employed. Manifest information will be reported in the final remedial report. Hazardous wastes derived from on-Site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), including transport to a Part 360-16 Registration Facility, a formal request will be made for approval by NYSDEC with an associated plan compliant with 6NYCRR Part 360-16. This request and plan will include the location, volume and a description of the material to be recycled, including verification that the material is not impacted by site uses and that the material complies with receipt

requirements for recycling under 6NYCRR Part 360. This material will be appropriately handled on-Site to prevent mixing with impacted material.

2.7 Materials Reuse On-Site

Soil and fill that is derived from the property that meets the Soil Cleanup Objectives (SCOs) established in this plan may be reused on-Site. The SCOs for on-Site reuse are listed in **Section 7** of the RWP.

'Reuse on-Site' means material that is excavated during the remedy or development, does not leave the property, and is relocated within the same property and on land with comparable levels of contaminants in soil/fill material, compliant with applicable laws and regulations, and addressed pursuant to the NYS BCP agreement subject to Engineering and Institutional Controls. The PE/QEP will ensure that reused materials are segregated from other materials to be exported from the Site and that procedures defined for material reuse in this remedial plan are followed.

Soil reuse is not planned for this project. However, in the event that any on-site soil is to be reused, it will be done so in accordance with DER-10, Section 5.4(e)4, and the reuse soils will meet the RRSCO and the PGWSCO.

Organic matter (wood, roots, stumps, etc.) or other waste derived from clearing and grubbing of the Site will not be buried on-Site. Soil or fill excavated from the site for grading or other purposes will not be reused within a cover soil layer or within landscaping berms.

2.8 Demarcation

After completion of hotspot removal and any other invasive remedial activities, and prior to backfilling, the top of the residual soil/fill will be defined by one of three methods:

- Placement of a demarcation layer. The demarcation layer will consist of geosynthetic fencing or equivalent material to be placed on the surface of residual soil/fill to provide an observable reference layer. A description or map of the approximate depth of the demarcation layer will be provided in the SMP
- A land survey of the top elevation of residual soil/fill before the placement of cover soils, pavement and associated sub-soils, or other materials or structures. Or
- All materials beneath the approved cover will be considered impacted and subject to site management after the remedy is complete.

Demarcation may be established by one or any combination of these three methods. As appropriate, a map showing the method of demarcation for the Site and all associated documentation will be presented in the FER.

This demarcation will constitute the top of the site management horizon. Materials within this horizon require adherence to special conditions during future invasive activities as defined in the Site Management Plan.

3 Import of Backfill Soil from Off-Site Sources

This Section presents the requirements for imported fill materials to be used below the cover layer and within the clean soil cover layer. All soils imported to the Site will be done so in accordance with DER-10, Section 5.4(e) and will meet NYSDEC-approved backfill and cover soil quality objectives for this Site. The backfill and cover soil quality objectives are listed in **Section 7** of the RWP. Imported soils will not exceed RRSCO or the PGWSCO established in Part 375.

All materials proposed for import onto the Site will be approved by the Remedial Engineer and will be in compliance with provisions in the RWP prior to receipt at the Site.

Material from industrial sites, spill sites, other environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

All imported soils will meet NYSDEC approved backfill or cover soil quality objectives for this Site. These NYSDEC approved backfill or cover soil quality objectives are listed in 6 NYCRR Part 375 Table 375-6.8(a): the lower of the PGWSCO and RRSCO (as summarized in DER-10 Appendix 5) and following the sampling frequency required in DER-10 Table 5.4(e)10, as follow:

Table 5.4(e)10			
Recommended Number of Soil Samples for Soil Imported To or Exported From a Site			
Contaminant	VOCs	SVOCs, Inorganics & PCBs/Pesticides	
Soil Quantity (cubic yards)	Discrete Samples	Composite	Discrete Samples/Composite
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
>1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

Non-compliant soils will not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved Remedial Work Plan or its approval by NYSDEC should be construed as an approval for this purpose.

Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Nothing in this Remedial Action Work Plan should be construed as approval for this purpose.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers and fill materials stockpiled onsite will be protected from storm water erosion until installed.

A process will be established to evaluate sources of backfill and cover soil to be imported to the Site, and will include an examination of source location, current and historical use(s), and any applicable documentation.

4 Fluids Management

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable laws and regulations. Liquids discharged into the City of New Rochelle sewer system will receive prior approval. Discharge to the City of New Rochelle sewer system will require an authorization and sampling data demonstrating that the groundwater meets the City's discharge criteria. The dewatering fluid will be pretreated as necessary to meet the City's discharge criteria. If discharge to the City sewer system is not appropriate, the dewatering fluids will be managed by transportation and disposal at an off-Site treatment facility.

Discharge of water generated during remedial construction to surface waters (i.e. a stream or river) is prohibited without a SPDES permit issued by New York State Department of Environmental Conservation.

5 Stormwater Pollution Prevention

Applicable laws and regulations pertaining to stormwater pollution prevention will be addressed during the remedial program. Erosion and sediment control measures identified in this remedial plan (silt fences and barriers, and hay bale checks) will be installed around the entire perimeter of the remedial construction area and inspected once a week and after every storm event to ensure that they are operating appropriately. Discharge locations will be inspected to determine whether erosion control measures are effective in preventing significant impacts to receptors. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. Undercutting or erosion of the silt fence toe anchor will be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

6 Contingency Plan for Unknown Contamination Sources

This contingency plan is developed for the remedial construction to address the discovery of unknown structures or contaminated media during excavation. Identification of unknown contamination source areas during invasive Site work will be promptly communicated to NYSDEC's Project Manager. Petroleum spills will be reported to the NYSDEC Spill Hotline. These findings will be included in the daily report. If previously unidentified contaminant sources are found during on-Site remedial excavation or development-related excavation, sampling will be performed on contaminated source material and surrounding soils and reported to NYSDEC. Chemical analytical testing will be performed for TAL metals, TCL volatiles and semi-volatiles, TCL pesticides and PCBs, as appropriate.

This section describes actions that must occur upon the discovery of previously unknown contaminated material(s), USTs, demolition debris or other unknown unidentifiable material that requires special handling. On-site personnel should be prepared to respond appropriately if the following previously unknown materials are encountered (if encountered, this material could result in a recommendation from the Remedial Engineer/QEP for an immediate, temporary shutdown of construction activities):

- Previously unknown tanks (including drums) containing a liquid product that is not likely to be water and is likely to present a threat to worker health or safety;
- Previously unknown demolition debris, which could contain significant quantities of asbestos, the disturbance of which is determined, based on field observations, to violate or likely to violate Federal, State, or local asbestos regulations; and,
- Material which cannot be readily identified.

6.1 Procedures for Encountered Underground Storage Tanks

Closure of USTs at the Site will be in accordance with the requirements of DER-10, Section 5.5. USTs will be visually inspected to determine if liquids are present in the tank. Significant quantities of liquid remaining in the tanks will be drummed on the Site or removed by a properly licensed disposal company and the particular product (e.g., fuel oil, diesel, etc.) will be identified prior to off-site disposal at a permitted facility. All encountered USTs will be disposed of pursuant to applicable Petroleum Bulk Storage (PBS) and hazardous waste regulations. All petroleum contaminated soils will be managed in conformance with NYSDEC petroleum spill remediation requirements and DER-10.

6.2 Procedures for Encountered Demolition Debris

To the extent practical, all clearly identifiable material suspected of containing asbestos will be removed from the waste stream and handled separately (if encountered). The Remedial Engineer/QEP will recommend that asbestos material visible in the waste stream be separated and analyzed to determine the percent of asbestos present. All applicable Federal, State and local asbestos handling regulations will be followed.

Depending on the amount of asbestos material identified in the waste stream, the Remedial Engineer/QEP may recommend a licensed and accredited asbestos inspector be retained to manage the handling and disposition of asbestos material. Approval to retain an asbestos inspector will be made by the Participant. Samples will be collected by a properly licensed asbestos inspector and submitted to a NYSDOH ELAP- certified laboratory for analysis, depending on the amount and type of material encountered.

Minor amounts of asbestos may be removed from the waste stream and disposed of in accordance with applicable State and local asbestos remediation requirements. An asbestos abatement firm will be retained to properly handle and remove minor amounts of asbestos.

The presence of significant quantities of asbestos will result in a temporary shutdown of the Site.

6.3 Procedures for Encountered Unknown Material

Material which cannot be readily identified but which is considered, based on field observations, to be material that needs further investigation before disposal will be properly stockpiled (as per the SoMP) in an area separate from all other stockpiled material.

6.4 Screening and Laboratory Analysis

Unknown material will be screened with a photo-ionization detector (PID) and all recorded levels will be documented. Samples will be collected and analyzed to identify the compounds present and to assist in determining appropriate disposal practices. Until determined by laboratory analysis otherwise, this material will be considered a hazardous substance. Specific materials known to require sampling and analysis prior to final disposition include all building components and debris containing painted surfaces and/or caulk. A plan to describe the handling and disposal of such materials will be submitted to NYSDEC for review and approval.

If previously unknown underground tanks or other previously unidentified contaminant sources are found during on-site remedial excavation or development related construction, sampling will be performed on product, sediment, and surrounding soils, etc. Chemical analytical work will be for full scan parameters (TAL metals, TCL volatiles and semi-volatiles, TCL pesticides, and PCBs). These analyses will not be limited to CP-51 petroleum list parameters where tanks are identified without prior approval by NYSDEC. Analyses will not be otherwise limited without NYSDEC approval.

7 Odor, Dust, and Nuisance Control

7.1 Odor Control

All necessary means will be employed to prevent on- and off-Site odor nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) use of foams to cover exposed odorous soils. If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; and (e) use of chemical odorants in spray or misting systems.

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC will be notified of all odor complaint events. Implementation of all odor controls, including halt of work, will be the responsibility of the PE/QEP's certifying this remedial plan.

7.2 Dust Control

Dust management during invasive on-Site work will include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas and stockpiles.
- Use of properly anchored tarps to cover stockpiles.
- Exercise extra care during dry and high-wind periods.
- Use of gravel or recycled concrete aggregate on egress and other roadways to provide a clean and dust-free road surface.

This dust control plan is capable of controlling emissions of dust. If nuisance dust emissions are identified, work will be halted and the source of dusts will be identified and corrected. Work will not resume until all nuisance dust emissions have been abated. NYSDEC will be notified of all dust complaint events. Implementation of all dust controls, including halt of work, will be the responsibility of the PE/QEP's responsible for certifying this remedial plan.

7.3 Other Nuisances

Noise control will be exercised during the remedial program. All remedial work will conform, at a minimum, to City of New Rochelle noise control standards.

Rodent control will be provided, during Site clearing and grubbing, and during the remedial program, as necessary, to prevent nuisances.

APPENDIX 5

Storm-Water Pollution Prevention Plan

Stormwater Pollution Prevention Plan

January 2019

NYSDEC BCP Site:

The Huguenot Site
BCP Site No. C360157
381-393 Huguenot Street
New Rochelle, NY
Westchester County Tax Map Designation: Section 2; Block 239; Lot 3, 4, 5 & 7
NYSDEC BCP Site No. C360157

Prepared for:

381-383 Huguenot LLC

New York State Department of Environmental Conservation

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1 Introduction

1.1 Purpose

Cider Environmental (CE) has prepared this Stormwater Pollution Prevention Plan (SWPPP) for work related to remedial action at 381-393 Huguenot Street, New Rochelle, Westchester County, New York (the "Site" or the "Subject Property"). BCP Site No. C360157.

1.2 Site Condition

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business. These buildings are currently vacant in anticipation of demolition.

1.3 Scope of Work

The remedial activities which will require the oversight by Cider include the following scope and will include the completion of:

- Limited soil excavation and disposal for the construction of the proposed new building and underground structures.
- Endpoint soil sampling.
- Installation and operation of a vapor barrier system to mitigate the risk of vapor intrusion.
- Composite covering system, including building slab, asphalt, and two (2) feet of clean fill (meeting RRSCO) on exposed soils not covered by components of the development.
- Re-installation of on-site groundwater wells, and long-term groundwater monitoring.

- Implementation of a Site Management Plan, including future land use and groundwater use restrictions.

Details of the scopes of work to be completed are provided within the Remedial Work Plan (RWP), dated January 2019 prepared by Cider Environmental.

2 Stormwater Management

A formal project-specific Construction Stormwater Pollution Prevention Plan (SWPPP) will not be developed, as only construction projects greater than 1 acre are subject to the requirements of NYSDEC Division of Water guidelines and regulations.

All work conducted under the Remediation Work Plan (RWP) shall utilize erosion and sediment controls that are in conformance with requirements presented in the New York State Standards and Specifications for Soil Erosion and Sediment Control. In general, the Contractor shall take all necessary measures to control erosion and sedimentation until the Site is restored and remedial activities and construction are complete.

All soil erosion and sediment control practices shall be installed prior to any earth disturbance activities, and maintained until permanent protection is established in accordance to City of New Rochelle and the NYS Standards and Specifications for erosion and sediment control.

The Site shall at all times be graded and maintained such that all stormwater run-off is diverted to onsite excavations (where impacts to remedial and/or construction activities allow) or soil erosion and sediment control facilities such as catch basins, sediment basins or allowable discharge points (permitted sewer).

At a minimum, silt fence shall be installed at the perimeter of the work area, wherever necessary, prior to beginning earthwork activities. Hay bales and/or silt fence shall be placed at locations downgradient of earth work areas, to prevent soil from migrating to undisturbed areas of the Site. Any disturbed area that will be left exposed for more than 30 days and not subject to construction traffic shall immediately receive a cover material.

Inspection of temporary erosion control measures by the Contractor shall be frequent, and repair or replacement shall be made promptly and when directed by the NYSDEC. If Contractor's Work interferes with or requires relocation of any temporary erosion control devices, the Contractor shall make all required changes and relocations to the devices as needed or as directed by the Engineer.

The precipitation would be expected to temporarily accumulate prior to infiltration. Therefore, using best management practices at the Site perimeter and preventing infiltration into storm water structures, stormwater runoff is not expected to pose a significant soil particulate or contaminant transport pathway during remedial action activities. During the soil/fill removal work, Contractor will undertake specific

measures for proper management of stormwater and to preclude migration of contaminants to surface waters or other areas of the Site. These will include:

- Direct loading of trucks where feasible to avoid staging of impacted soil/fill.
- Use of polyethylene sheeting for staging and covering of impacted soil/fill as necessary.
- Grading of excavations and soil cuts to prevent storm water from migrating off-site.

At the conclusion of Work, no areas shall be left uncontrolled and shall be covered or maintained by viable vegetative and/or protective stone and/or geotechnical cover.

APPENDIX 6

Community Air Monitoring Plan

Community Air Monitoring Program

January 2019

Subject Property:

The Huguenot Site
BCP Site No. C360157
381-393 Huguenot Street
New Rochelle, NY
Westchester County Tax Map Designation: Section 2; Block 239; Lot 3, 4, 5 & 7
NYSDEC BCP Site No. C360157

Prepared for:

381-383 Huguenot LLC

New York State Department of Environmental Conservation

Community Air Monitoring Program

Client: 318-383 Huguenot LLC
Project: Remedial Investigation
Activities: Soil, groundwater and air sampling
Location: The Huguenot Site, New Rochelle, New York
Chemical Hazards: Volatile Organic Compounds, Semi-Volatile Organic Compounds, Metals, Pesticides, Polychlorinated Biphenyls
Prepared By: Cider Environmental

Date: January 2019

Client Contact

Title	Name	Telephone
Client Representative	Frank Chechile	(614) 787-2733

Cider Key Personnel

Title	Name	Telephone
Project Manager:	James Cressy	(631) 365-6118
Site Health & Safety Officer:	Shuangtao Zhang	(631) 456-6336

THIS CAMP IS NOT INTENDED FOR USE IN ESTABLISHING ACTION LEVELS FOR WORKER RESPIRATORY PROTECTION. RATHER, ITS INTENT IS TO PROVIDE A MEASURE OF PROTECTION FOR THE DOWNWIND COMMUNITY (I.E., OFF-SITE RECEPTORS INCLUDING RESIDENCES AND BUSINESSES) FROM POTENTIAL AIRBORNE CONTAMINANT RELEASES AS A DIRECT RESULT OF INVESTIGATIVE WORK ACTIVITIES AT THE SITE. THE ACTION LEVELS SPECIFIED HEREIN REQUIRE INCREASED MONITORING, CORRECTIVE ACTIONS TO ABATE EMISSIONS, AND/OR WORK SHUTDOWN. ADDITIONALLY, THIS CAMP WILL HELP TO CONFIRM THAT WORK ACTIVITIES DO NOT SPREAD CONTAMINATION OFF-SITE THROUGH THE AIR.

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1 Introduction

1.1 Purpose

Cider Environmental (CE) has prepared this Community Air Monitoring Plan (CAMP) for the Huguenot Site, BCP Site No. C360157, located at 381-393 Huguenot Street, New Rochelle, Westchester County, New York. This CAMP is consistent with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan.

This CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses) from potential airborne contaminant releases as a direct result of intrusive work activities at the site. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, this CAMP will help to confirm that work activities do not spread contamination off-site through the air.

1.2 Surrounding Properties

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above; to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

1.3 Site Conditions

The Subject Property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, utilized for vehicle parking. The first floor of the building maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business.

The Site is currently utilized for mixed commercial and residential uses. The surrounding parcels are currently utilized for mixed commercial and residential uses. The Site is located within the City of New Rochelle's recently designated Downtown Overlay Zone (DOZ). The DOZ is part of a new zoning plan adopted in 2015 to re-establish the downtown as a center of vibrancy within a mixed-use, transit oriented setting. The characteristics of the Site allow a building of up to six stories, with the provision by the developer of a community benefit.

1.4 Site History

The northern portion of the Site (Lots 3A and 4 at 381 and 383 Huguenot Street) has been utilized for dry cleaning services circa 1931, and for manufacturing since the 1970s to 2010s. The central portion of the Site (385 & 387 Huguenot) has maintained a residential dwelling circa 1931, and as truck and trailer parking since 1990s. The southern portion of the Site (Lots 5 and 7 at 391 and 393 Huguenot) has maintained a gasoline filling station from 1930s to 1950s, car wash in 1931, and as warehouse from 1970s to 2010s.

2 Community Air Monitoring Plan

Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence. Exceedences of action levels observed during performance of the Community Air Monitoring Plan (CAMP) will be reported to the NYSDEC Project Manager and included in the Daily Report.

2.1 VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) will be monitored at the upwind and downwind perimeter of the immediate work area (i.e., the exclusion zone) and the nearest receptor (i.e., apartment building or residence) on a continuous basis during invasive work. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring

continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.
- All 15-minute readings must be recorded and be available for NYSDEC personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

2.2 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone and the nearest receptor (i.e., apartment building or residence) on a continuous basis during invasive work. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.
- All readings will be recorded and be available for NYSDEC personnel to review.

APPENDIX 7

Citizen Participation Plan



NEW YORK
STATE OF
OPPORTUNITY.

**Department of
Environmental
Conservation**

Brownfield Cleanup Program

Citizen Participation Plan for The Huguenot

March 2018

Site No.: C360157
381-393 Huguenot Street
New Rochelle
Westchester County, New York

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* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant: **381-383 Huguenot LLC (“Applicant”)**
Site Name: **The Huguenot (“Site”)**
Site Address: **381-393 Huguenot Street, New Rochelle**
Site County: **Westchester County**
Site Number: **C360157**

1. What is New York’s Brownfield Cleanup Program?

New York’s Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as “brownfields” so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants who conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at:
<http://www.dec.ny.gov/chemical/8450.html> .

2. Citizen Participation Activities

Why NYSDEC Involves the Public and Why It Is Important

NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social well-being. NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected and interested in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public health and the environment
- Improving public access to, and understanding of, issues and information related to a particular site and that site's investigation and cleanup process
- Providing citizens with early and continuing opportunities to participate in NYSDEC's site investigation and cleanup process
- Ensuring that NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community
- Encouraging dialogue to promote the exchange of information among the affected/interested public, State agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision making.

This Citizen Participation (CP) Plan provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the site's investigation and cleanup program also are identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some documents may be placed on the NYSDEC web site. If this occurs, NYSDEC will inform the public in fact sheets distributed about the site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The site contact list includes, at a minimum:

- chief executive officer and planning board chairperson of each county, city, town and village in which the site is located;
- residents, owners, and occupants of the site and properties adjacent to the site;
- the public water supplier which services the area in which the site is located;
- any person who has requested to be placed on the site contact list;
- the administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility;
- location(s) of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

Note: The first site fact sheet (usually related to the draft Remedial Investigation Work Plan) is distributed both by paper mailing through the postal service and through DEC Delivers, its email listserv service. The fact sheet includes instructions for signing up with the appropriate county listserv to receive future notifications about the site. See <http://www.dec.ny.gov/chemical/61092.html>.

Subsequent fact sheets about the site will be distributed exclusively through the listserv, except for households without internet access that have indicated the need to continue to receive site information in paper form. Please advise the NYSDEC site project manager identified in Appendix A if that is the case. Paper mailings may continue during the investigation and cleanup process for some sites, based on public interest and need.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities

through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.
- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

The public is encouraged to contact project staff at any time during the site's investigation and cleanup process with questions, comments, or requests for information.

This CP Plan may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

NYSDEC must determine if the site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the site, as described in Section 5.

If the site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the site.

As of the date the declaration (page 2) was signed by the NYSDEC project manager, the significant threat determination for the site had not yet been made.

To verify the significant threat status of the site, the interested public may contact the NYSDEC project manager identified in Appendix A.

For more information about TAGs, go online at
<http://www.dec.ny.gov/regulations/2590.html>

Note: The table identifying the citizen participation activities related to the site's investigation and cleanup program follows on the next page.

Citizen Participation Activities	Timing of CP Activity(ies)
Application Process:	
• Prepare site contact list • Establish document repository(ies)	At time of preparation of application to participate in the BCP.
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period • Publish above ENB content in local newspaper • Mail above ENB content to site contact list • Conduct 30-day public comment period	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement (BCA):	
• Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation Note: Applicant must submit CP Plan to NYSDEC for review and approval within 20 days of the effective date of the BCA.
Before NYSDEC Approves Remedial Investigation (RI) Work Plan:	
• Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan • Conduct 30-day public comment period	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
• Distribute fact sheet to site contact list that describes RI results	Before NYSDEC approves RI Report
Before NYSDEC Approves Remedial Work Plan (RWP):	
• Distribute fact sheet to site contact list about draft RWP and announcing 45-day public comment period • Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager) • Conduct 45-day public comment period	Before NYSDEC approves RWP. Forty-five-day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.
Before Applicant Starts Cleanup Action:	
• Distribute fact sheet to site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
• Distribute fact sheet to site contact list that announces that cleanup action has been completed and that NYSDEC is reviewing the Final Engineering Report • Distribute fact sheet to site contact list announcing NYSDEC approval of Final Engineering Report and issuance of Certificate of Completion (COC)	At the time the cleanup action has been completed. Note: The two fact sheets are combined when possible if there is not a delay in issuing the COC.

3. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern that relate to the site. Additional major issues of public concern may be identified during the course of the site's investigation and cleanup process.

The major issues of public concern include: 1) contaminated soil, groundwater and soil gas on the Site; 2) potential impact on nearby buildings via vapor encroachment; 3) the source and the history of the contamination; 4) potential impact on property value; and 5) potential impact to the community during site investigation, remediation and construction.

During the previous site investigation, lead, mercury, PCBs, chlorinated solvents and petroleum-related contamination were detected in a 2-foot layer of urban fill material/soil throughout the site. Chlorinated solvents and petroleum-related contaminants were detected in the soil gas samples on the Site. Petroleum-related contaminants and chlorinated solvents were detected in groundwater.

It appears groundwater contamination may have migrated beyond the Site boundary to the west. There is potential impact to nearby buildings via vapor intrusion.

The source of metals-related contamination appears to be the urban fill material that exists throughout the Site. The source of PCBs is unknown, but it appears to be localized. The source of chlorinated solvents appears to be the former on-site dry cleaning operation. The source of petroleum-related contamination is the former on-site gasoline filling operation and the former fuel oil operation.

It is anticipated that the property values of the community will not be adversely impacted by the proposed site remediation under the Brownfield Cleanup Program.

A community air monitoring program will be implemented during the site investigation, remediation and construction activities to ensure there will be no adverse impact on the community.

4. Site Information

Appendix C contains a map identifying the location of the site.

Site Description

The Site is located at 381-393 Huguenot Street, in an urban area in New Rochelle, New York. The Site is bound to the north by a vacant store (first floor) with residential above;

to the south by a three-story residential apartment building and a one-story residential building; to the east by Huguenot Street and beyond by a gasoline filling station; and to the west by an office building/warehouse.

The subject property consists of four (4) irregular shaped parcels totaling approximately 0.39 acres. The property currently maintains two structures. Lot 7 currently maintains an irregular shaped one-story building (with partial basement), with an approximate footprint of 3,400-square feet. This building is currently utilized for office and storage space associated with a U-Haul business, a real-estate firm, and a janitorial supply business. Lot 5 is currently vacant, and is utilized for vehicle parking. The first floor of the buildings maintained on Lots 3A and 4 house a church ministry, with the second floors occupied by one residential unit in each. The basement on Lot 4 is occupied by a hydraulic repair business.

The Site is currently utilized for mixed commercial and residential uses. The surrounding parcels are currently utilized for mixed commercial and residential uses. The Site is located within the City of New Rochelle's recently designated Downtown Overlay Zone (DOZ). The DOZ is part of a new zoning plan adopted in 2015 to re-establish the downtown as a center of vibrancy within a mixed-use, transit oriented setting. The characteristics of the Site allow a building of up to six stories, with the provision by the developer of a community benefit.

History of Site Use, Investigation, and Cleanup

The northern portion of the Site (Lots 3A and 4 at 381 and 383 Huguenot Street) has been utilized for dry cleaning services circa 1931, and for manufacturing since the 1970s to 2010s. The central portion of the Site (385 & 387 Huguenot) has maintained a residential dwelling circa 1931, and as truck and trailer parking since 1990s. The southern portion of the Site (Lots 5 and 7 at 391 and 393 Huguenot) has maintained a gasoline filling station from 1930s to 1950s, car wash in 1931, and as warehouse from 1970s to 2010s.

The NYSDEC currently has an open spill associated with the Site (Spill No. 9604099). This spill was initially reported on June 25, 1996 at 381 Huguenot Street in association with a potentially leaking fuel oil line. This spill was reported again on October 16, 2015 due to soil and groundwater contamination encountered during a Phase II Site Assessment.

In March 2016, a Phase II Environmental Site Assessment (ESA) was performed at the Site. The soil samples showed petroleum-related contamination. The soil gas samples detected several gasoline-related compounds and chlorinated solvents. The groundwater samples showed evidence of impact from petroleum products and chlorinated solvents.

In February 2017, a Supplemental Subsurface Investigation (SSI) was performed at the Site. A 2-foot layer of urban fill material was detected throughout the site, with lead, mercury and petroleum-related contamination. The SSI also confirmed the groundwater contamination from on-site fuel oil application. The SSI determined that the groundwater contamination has likely migrated beyond the Site boundary to the west.

5. Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a Participant. This means that the Applicant was the owner of the site at the time of the disposal or discharge of contaminants or was otherwise liable for the disposal or discharge of the contaminants. The Participant must fully characterize the nature and extent of contamination on-site, as well as the nature and extent of contamination that has migrated from the site. The Participant also must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the site and to contamination that has migrated from the site.

The Applicant in its Application proposes that the site will be used for restricted residential purposes.

To achieve this goal, the Applicant will conduct investigation and cleanup activities at the site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the site.

Investigation

The Applicant has completed a partial site investigation before it entered into the BCP. NYSDEC will determine if the data are useable.

In addition, the Applicant will conduct an investigation of the site officially called a "remedial investigation" (RI). This investigation will be performed with NYSDEC oversight. The Applicant must develop a remedial investigation work plan, which is subject to public comment.

The site investigation has several goals:

- 1) define the nature and extent of contamination in soil, surface water, groundwater and any other parts of the environment that may be affected;

- 2) identify the source(s) of the contamination;
- 3) assess the impact of the contamination on public health and the environment;
and
- 4) provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

The Applicant submits a draft “Remedial Investigation Work Plan” to NYSDEC for review and approval. NYSDEC makes the draft plan available to the public review during a 30-day public comment period.

When the investigation is complete, the Applicant will prepare and submit a report that summarizes the results. This report also will recommend whether cleanup action is needed to address site-related contamination. The investigation report is subject to review and approval by NYSDEC.

NYSDEC will use the information in the investigation report to determine if the site poses a significant threat to public health or the environment. If the site is a “significant threat,” it must be cleaned up using a remedy selected by NYSDEC from an analysis of alternatives prepared by the Applicant and approved by NYSDEC. If the site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Interim Remedial Measures

An Interim Remedial Measure (IRM) is an action that can be undertaken at a site when a source of contamination or exposure pathway can be effectively addressed before the site investigation and analysis of alternatives are completed. If an IRM is likely to represent all or a significant part of the final remedy, NYSDEC will require a 30-day public comment period.

Remedy Selection

When the investigation of the site has been determined to be complete, the project likely would proceed in one of two directions:

1. The Applicant may recommend in its investigation report that no action is necessary at the site. In this case, NYSDEC would make the investigation report available for public comment for 45 days. NYSDEC then would complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. NYSDEC would then issue a “Certificate of Completion” (described below) to the Applicant.

or

2. The Applicant may recommend in its investigation report that action needs to be taken to address site contamination. After NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a “Remedial Work Plan”. The Remedial Work Plan describes the Applicant’s proposed remedy for addressing contamination related to the site.

When the Applicant submits a draft Remedial Work Plan for approval, NYSDEC would announce the availability of the draft plan for public review during a 45-day public comment period.

Cleanup Action

NYSDEC will consider public comments, and revise the draft cleanup plan if necessary, before approving the proposed remedy. The New York State Department of Health (NYSDOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy. The selected remedy is formalized in the site Decision Document.

The Applicant may then design and perform the cleanup action to address the site contamination. NYSDEC and NYSDOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a final engineering report that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the site.

Certificate of Completion

When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the site, it will approve the final engineering report. NYSDEC then will issue a Certificate of Completion (COC) to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the site after it receives a COC.

Site Management

The purpose of site management is to ensure the safe reuse of the property if contamination will remain in place. Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan.

An *institutional control* is a non-physical restriction on use of the site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the site suitable for some, but not all uses.

An *engineering control* is a physical barrier or method to manage contamination. Examples include: caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that pumps and treats groundwater. Site management continues until NYSDEC determines that it is no longer needed.

Appendix A - Project Contacts and Locations of Reports and Information

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Daniel Lanners
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014
Phone: 516-402-9652
daniel.lanners@dec.ny.gov

Wendy Rosenbach
Regional Citizen Participation Specialist
NYSDEC Region 3
21 South Putt Corners Road
New Paltz, NY 12561
Phone: 845-256-3018
wendy.rosenbach@dec.ny.gov

New York State Department of Health (NYSDOH):

Eamonn O'Neil
Project Manager
NYSDOH
Empire State Plaza - Corning Tower,
Room 1787
Albany, NY 12237
Phone: 518-402-7860
bee@health.ny.gov

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

New Rochelle Public Library
1 Library Plaza
New Rochelle, NY 10801
Phone: 914-632-7878
Hours: Mon-Tue, Thu:

9AM-8PM
Wed: 10AM-6PM
Fri-Sat: 9AM-5PM
Sun: 1PM-5PM

NYSDEC Region 3
21 South Putt Corners Road
New Paltz, NY 12561
Attn: Please call for an appointment
Phone: 845-256-3154

Appendix B - Site Contact List

**Huguenot Site (C360157)
381-393 Huguenot Street
New Rochelle, NY 10801**

Site Contact List (Elected Officials, Media Outlets & Environmental Groups)

Please note that the names, addresses, and email addresses of adjacent property owners and residents on the contact list are not placed in versions of this document available to the public. Instead, they are maintained confidentially in the NYSDEC project manager's files. If you would like to be included on the mailing lists please contact the NYSDEC Project Manager.

ELECTED OFFICIALS:

Senator Andrea Stewart-Cousins

28 Wells Ave Building #3
Yonkers, NY 10701
District Office: 914.423.4031
Albany Office: 518.455.2585
scousins@nysenate.gov

Assemblyman Steven Otis

222 Grace Church Street
Port Chester, NY 10573
District: 914-939-7028
Albany: 518-455-4897
OtisS@nyassembly.gov

Westchester County

George Latimer, County Executive

900 Michaelian Building
148 Martine Ave.
White Plains, NY 10601
Phone: 914.995.2900
CE@westchestergov.com

Westchester County Planning Board

148 Martine Ave.
White Plains, NY 10601
Phone: 914.995.4408

City of New Rochelle

Mayor Noam Bramson

515 North Avenue
New Rochelle, NY 10801
Phone: 914.654.2150
nbramson@newrochelleny.com

City of New Rochelle-Planning Board

Max Schwartz, Planner
515 North Avenue
New Rochelle, NY 10801
Phone: 914.654.2183
mschwartz@newrochelleny.com

MEDIA OUTLETS:

Journal News

1133 Westchester Avenue, Suite N110
White Plains, NY 10604
914.694.9300

Mary Dolan, News Director

Phone: 914.694.5230

mdolan@lohud.com

The Daily Voice – New Rochelle

Email: NewRochelle@dailyvoice.com

Email: press@dailyvoice.com

The Rivertowns Enterprise

95 Main Street, Dobbs Ferry, NY 10522

Tim Lamorte, Editor

tlamorte@rivertownsenderprise.net

914.478.2787 ext. 11

El Aguila News

**Spanish Language Newspaper Covering
Westchester County**

PO Box 8204

White Plains, NY 10602

914.686.2598

New Rochelle Review

170 Hamilton Ave., Suite 203

White Plains, NY 10601

914.653.1000

publisher@hometwn.com

Christian Falcone Editor-in-Chief (x19)

chris@hometwn.com

News 12 Westchester

6 Executive Plaza

Yonkers, NY 10701

news12wc@news12.com

914.378.4800

Verizon Fios 1 News

Phone: 877.346.7154

online@fios1news.com

Spectrum News Hudson Valley

104 Watervliet Avenue Albany, NY 12206

hvnews@twcnews.com

518.641.6397

Westchester County Weekly

229 W. 43rd Street

New York, NY 10036

WVOX AM-1460

1 Broadcast Forum

New Rochelle, NY 10801

914.636.1460

WRNN TV

800 Westchester Avenue, Suite S-640

Rye Brook, NY 10573

914.417.2700

ENVIRONMENTAL GROUPS:

Riverkeeper

20 Secor Road
Ossining, NY 10562
800. 21-RIVER
info@riverkeeper.org

Scenic Hudson

One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601
845.473.4440
info@scenichudson.org

Federated Conservationists of Westchester County

E-House
78 North Broadway
White Plains, NY 10603
fcwc@fcwc.org
(or) info@fcwc.org
914.422.4053

Citizens Campaign for the Environment (CCE)

Long Island/Metro New York
25-A Main Street
Farmingdale, NY 11735
516.390.7150
farmingdale@citizenscampaign.org

CCE Capital Region

744 Broadway
Albany, NY 12207
518.434.8172
albany@citizenscampaign.org

New York League of Conservation Voters

30 Broad Street, 30th Floor
New York, NY 10004
212.361-6350
info@nylcv.org

Westchester Chapter

120 Bloomingdale Road
White Plains, NY 10605

Westchester Land Trust

403 Harris Road
Bedford Hills, NY 10507

Westchester Environmental Coalition

PO Box 488
White Plains, NY 10602

Clearwater, Inc.

724 Wolcott Avenue
Beacon, NY 12508

Greenway Conservancy

Capitol Building
Capitol Station, Rm. 254
Albany, NY 12224

The Nature Conservancy

Eastern New York Chapter
265 Chestnut Ridge Road
Mt. Kisco, NY 10549

Beczak Environmental Center

21 Alexander Street
Yonkers, NY 10701

Environmental Citizens Coalition

33 Central Avenue
Albany, NY 12210

Westchester County EMC

414 Michaelian Office Building
White Plains, NY 10601

Sierra Club - Atlantic Chapter

353 Hamilton Street
Albany, NY 12210-1709

PUBLIC WATER SUPPLIER:

United Water New Rochelle

2525 Palmer Ave
New Rochelle, NY 10801
914.632.6900

Suez Water

2525 Palmer Avenue, PO Box 469
New Rochelle, NY 10801
914.632.6900

SCHOOLS AND DAY CARE FACILITIES WITHIN 2,000 FEET OF THE SITE

Hallen School

97 Centre Avenue
New Rochelle, NY 10801
914.636.6600

50 Pintard Avenue

New Rochelle, NY 10801
914.632.3981

St Gabriel's High School

50 Washington Avenue
New Rochelle, NY 10801
914.235.0414

Chris Mongiello and the Rock Academy

25 Leroy Place
New Rochelle, NY 10805
914.560.4172

New School of Learning

88 Centre Ave
New Rochelle, NY 10801
914.235.2111

Little Rascals Daycare

18 Badeau Place
New Rochelle, NY 10801
914.235.7897

Children's Center

OTHER INTERESTED PARTIES

New Rochelle Public Library

1 Library Plaza
New Rochelle, NY 10801
914.632.7878

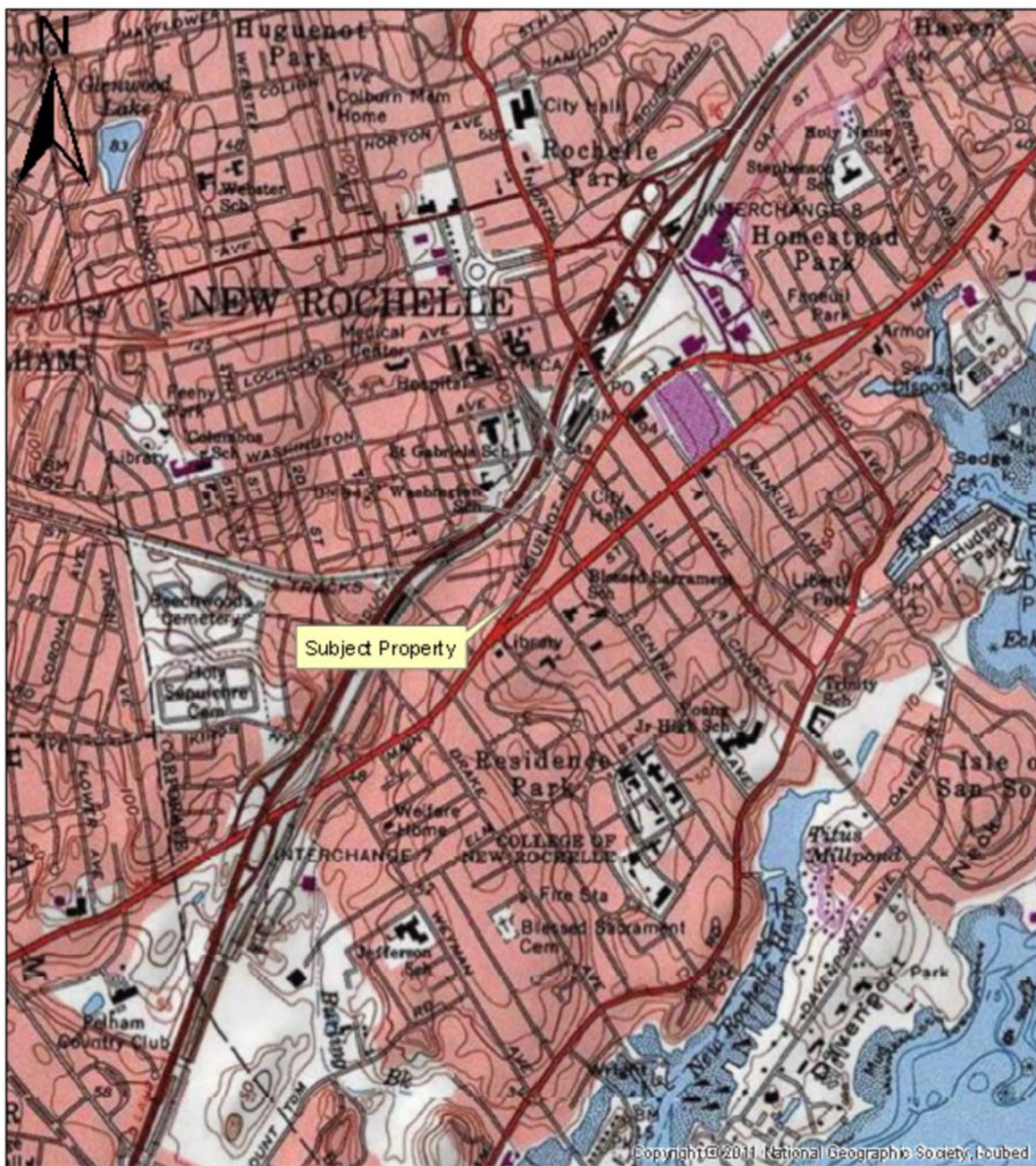
Huguenot Children's Library

794 North Avenue
New Rochelle, NY 10801
914.632.8954

381-383 Huguenot LLC

Attn: Frank Chechile
11604 Luvie Court
Potamac, MD 20854
Frank.chechile@hotmail.com
614.787.2733

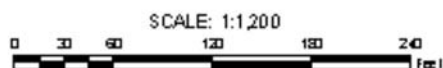
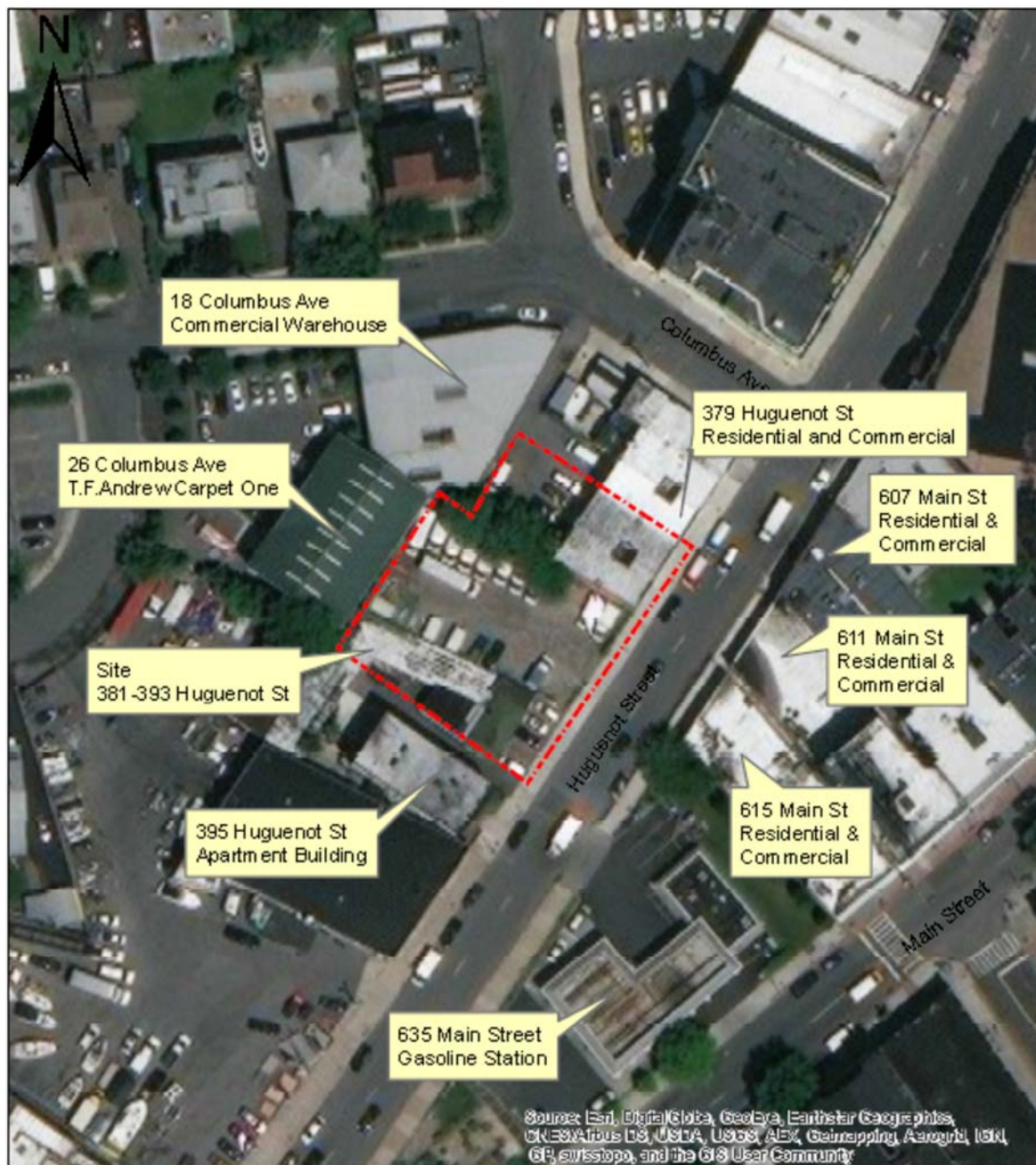
Appendix C - Site Location Map and Site Base Map



USGS 7.5 Minute Quadrangle Topographic Map
(2011)

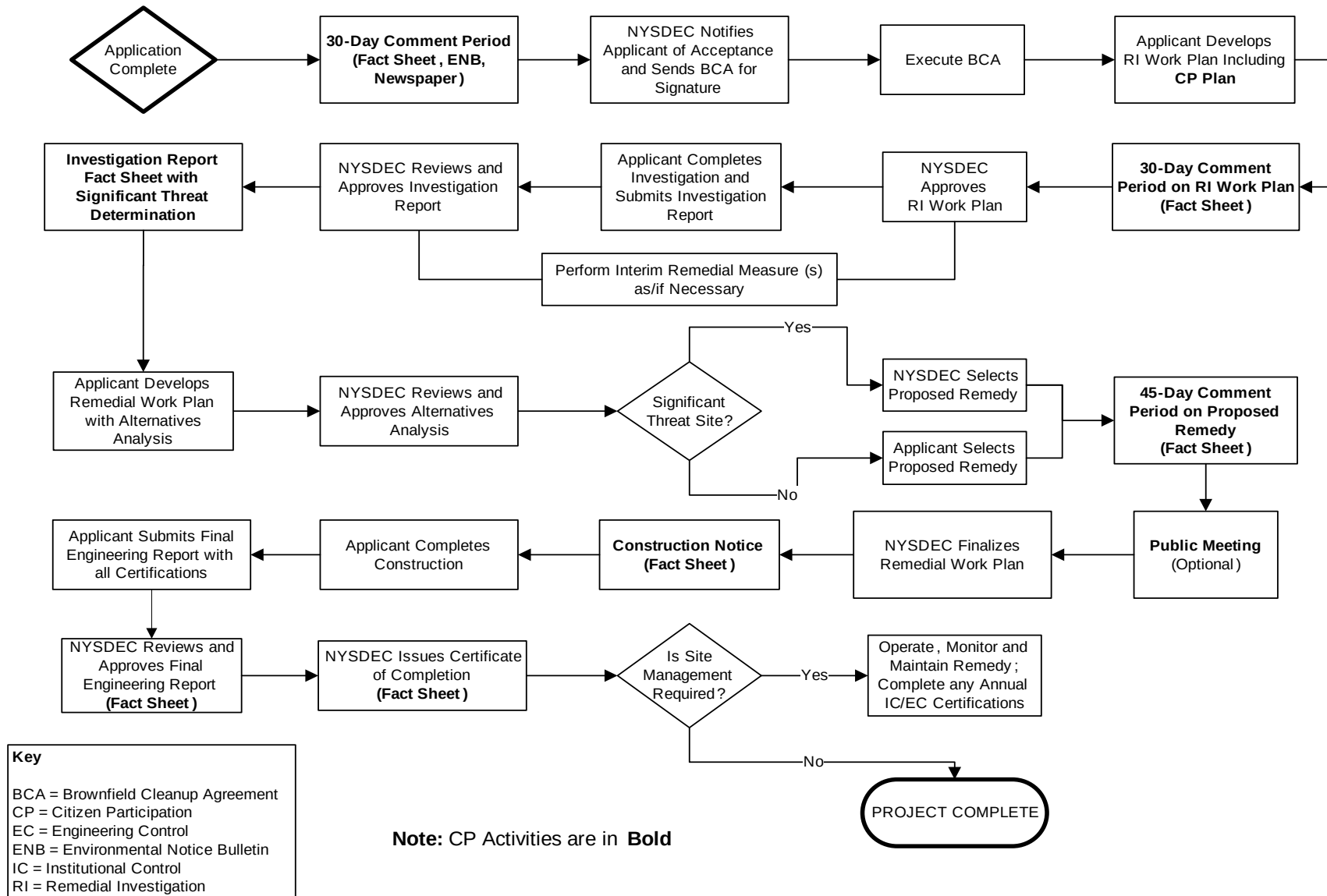
SCALE: 1:24,000
0 0.125 0.25 0.5 0.75 1 Miles

TITLE		Figure No.	
SITE LOCATION MAP		01	
PROJECT		Project No.	
381-393 Huguenot Street New Rochelle, New York		2015-188	
	DESIGN	WF	1-18-2016
	CHECK		
	REVIEW		



TITLE		SITE BASE MAP		Figure No.
				02
PROJECT		381-393 Huguenot Street New Rochelle, New York		Project No.
				2015-188
	DESIGN	WF	1-29-2018	
	CHECK			
	REVIEW			

Appendix D– Brownfield Cleanup Program Process





Division of Environmental Remediation

Remedial Programs Scoping Sheet for Major Issues of Public Concern

Instructions

This Scoping Sheet assesses major issues of public concern; impacts of the site and its remedial program on the community; community interest in the site; information the public needs; and information needed from the public.

The information generated helps to plan and conduct required citizen participation (CP) activities, and to choose and conduct additional CP activities, if appropriate. The scoping sheet can be revisited and updated as appropriate during the site's remedial process to more effectively implement the site's CP program.

Note: Use the information as an aid to prepare and update the Major Issues of Public Concern section of the site CP Plan.

General Instructions

- When to prepare: During preparation of the CP Plan for the site. It can be revisited and updated anytime during the site remedial process.
- Fill in site name and other information as appropriate.
- The Scoping Sheet may be prepared by DEC or a remedial party, but must be reviewed and approved by the DER site project manager or his/her designee.

Instructions for Numbered Parts

Consider the bulleted issues and questions below and any others that may be unique or appropriate to the site and the community to help complete the five Parts of this Scoping Sheet. Identify the issue stakeholders in Parts 1 through 3 and adjust the site's contact list accordingly.

Part 1. List Major Issues of Public Concern and Information the Community Wants.

- Is our health being impacted? (e.g. Are there problems with our drinking water or air? Are you going to test our water, yards, sumps, basements? Have health studies been done?)
- There are odors in the neighborhood. Do they come from the site and are they hazardous?
- Are there restrictions on what we may do (e.g. Can our children play outside? Can we garden? Must we avoid certain areas? Can we recreate (fish, hunt, hike, etc. on/around the site?)
- How and when were the site's contamination problems created?
- What contaminants are of concern and why? How will you look for contamination and find out where it is going? What is the schedule for doing that?
- The site is affecting our property values!
- How can we get more information (e.g. who are the project contacts?)
- How will we be kept informed and involved during the site remedial process?
- Who has been contacted in the community about site remedial activities?
- What has been done to this point? What happens next and when?
- The site is going to be cleaned up for restricted use. What does that mean? We don't want redevelopment on a "dirty" site.

Part 2. List Important Information Needed from the Community, if Applicable.

- Can the community supplement knowledge about past/current uses of the site?
- Does the community have knowledge that the site may be significantly impacting nearby people, properties, natural resources, etc.?
- Are activities currently taking place at the site or at nearby properties that may need to be restricted?
- Who may be interested or affected by the site that has not yet been identified?
- Are there unique community characteristics that could affect how information is exchanged?
- Does the community and/or individuals have any concerns they want monitored?
- Does the community have information about other sources in the area for the contamination?

Part 3. List Major Issues and Information That Need to be Communicated to the Community.

- Specific site investigation or remediation activities currently underway, or that will begin in the near future.
- The process and general schedule to investigate, remediate and, if applicable, redevelop the site.
- Current understanding about the site contamination and effects, if any, on public health and the environment.
- Site impacts on the community and any restrictions on the public's use of the site and/or nearby properties.
- Planned CP activities, their schedule, and how they relate to the site's remedial process.
- Ways for the community to obtain/provide information (document repositories, contacts, etc.).

Part 4. Community Characteristics

a. - e. Obtain information from local officials, property owners and residents, site reports, site visits, "windshield surveys," other staff, etc.

f. Has the affected community experienced other **significant** present or past environmental problems unrelated to this site? Such experiences could significantly affect public concerns and perspectives about the site; how the community will relate to project staff; the image and credibility of project staff within the community; and the ways in which project staff communicate with the community.

g. In its remedial programs, DER seeks to integrate, and be consistent with, environmental justice principles set forth in *DEC Commissioner Policy 29 on Environmental Justice* and *DER 23 – Citizen Participation Handbook for Remedial Programs*. Is the site and/or affected community wholly or partly in an Environmental Justice (EJ) Area? Use the Search feature on DEC's public web site for "environmental justice". DEC's EJ pages define an EJ area, and link to county maps to help determine if the site and/or community are in an EJ area.

h. Consider factors such as:

- Is English the primary language of the affected community? If not, provisions should be considered regarding public outreach activities such as fact sheets, meetings, door-to-door visits and other activities to ensure their effectiveness.
- The age demographics of the community. For example, is there a significant number of senior citizens in the community? It may be difficult for some to attend public meetings and use document repositories. This may suggest adopting more direct interaction with the community with activities such as door-to-door visits, additional fact sheets, visits to community and church centers, nursing homes, etc.
- How do people travel about the community? Would most people drive to a public meeting or document repository? Is there adequate public transportation?

Part 5. Affected/Interested Public.

Individuals and organizations who need or want information and input can change during the site's remedial process. This need is influenced by real, potential, or perceived impacts of the site or the remedial process. Some people may want information and input throughout the remedial process. Others may participate only during specific remedial stages, or may only be interested in particular issues.

It is important to revisit this question when reviewing this scoping sheet. Knowing who is interested in the site – and the issues that are important to them – will help to select and conduct appropriate outreach activities, and to identify their timing and the information to be exchanged.

Check all affected/interested parties that apply to the site. **Note: Adjust the site's contact list appropriately.** The following are some ways to identify affected/interested parties:

- Tax maps of adjacent property owners
- Attendees at public meetings
- Telephone discussions
- Letters and e-mails to DER, the remedial party, and other agencies
- Political jurisdictions and boundaries
- Media coverage
- Current/proposed uses of site and/or nearby properties (recreational, commercial, industrial)
- Discussions with community organizations: grass roots organizations, local environmental groups, environmental justice groups, churches, and neighborhood advisory groups



Division of Environmental Remediation

Remedial Programs
Scoping Sheet for Major Issues of Public Concern (see instructions)

Site Name: The Huguenot

Site Number: C360157

Site Address and County: 381-393 Huguenot Street, New Rochelle, Westchester County

Remedial Party(ies): 381-383 Huguenot LLC

Note: For Parts 1. – 3. the individuals, groups, organizations, businesses and units of government identified should be added to the site contact list as appropriate.

Part 1. List major issues of public concern and information the community wants. Identify individuals, groups, organizations, businesses and/or units of government related to the issue(s) and information needs. **Use this information as an aid to prepare or update the Major Issues of Public Concern section of the site Citizen Participation Plan.**

The major issues of public concern include: 1) contaminated soil, groundwater and soil gas on the Site; 2) potential impact on nearby buildings via vapor encroachment; 3) the source of the contamination ;4) potential impact on property value; and 5) potential impact during site investigation, remediation and construction.

How were these issues and/or information needs identified?

These issues were identified during the previous site assessment and investigation. It is also based on the proposed site uses and the redevelopment plan.

Part 2. List important information needed **from** the community, if applicable. Identify individuals, groups, organizations, businesses and/or units of government related to the information needed.

Historic uses of the Site and the adjoining properties. Any concerns regarding collecting samples/air monitoring on the adjacent properties? Any questions regarding the chemical of concerns or their potential impact on the public health?

How were these information needs identified?

These issues were identified during the previous site assessment and investigation. It is also based on the proposed site uses and the redevelopment plan.

Part 3. List major issues and information that need to be communicated **to** the community. Identify individuals, groups, organizations, businesses and/or units of government related to the issue(s) and/or information.

Proposed Site investigation and remediation activities The general schedule to investigate, remediate and redevelop the site. Current understanding about the site contamination and effects. Site impacts on the community and any restrictions on the public's use of the site and/or nearby properties. Planned CP activities, their schedule, and how they relate to the site's remedial process. Ways for the community to obtain/provide information (document repositories, contacts, etc.).

How were these issues and/or information needs identified?

These issues were identified during the previous site assessment and investigation. It is also based on the proposed site uses and the redevelopment plan.

Part 4. Identify the following characteristics of the affected/interested community. This knowledge will help to identify and understand issues and information important to the community, and ways to effectively develop and implement the site citizen participation plan (mark all that apply):

a. Land use/zoning at and around site:

☒ **Residential** ☐ **Agricultural** ☐ **Recreational** ☒ **Commercial** ☐ **Industrial**

b. Residential type around site:

☒ **Urban** ☐ **Suburban** ☐ **Rural**

c. Population density around site:

☒ **High** ☐ **Medium** ☐ **Low**

d. Water supply of nearby residences:

☒ **Public** ☐ **Private Wells** ☐ **Mixed**

e. Is part or all of the water supply of the affected/interested community currently impacted by the site?

☐ **Yes** ☒ **No**

Provide details if appropriate:

[Click here to enter text.](#)

f. Other environmental issues significantly impacted/impacting the affected community?

☐ **Yes** ☒ **No**

Provide details if appropriate:

[Click here to enter text.](#)

g. Is the site and/or the affected/interested community wholly or partly in an Environmental Justice Area?

☒ **Yes** ☐ **No**

h. Special considerations:

☐ **Language** ☐ **Age** ☐ **Transportation** ☐ **Other**

Explain any marked categories in **h**:

[Click here to enter text.](#)

Part 5. The site contact list must include, at a minimum, the individuals, groups, and organizations identified in Part 2. of the Citizen Participation Plan under 'Site Contact List'. Are *other* individuals, groups, organizations, and units of government affected by, or interested in, the site, or its remedial program? (Mark and identify all that apply, then adjust the site contact list as appropriate.)

☒ **Non-Adjacent Residents/Property Owners:** [Click here to enter text.](#)

☐ **Local Officials:** [Click here to enter text.](#)

☐ **Media:** [Click here to enter text.](#)

☐ **Business/Commercial Interests:** [Click here to enter text.](#)

☐ **Labor Group(s)/Employees:** [Click here to enter text.](#)

☐ **Indian Nation:** [Click here to enter text.](#)

☐ **Citizens/Community Group(s):** [Click here to enter text.](#)

☐ **Environmental Justice Group(s):** Click here to enter text.

☐ **Environmental Group(s):** Click here to enter text.

☐ **Civic Group(s):** Click here to enter text.

☐ **Recreational Group(s):** Click here to enter text.

☐ **Other(s):** Click here to enter text.

Prepared/Updated by: Wenqing Fang, Cider Environmental

Date: January 29, 2018

Reviewed/Approved by: Daniel Lanners, NYSDEC

Date: March 26, 2018

APPENDIX 8

Vapor Barrier Manufacturer Specifications

PREPRUFE® 300R & 160R

Pre-applied waterproofing membranes that bond integrally to poured concrete for use below slabs or behind basement walls on confined sites

Product Description

Preprufe® 300R & 160R membranes are unique composite sheets comprised of a thick HDPE film, pressure sensitive adhesive and weather resistant protective coating. Designed with Advanced Bond Technology™, Preprufe 300R & 160R membranes form a unique, integral bond to poured concrete, preventing both the ingress and lateral migration of water while providing a robust barrier to water, moisture and gas.

The Preprufe R System includes:

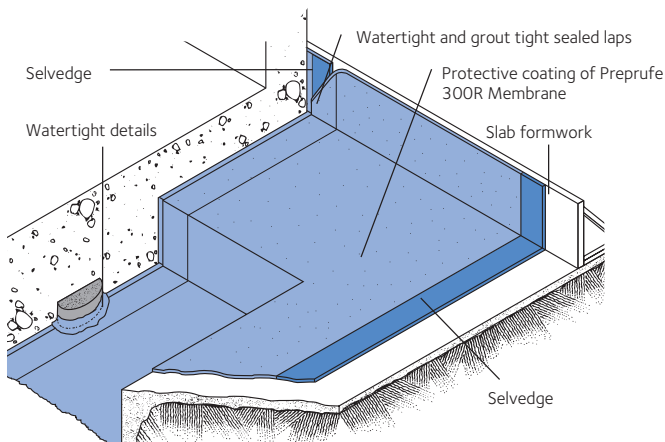
- **Preprufe 300R** – heavy-duty grade for use below slabs and on rafts (i.e. mud slabs). Designed to accept the placing of heavy reinforcement using conventional concrete spacers
- **Preprufe 160R** – thinner grade for blindside, zero property line applications against soil retention systems. Vertical use only
- **Preprufe Tape LT** – for covering cut edges, roll ends, penetrations and detailing (temperatures between 25 °F (-4 °C) and 86 °F (+30 °C))
- **Preprufe Tape HC** – for covering cut edges, roll ends, penetrations and detailing (minimum 50 °F (10 °C))
- **Preprufe CJ Tape LT** – for construction joints and detailing (temperatures between 25 °F (-4 °C) and 86 °F (+30 °C))
- **Preprufe CJ Tape HC** – for construction joints and detailing (minimum 50 °F (10 °C))
- **Bituthene® Liquid Membrane** – for sealing around penetrations, etc.
- **Adcor® ES** – waterstop for joints in concrete walls and floors
- **Preprufe Tieback Covers** – preformed cover for soil retention wall tieback heads
- **Preprufe Preformed Corners** – preformed inside and outside corners

Preprufe 300R & 160R membranes are applied either horizontally to smooth prepared concrete, carton forms or well rolled and compacted earth or crushed stone substrate; or vertically to permanent formwork or adjoining structures. Concrete is then cast directly against the adhesive side of the membranes. The specially developed Preprufe adhesive layers work together to form a continuous and integral seal to the structure.

Preprufe products can be returned up the inside face of slab formwork but is not recommended for conventional twin-sided formwork on walls, etc. Use Bituthene self-adhesive membrane or Procor fluid-applied membrane to walls after removal of formwork for a fully bonded system to all structural surfaces.

Advantages

- Forms a unique continuous adhesive bond to concrete poured against it – prevents water migration and makes it unaffected by ground settlement beneath slabs
- Fully-adhered watertight laps and detailing
- Provides a barrier to water, moisture and gas – physically isolates the structure from the surrounding ground
- BBA Certified for basement Grades 2, 3, & 4 to BS 8102:1990
- Zero permeance to moisture
- Solar reflective – reduced temperature gain
- Simple and quick to install – requiring no priming or fillets
- Can be applied to permanent formwork – allows maximum use of confined sites
- Self protecting – can be trafficked immediately after application and ready for immediate placing of reinforcement
- Unaffected by wet conditions – cannot activate prematurely
- Inherently waterproof, non-reactive system:
 1. not reliant on confining pressures or hydration
 2. unaffected by wet/dry cycling
- Chemical resistant – effective in most types of soils and waters, protects structure from salt or sulphate attack



Drawings are for illustration purposes only.
Please refer to gcpat.com for specific application details.

Installation

The most current application instructions, detail drawings and technical letters can be viewed at gcpat.com. For other technical information contact your local GCP representative.

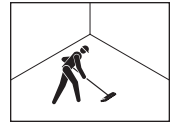
Preprufe 300R & 160R membranes are supplied in rolls 4 ft (1.2 m) wide, with a seldge on one side to provide self-adhered laps for continuity between rolls. The rolls of Preprufe Membrane and Preprufe Tape are interwound with a disposable plastic release liner which must be removed before placing reinforcement and concrete.

Substrate Preparation

All surfaces – It is essential to create a sound and solid substrate to eliminate movement during the concrete pour. Substrates must be regular and smooth with no gaps or voids greater than 0.5 in. (12 mm). Grout around all penetrations such as utility conduits, etc. for stability (see Figure 1).

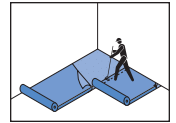
Horizontal – The substrate must be free of loose aggregate and sharp protrusions. Avoid curved or rounded substrates. When installing over earth or crushed stone, ensure substrate is well compacted to avoid displacement of substrate due to traffic or concrete pour. The surface does not need to be dry, but standing water must be removed.

Figure 1



Vertical – Use concrete, plywood, insulation or other approved facing to sheet piling to provide support to the membrane. Board systems such as timber lagging must be close butted to provide support and not more than 0.5 in. (12 mm) out of alignment.

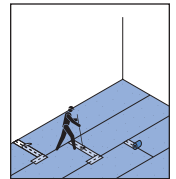
Figure 2



Membrane Installation

Preprufe membranes can be applied at temperatures of 25°F (-4°C) or above. When installing Preprufe product in cold or marginal weather conditions 55°F (<13°C) the use of Preprufe Tape LT is recommended at all laps and detailing. Preprufe Tape LT should be applied to clean, dry surfaces and the release liner must be removed immediately after application. Alternatively, Preprufe Low Temperature (LT) membrane is available for low temperature condition applications. Refer to Preprufe LT data sheet and GCP tech letter 16 for more information.

Figure 3



Horizontal substrates – Place the membrane HDPE film side to the substrate with the clear plastic release liner facing towards the concrete pour. End laps should be staggered to avoid a build up of layers. Leave plastic release liner in position until overlap procedure is completed (see Figure 2).

Accurately position succeeding sheets to overlap the previous sheet 3 in. (75 mm) along the marked seldge. Ensure the underside of the succeeding sheet is clean, dry and free from contamination before attempting to overlap. Peel back the plastic release liner from between the overlaps as the two layers are bonded together. Ensure a continuous bond is achieved without creases and roll firmly with a heavy roller. Completely remove the plastic liner to expose the protective coating. Any initial tack will quickly disappear.

Refer to GCP tech letter 15 for information on suitable rebar chairs for Preprufe products.

Vertical substrates – Mechanically fasten the membrane vertically using fasteners appropriate to the substrate with the the clear plastic release liner facing towards the concrete pour. The membrane may be installed in any convenient length. Fastening can be made through the seldge using a small and low profile head fastener so that the membrane lays flat and allows firmly rolled overlaps. Immediately remove the plastic release liner.

Ensure the underside of the succeeding sheet is clean, dry and free from contamination before attempting to overlap. Roll firmly to ensure a watertight seal.

Roll ends and cut edges – Overlap all roll ends and cut edges by a minimum 3 in. (75 mm) and ensure the area is clean and free from contamination, wiping with a damp cloth if necessary. Allow to dry and apply Preprufe Tape LT (or HC in hot climates) centered over the lap edges and roll firmly (see Figure 3). Immediately remove printed plastic release liner from the tape.

Details

Detail drawings are available at gcpat.com.

Membrane Repair

Inspect the membrane before installation of reinforcement steel, formwork and final placement of concrete. The membrane can be easily cleaned by power washing if required. Repair damage by wiping the area with a damp cloth to ensure the area is clean and free from dust, and allow to dry. Repair small punctures (0.5 in. (12 mm) or less) and slices by applying Preprufe Tape centered over the damaged area. Repair holes and large punctures by applying a patch of Preprufe membrane, which extends 6 in. (150 mm) beyond the damaged area. Seal all edges of the patch with Preprufe Tape. Any areas of damaged adhesive should be covered with Preprufe Tape. Where exposed selvage has lost adhesion or laps have not been sealed, ensure the area is clean and dry and cover with fresh Preprufe Tape. All Preprufe Tape must be rolled firmly and the tinted release liner removed. Alternatively, use a hot air gun or similar to activate the adhesive using caution not to damage the membrane and firmly roll lap to achieve continuity.

Pouring of Concrete

Ensure the plastic release liner is removed from all areas of Preprufe membrane and tape.

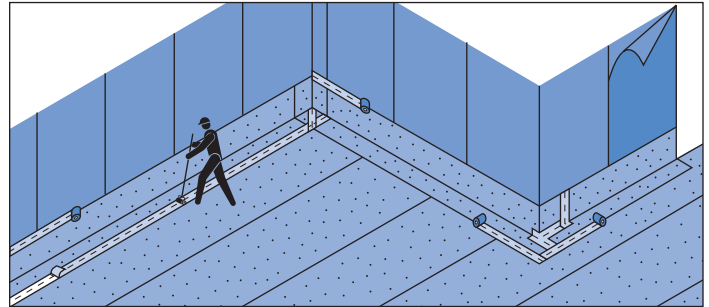
It is recommended that concrete be poured within 56 days (42 days in hot climates) of application of the membrane. Following proper ACI guidelines, concrete must be placed carefully and consolidated properly to avoid damage to the membrane. Never use a sharp object to consolidate the concrete.

Removal of Formwork

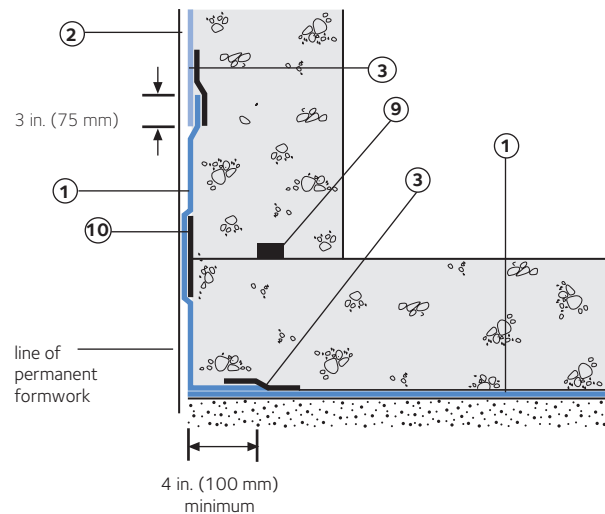
Detail Drawings

Details shown are typical illustrations and not working details. For a list of the most current details, visit us at gcpat.com. For technical assistance with detailing and problem solving please call toll free at 866-333-3SBM (3726).

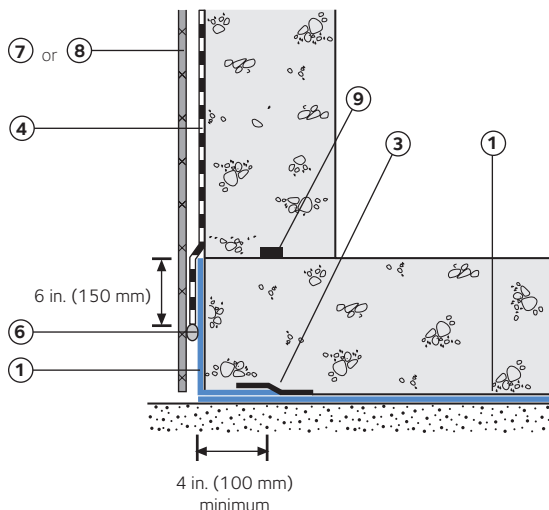
Preprufe membranes can be applied to removable formwork, such as slab perimeters, elevator and lift pits, etc. Once the concrete is poured the formwork must remain in place until the concrete has gained sufficient compressive strength to develop the surface bond. Preprufe membranes are not recommended for conventional twin-sided wall forming systems, see GCP tech letter 13 for information on forming systems used with Preprufe products.



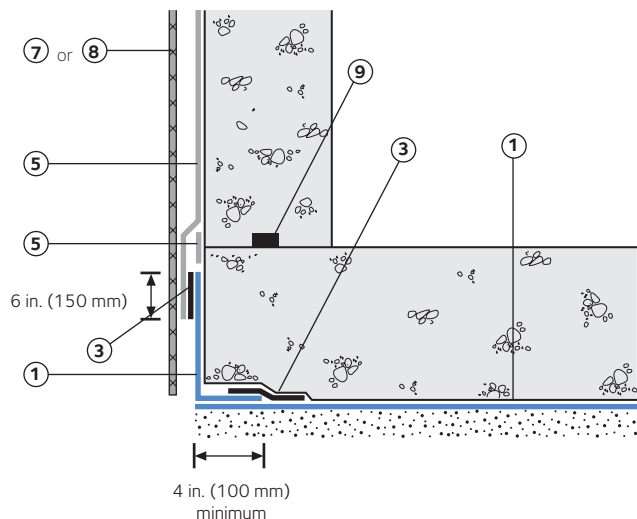
Wall base detail against permanent shutter



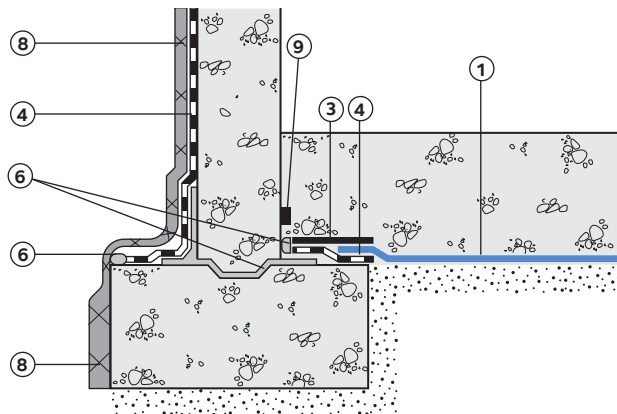
Bituthene® wall base detail (Option 1)



Procor® wall base detail (Option 1)



Bituthene® wall base detail (Option 2)

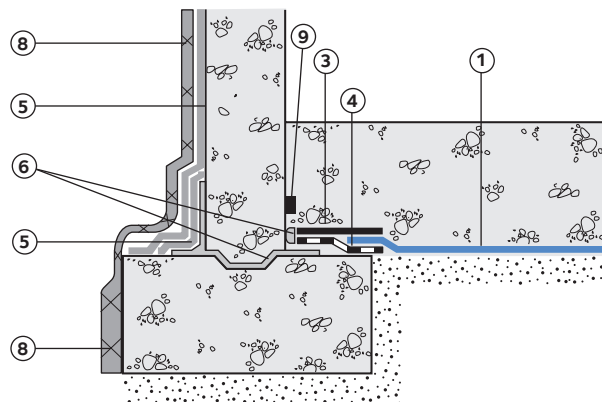


- 1 Preprufe® 300R
- 2 Preprufe® 160R
- 3 Preprufe® Tape
- 4 Bituthene®

- 5 Procor®
- 6 Bituthene® Liquid Membrane
- 7 Approved Protection Course

- 8 Hydroduct®
- 9 Adcor™ ES
- 10 Preprufe® CJ Tape

Procor® wall base detail (Option 2)



Supply

Dimensions (Nominal)	Preprufe 300R Membrane	Preprufe 160R Membrane	Preprufe Tape (LT or HC*)
Thickness	0.046 in. (1.2 mm)	0.032 in. (0.8 mm)	
Roll size	4 ft x 98 ft (1.2 m x 30 m)	4 ft x 115 ft (1.2 m x 35 m)	4 in. x 49 ft (100 mm x 15 m)
Roll area	392 ft ² (36 m ²)	460 ft ² (42 m ²)	
Roll weight	108 lbs (50 kg)	92 lbs (42 kg)	4.3 lbs (2 kg)
Minimum side/end laps	3 in. (75 mm)	3 in. (75 mm)	3 in. (75 mm)

Physical Properties

Property	Typical Value 300R	Typical Value 160R	Test Method
Color	white	white	
Thickness	0.046 in. (1.2 mm)	0.032 in. (0.8 mm)	ASTM D3767
Lateral Water Migration Resistance	Pass at 231 ft (71 m) of hydrostatic head pressure	Pass at 231 ft (71 m) of hydrostatic head pressure	ASTM D5385, modified ¹
Low temperature flexibility	Unaffected at -20°F (-29°C)	Unaffected at -20°F (-29°C)	ASTM D1970
Resistance to hydrostatic head	231 ft (71 m)	231 ft (71 m)	ASTM D5385, modified ²
Elongation	500%	500%	ASTM D412, modified ³
Tensile strength, film	4000 psi (27.6 MPa)	4000 psi (27.6 MPa)	ASTM D412
Crack cycling at -9.4°F (-23°C), 100 cycles	Unaffected, Pass	Unaffected, Pass	ASTM C836
Puncture resistance	221 lbs (990 N)	100 lbs (445 N)	ASTM E154
Peel adhesion to concrete	5 lbs/in. (880 N/m)	5 lbs/in. (880 N/m)	ASTM D903, modified ⁴
Lap peel adhesion	5 lbs/in. (880 N/m)	5 lbs/in. (880 N/m)	ASTM D1876, modified ⁵
Permeance to water vapor transmission	0.01 perms (0.6 ng/(Pa x s x m ²))	0.01 perms (0.6 ng/(Pa x s x m ²))	ASTM E96, method B
Water absorption	0.5%	0.5%	ASTM D570

Footnotes:

- Lateral water migration resistance is tested by casting concrete against membrane with a hole and subjecting the membrane to hydrostatic head pressure with water. The test measures the resistance of lateral water migration between the concrete and the membrane.
- Hydrostatic head tests of Preprufe Membranes are performed by casting concrete against the membrane with a lap. Before the concrete cures, a 0.125 in. (3 mm) spacer is inserted perpendicular to the membrane to create a gap. The cured block is placed in a chamber where water is introduced to the membrane surface up to the head indicated.
- Elongation of membrane is run at a rate of 2 in. (50 mm) per minute.
- Concrete is cast against the protective coating surface of the membrane and allowed to properly dry (7 days minimum). Peel adhesion of membrane to concrete is measured at a rate of 2 in. (50 mm) per minute at room temperature.
- The test is conducted 15 minutes after the lap is formed (per GCP published recommendations) and run at a rate of 2 in. (50 mm) per minute.

Removal of Formwork (continued)

A minimum concrete compressive strength of 3000 psi (20 N/mm²) is recommended prior to stripping formwork supporting Preprufe membranes. Premature stripping may result in displacement of the membrane and/or spalling of the concrete.

Refer to GCP Tech Letter 17 for information on removal of formwork for Preprufe products.

Specification Clauses

Preprufe 300R or 160R membrane shall be applied with its protective coating presented to receive fresh concrete to which it will integrally bond. Only GCP Applied Technologies approved membranes shall be bonded to Preprufe 300R/160R product. All Preprufe 300R/160R system materials shall be supplied by GCP Applied Technologies, and applied strictly in accordance with their instructions. Specimen performance and formatted clauses are also available.

NOTE: Use Preprufe Tape to tie-in Procor® fluid-applied membrane with Preprufe products.

Health and Safety

Refer to relevant SDS (Safety Data Sheet). Complete rolls should be handled by a minimum of two persons.



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We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

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GCP0083

PF-111-1216



APPENDIX 9

Resumes of Key Remedial Personnel

WENQING FANG, P.E.

Sr. Consultant/ Principal

Professional Experience

June 2013- Present

Cider Environmental

Commack, NY

Sr. Consultant /Principal

- Established Cider Environmental. Designed companywide standard operation procedures (SOPs) and quality assurance and quality control (QA/QC) program.
- Provide technical oversight for environmental assessment and remediation services.
- Supervise and train junior staffs both in the field and in the office.
- Maintain good relationship with clients and regulatory agencies.

Jun 2012- Jun 2013

Golder Associates

Houston, TX

Sr. Remediation Project Manager

- Performed assessment and remediation at oil & gas facilities, commercial laboratories, and commercial compounds.
- Prepared project budget/cash flow projection for remedial alternatives, including “dig-and-haul”, in-situ chemical oxidation (ISCO) and monitored natural attenuation (MNA). Evaluated existing/historical remedial activities and made recommendations on exit strategies.
- Performed feasibility studies on municipal setting designation (MSD) application.
- Prepared Affected Property Assessment Report (APAR) and Response Action Plan (RAP) for Texas Risk Reduction Program (TRRP) sites.
- Construct site-specific environmental database, incorporated with ArcGIS and AutoCAD.
- Perform groundwater modeling (BIOCHLOR and BIOSCREEN) to track contaminants fate-and-transport; evaluate feasibility of MNA as the sole remedy, and calculate appropriate action levels (AALs).
- Perform operational risk assessment as part of Environmental and Social Impact Assessment (ESIA) for a liquefied natural gas (LNG) pipeline project in PNG, a gold mining project in Mexico, and an iron mining project in Guinea.
- Perform Phase I/II Environmental Site Assessment (ESA) in Texas, Louisiana and Oklahoma.

Apr 2004- Jun 2012

Impact Environmental

Bohemia, NY

Environmental Engineer / Project Manager

- Managed multiple projects. Lead project teams both in the field and in the office. Take full responsibilities of the projects from initiation to closure. Work closely with clients to develop site-specific strategies. Provide both aggressive and passive alternatives to address clients' budget concerns and schedules. Deal with emergencies and unexpected events with timely responses and flexibilities.
- Designed and performed site investigation, including multi-media sampling (soil/ sediment/ surface water/ groundwater/ ambient air/ soil gas); groundwater well installation, gauging and survey; natural gamma logging; and electrical conductivity logging. Experienced with Geoprobe, hollow stem auger, sonic drill rig, and air/mud rotary. Prepared remedial cost estimation and remedial investigation and feasibility study (RI/FS).
- Designed and performed site remediation, including soil vapor extraction and air sparging system (SVE/AS); ISCO; In-Situ Chemical Reduction (ISCR); enhanced aerobic/anaerobic bio-remediation (EAB); bio-augmentation; and soil off-site disposal. Design and perform pilot test for the comparison and evaluation of remedial alternatives.
- Conducted real property transaction risk reviews and site baseline studies. Perform ASTM Due Diligence Phase I/II ESAs.

Key Personnel Resumes

- Prepared human health based risk assessment. Experienced with achieving administrative closure for sites with residual contamination by utilizing exposure assessments.
- Designed and installed Engineering Control measures, including soil caps, sub-slab depressurization systems (SSDS) and vapor barriers, to minimize human exposure risks.
- Performed aquifer test (pumping test and slug test) and the associated data processing. Performed construction dewatering modeling and designed dewatering system layout. Used Visual MODFLOW and Groundwater Modeling System (GMS) for groundwater contamination fate-and-transport modeling. Used various tools and software for subsurface stratigraphic interpretation.
- Excellent AutoCAD drafter. Experienced with ArcGIS. Experienced with Microsoft Access/Excel programming (via VBA).

Aug 2002- Dec 2003

EH&S at Stony Brook University

Stony Brook, NY

Graduate Student Assistant

- Performed indoor air quality sampling.
- Provided assistance in OSHA training for the university staff.
- Prepared transportation manifest for laboratory-generated hazardous materials.
- Maintained online Material Safety Data Sheet (MSDS) database for the university.

Aug 2001- Aug 2002

Environmental Protection Bureau of China

Jingzhou, China

Environmental Engineer

- Prepared regional Environmental Assessment regarding the impact of agriculture non-point discharge on the environmental quality of surface water bodies of Hubei Province, China. Provided technical documents for the establishment of regional sustainability strategies.
- Performed Environmental Impact Assessment (EIA) on proposed industrial projects, with focus on the potential impacts on ambient air and drinking water resources. Attended project evaluation meetings with various regulatory agencies and researchers.
- Performed surface water and ambient air quality sampling and contamination fate-and-transport modeling.

Education

- 2002–2004 Stony Brook University Stony Brook, NY
- M. S. Technological Systems Management (Environmental & Waste Management)
- 1997-2001 Wuhan University Wuhan, China
- B. Eng. Environmental Engineering

Professional License

- New York State Professional Engineering No. 095477
- Texas State Professional Engineering No. 115643

Trainings

- OSHA 40 Hour HAZWOPER Training
- OSHA 10 Hour Construction Safety Training

JAMES CRESSY

Sr. Consultant/ Principal

A dedicated, results-oriented leader and environmental professional, with broad-based knowledge of site assessment and remediation for large and small projects. Excellent project management skill and business communication skills to handle demanding schedules, rigid deadlines, tight budgets, and shifting priorities. Capability to manage widely divergent, simultaneously occurring projects with inflexible time-lines, through the use of exceptional organizational skills, advanced technical tools, out-of-the box thinking, and innovative problem solving abilities.

Professional Experience

Jun 2013- Present

Cider Environmental

Commack, NY

Sr. Consultant/Principal

- Establish client basis for the company. Arrange client meetings and prepare bid documents. Prepare corporate qualification materials for client development. Lead the marketing efforts and being the point-of-contact for key clients.
- Monitor financial status of the company. Supervise time & material (T&M) tracking and invoicing.
- Negotiate with subcontractor for SOP and insurance.
- Supervise human resource department.
- Supervise companywide Phase I environmental site assessment (ESA) projects.
- Provide training for junior staff both in the field and in the office.
- Maintain healthy relationship with regulatory agencies at federal, state, county and local levels.

Apr 2005- June 2013

Impact Environmental

Bohemia, NY

Project Manager/Supervisor

- Supervised Assessment Division with over \$400,000 annual revenue, and produced over 200 Phase I ESAs and over 30 Phase II ESAs annually. Managed entire assessment portfolio. Supervised multiple project managers and junior staff. Held regular project meetings with project managers to track project status. Arranged regular project status meetings with key clients for updates.
- Monitored division-wide financial status. Work closely with accounting and human resource departments to maintain health status of the division.
- Simultaneously manage multiple projects. Use advanced project scheduling tools to allocate and track equipment resources and manpower accordingly.
- Interacted with client, attorneys, property owners, and regulatory agencies on regular basis to ensure smooth progress.
- Designed companywide standard operation procedures (SOPs) and quality assurance and quality control (QA/QC) program for Phase I ESAs. Provided Phase I ESA trainings for junior staff. Lead companywide program update to be in compliance with ASTM and AAI standards.
- Managed companywide field equipment's. Kept abreast with the emerging technologies, and made sure all field equipment's were always in ready-to-use condition and were compatible with the latest technologies and regulatory standards.
- Provided prompt spill emergency response, and supervised emergency cleanup efforts for impacted soil and groundwater.
- Supervised underground storage tanks (USTs) removal and associated soil and groundwater remediation.
- Supervised underground injection well (UIW) remediation projects.
- Designed and performed in-site groundwater remediation by enhanced aerobic bio-degradation.
- Designed and implemented vapor intrusion prevention measures, including sub-slab depressurization systems and vapor barrier systems.

Key Personnel Resumes

- Performed and supervised over 2,000 Phase I ESAs and over 400 Phase II ESAs.
- Provided litigation support as expert witness in groundwater contamination cases.
- Designed and implemented remedial strategies for petroleum and/or chlorinated solvents impacted sites. Prepared various submittals, including, but not limited to, remedial action work plan, health and safety plan, remedial action report, and closure report.

Dec 1999 – Dec 2004

Atlantic Express

Staten Island, NY

Communications Technician

- Installed, maintained and upgraded communications system for over 10,000 vehicles
- Provided assistance in creating and implementing proprietary software

Education

- 2007–2009 Stony Brook University
Stony Brook, NY
- College of Engineering and Applied Sciences. Masters of Science in Technological Systems
Management: Energy and Environmental Systems
- 1999-2001 Stony Brook University
Stony Brook, NY
- Bachelor of Art

Area of Expertise

- Project/Client portfolio management.
- A wide-ranging academic background with solid technical and practical experience.
- Extremely proficient in environmental assessments and remediation.
- Design and evaluation of groundwater/vapor recovery systems.
- Proven track records of project management with impeccable records on EH&S.
- Capable of multi-tasking and seamless switching between field work and office work.
- Perform quick, detailed and accurate assessments; from small vacant properties to large multi-use properties.

Trainings

- OSHA 40 Hour HAZWOPER Training
- OSHA 10 Hour Construction Safety Training
- NYSDEC Vapor Intrusion Seminar
- New York City Office of Environmental Remediation Gold Certified

RICHARD KLEINERT

Environmental Scientist

Professional Experience

Jun 2013- Present

Cider Environmental

New York, NY

Environmental Scientist

- Submission of Freedom of information Requests to various agencies.
- Conduct government record searches and file reviews in association with the performance of Phase I Site Assessments.
- Utilize various publicly and privately compiled computer databases to satisfy the requirements of ASTM E-1527-05.
- Technical Operator of Geoprobe sampling system for the acquisition of subsurface soil and groundwater.

October 2007 – December 2009

Impact Environmental

Bohemia, NY

Environmental Scientist/Geologist

- Submission of Freedom of Information Requests to various agencies
- Conducts government record searches and file reviews in association with the performance of Phase I Environmental Site Assessments
- Working relationship with several governmental agency contacts
- Utilizes various publicly and privately compiled computer databases to satisfy the requirements of ASTM E-1527-05
- Conducts site reconnaissance work
- Performed over 100's of Phase I Environmental Site Assessments both in NY and country-wide
- Technical Operator for Geoprobe sampling system for the acquisition of subsurface soil and groundwater
- Performed over 50 Phase II Environmental Site Assessments
- Familiar with composing Remedial Action Work Plans, Closure Reports, UST and AST removals
- Interaction with clients, attorneys, property owners, etc.

January 2004- October 2007

R&J Abstracts Inc

Mineola, NY

Real Estate Title Examiner

- Independently research and develop reports for Lending Institutions and Real Estate Insurance companies.
- Research county clerk records to verify judgments, mortgages delinquencies, foreclosures and federal tax/ mechanical liens.
- Perform title examinations for default properties. Verify that the contents of search packet (from in-house searches or from abstractors) were accurate and complete. Identify vesting, legal description and pertinent encumbrances to the property. Included in the final examination product are mortgages, judgments, liens, bankruptcies and any other pertinent senior or junior items and/or exceptions to the title.
- Plot difficult legal descriptions and compare with pertinent assessor maps, records of survey, parcel maps, tract maps, etc. Ensure that all reports accurately describe the properties requested by clients.
- Perform quick and accurate title searches (by both chain of title and grantor-grantee methods), including searches on owners with multiple properties, recent subdivision splits, or boundary line adjustments.

March 1998- November 2003, *Archaeologist, Independent Contractor for various companies*

- Interpreted and implemented various government regulations and requirements.
- Collected and recorded field data for future analysis.
- Monitored heavy construction equipment for the presence of archaeological materials.
- Communicated diplomatically with land owners, reporters and community members.
- Performed survey and excavation of archaeological sites to determine eligibility for the National Historic Registry of Historical Places.
- Conducted archival research to determine the historical uses of subject properties.
- Analyzed recovered artifacts to establish use and historical importance.
- Generated field maps of surveys and excavations for use in report preparation.

Education

December 1995 State University of New York at New Paltz

New Paltz, New York

- Bachelor of Arts in Anthropology

December 2012 Dowling University

Sayville, New York

- Masters in Science Education

Area of Expertise

- Phase I ESA
- Phase II ESA
- Subsurface geology of New York
- Subsurface groundwater transportation at greater New York Area.

Trainings

- OSHA 40 Hour HAZWOPER Training
- OSHA 10 Hour Construction Safety Training

SHUANGTAO ZHANG

Hydrologist/Project Manager

Professional Experience

Jun 2013- Present

Cider Environmental

New York, NY

Hydrologist

- Performed Phase II Environmental Site Assessment (ESA), both in the field and in the office.
- Performed remote sensing survey by using groundwater penetrating radar (GPR).
- Performed ground water sampling using low-flow techniques.
- Supervised subsurface sampling by Geoprobe, hollow stem auger, sonic drilling, and air/mud rotary. Performed soil characterization and sampling. Prepared soil logs.
- Performed down-hole logging with natural gamma to identify the location of clay lenses.
- Supervised groundwater monitoring well installation. Supervised well purging, development, and sampling. Utilized Horiba and YSI meters and low flow techniques for groundwater sampling.
- Performed groundwater well survey, with both auto-level and laser-level, and constructed groundwater potentiometric maps.
- Maintaining field daily logs, soil core logs, sampling logs and drilling logs
- Calibration and utilization field instruments, including PID and PDR for air monitoring, and YSI and Horiba for groundwater sampling.
- Coordinate with state regulators and work under oversight of state regulatory agencies

Aug 2007 – Jan 2008

Hydro Tech Environmental Corp.

Commack, NY

Environmental Geologist

- Performed Phase I ESA, both in the field and in the office
- Prepared Freedom of Information Requests
- Performed government database searches and file reviews for Phase I Environmental Site Assessments
- Performed Phase II ESA, both in the field and in the office. Supervised Geoprobe operations for soil borings, soil characterization and sampling

Aug 2007- Jun 2010

Stony Brook University

Stony Brook, NY

Research Assistant in Hydrology

Aug 2003- Jun 2004

Peking University

Beijing, China

Teaching Assistant in Geology

Aug 1995 – Aug 2001

Daqing Oil Field

Daqing, China

Director of Geological Analysis and Engineering Department

- Managed a field team of more than 40 people. Assigned daily workload, and made daily project status report.
- Managed multiple oil field projects. Specifically, managed more than 60 oil recovery wells to ensure steady recovery rate.
- Managed data logging and analyzing. Familiar with various down-hole logging instruments and technologies, including EC and natural gamma.
- Incorporated advanced technologies to improve oil production rate in aged wells.
- Identified potential oil field and develop plans to expand existing oil field by adding new well locations and development layers.

Education

Aug 2006- Aug2008	Stony Brook University	Stony Brook, NY
➤ M.S. of Geology, Geosciences Department		
Aug 2001- Aug2004	Peking University	Beijing, China
➤ M.S. of Geology, School of Earth and Space Sciences		
Sep 1991- Jul 1995	Daqing Petroleum Institute	Daqing, China
➤ B.S. of Petroleum Geology, Department of Petroleum Exploring		

Area of Expertise

- Phase I and Phase II ESA.
- Oil field geology and hydrogeology.
- Expert in petroleum product characterization.
- Expert with Microsoft Excel, Word, Access, PowerPoint, Adobe and other Office software.
- Familiar with AutoCAD, Soil Log Plot, ArcGIS, CoralDraw, Photoshop, ACDSee.
- Familiar with GPR to identify objects underground such as pipes and USTs.
- Excellent skills on 3-Dimensionally geometrical thinking, imagination and solving 3-D problem.
- Team working, communicating, flexibility, responsibility, self-motivated, concentrated, fast learning.

Trainings

- OSHA 40 Hour HAZWOPER Training
- OSHA 10 Hour Construction Safety Training

Jesse Bohner

Environmental Scientist

Professional Experience

Sept 2015- Present

Cider Environmental

Commack, NY

Environmental Scientist

- Perform Phase I Environmental Site Assessments.
- Perform Phase II Environmental Site Assessments.
- Perform soil vapor intrusion (SVI) investigation.
- Perform tank closure sampling and remediation.
- Perform underground injection control (UIC) sampling and remediation.
- Perform long-term groundwater monitoring.
- Perform subsurface investigations (soil, groundwater, soil vapor sampling).
- Conduct community air monitoring program (CAMP) for Brownfield Cleanup Programs, Voluntary Cleanup Programs and NYC OER E-designated site redevelopment projects.

April 2012- September 2015

Matson HVAC

Bohemia, N.Y

Assistant Technician

- Installation of equipment.
- Organize Trucks/tools.
- Ensure proper disposal of refrigerant, metals, and other hazardous wastes.

Jan 2014– May 2015

Binghamton University Recycling company

Binghamton, NY

Student Assistant

- Drive Recycling trucks.
- Pick-up and drop off recycling.
- Organize and coordinate Earth day & Recycle-mania events 2014 and 2015

April 2008- August 2011

Dairy Barn Stores Inc.

St. James, NY

Education

➤ 2012–2015

Binghamton University

Binghamton, NY

Bachelor of Science, Environmental Science.

Trainings

- OSHA 40 Hour HAZWOPER Training.